

GAO

Report to the Chairman, Subcommittee
on Readiness, Committee on Armed
Services, House of Representatives

September 1990

DOD PROCUREMENT

Cost-Per-Copy Service Can Reduce Copying Costs



RESTRICTED—Not to be released outside the
General Accounting Office unless specifically
approved by the Office of Congressional
Relations.



United States
General Accounting Office
Washington, D.C. 20548

**National Security and
International Affairs Division**

B-237648

September 28, 1990

The Honorable Earl Hutto
Chairman, Subcommittee on
Readiness
Committee on Armed Services
House of Representatives

Dear Mr. Chairman:

This report is in response to your request that we evaluate the viability of the cost-per-copy (CPC) service concept before the concept is broadly expanded.

We found that CPC service has resulted in significant cost savings compared to the prior copier costs. Our recommendations include the need for improved guidance to ensure that cost analysis is done on a copier-by-copier basis and all procurement options are considered in selecting the most economical method to acquire copier service.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from its issue date. At that time, we will send copies to the Chairmen, Senate and House Committees on Appropriations, Senate Committee on Governmental Affairs, House Committee on Government Operations, and the Joint Committee on Printing; Secretaries of Defense and the Army, Navy, and Air Force; Administrator, General Services Administration; and other interested parties. We will make copies available to others upon request.

If you need further information, please call me on 275-8412. Major contributors to this report are listed in appendix XII.

Sincerely yours,

A handwritten signature in cursive script, reading 'Donna M. Heivilin'.

Donna M. Heivilin
Director, Logistics Issues

Executive Summary

Purpose

The Department of Defense (DOD) spends over \$100 million a year on photocopying services. DOD was leasing and purchasing copiers when cost-per-copy service was introduced as a procurement option. This type of service involves a vendor furnishing a copier, maintenance, and supplies, with the government's cost based on the quantity of copies produced.

The Chairman, Subcommittee on Readiness, House Committee on Armed Services, requested GAO to evaluate the viability of the cost-per-copy service concept before the concept is broadly expanded. GAO's objectives were to (1) identify the characteristics of cost-per-copy service contracts, (2) determine the advantages and disadvantages of cost-per-copy service and whether the concept has potential for expansion, and (3) obtain industry views on the concept.

Background

The emergence of cost-per-copy service in DOD began in 1973 with the Air Force Tactical Air Command and has since spread throughout the Air Force. The Navy first used it in fiscal year 1986 and the Army in fiscal year 1988. According to military departments' data, DOD's copier costs in the United States were over \$116 million in fiscal year 1988. These costs include \$10.8 million for cost-per-copy contracts in 47 geographic areas.

Results in Brief

The terms and conditions of cost-per-copy service vary by contract and neither DOD nor the General Services Administration (GSA) has provided guidance on establishing contract terms. Conversion to cost-per-copy service has resulted in significant cost savings, improved maintenance, and other advantages to the government. The military departments' cost feasibility studies could be improved, however, since these evaluations did not consider all possible procurement options and relevant cost factors. Even so, the deficiencies noted would not have altered the outcome: cost-per-copy service is a cost-effective option. In addition, there is potential for expanding the use of cost-per-copy service within DOD and across other government agencies. To expand its use, a central source of information on the availability of cost-per-copy service by geographic area needs to be developed and distributed to copier managers.

Principal Findings

Guidance Lacking on Establishing Contract Terms

Several organizations, including procurement offices in major commands and at local military bases, and GSA, purchased cost-per-copy services for the military. GAO noted that terms and conditions varied by contract regarding the number of contract option years, specification of copy production volume bands, requirements for vendor-furnished supplies, and maintenance requirements. Although GAO did not find any relationship between the contract terms and pricing, differences in these terms could affect government costs. Neither DOD nor GSA has provided guidance to agencies on what factors to consider in establishing contract terms.

Conversion to Cost-Per-Copy Service Has Reduced Copying Costs

Cost feasibility studies conducted by the Army and Navy for 15 organizations before converting to cost-per-copy service estimated that these organizations could save \$1.5 million (45 percent) in annual operating costs by converting to cost-per-copy service. Based on GAO's review of Army and Navy post-conversion cost reduction computations in 11 organizations, converting to cost-per-copy services resulted in an overall savings of \$1.4 million (42 percent) in annual operating costs. Separate studies conducted by the Navy and GSA also showed that cost-per-copy service is generally less costly to the government.

Guidance for Conducting Cost Feasibility Studies Needs to Be Improved

GAO identified a number of concerns about the way cost feasibility studies were being conducted. Some studies were done on an aggregate basis rather than on a copier-by-copier basis, which resulted in some individual copiers being converted to cost-per-copy service when it was not the most cost-effective option. The studies generally compared the cost-per-copy option only to the cost of existing copiers and did not consider other procurement options. They also did not include some relevant cost factors, such as termination charges on leased copiers. In addition, the required cost analyses were not always performed, and some studies that were reportedly conducted were not retained. These deficiencies, however, did not alter the conclusion that cost-per-copy service can be a cost-effective option.

Perceived Advantages and Disadvantages Associated With Cost-Per-Copy Service

Military department officials cited several advantages other than cost associated with cost-per-copy service. These advantages included a reduction in administrative work load because of significantly fewer procurement actions and invoices; improved copier management because it was consolidated into one office; better information provided by contractors on use rates; and improved maintenance and less downtime. Some of those advantages are available with existing procurement methods, such as the lease option, which involves no capital investment. Others could be included as requirements in competitively awarded contracts.

Officials also cited several perceived disadvantages, such as increased copier use, associated with cost-per-copy service. However, GAO found no evidence that these disadvantages were actually encountered, had any significant impact, or could not also occur under other procurement options.

Potential for Expansion of Cost-Per-Copy Service

In recent years, DOD has increased the number of cost-per-copy contracts and, in fiscal year 1989, GSA awarded its first such contracts for civil agencies. However, cost-per-copy service could still be expanded, both within the military departments and across agency lines. Some organizations without cost-per-copy service are located in or near areas served by existing contracts. However, there is no central source of information on existing cost-per-copy service contracts to identify cost-per-copy service availability.

Copier Industry Views of Cost-Per-Copy Are Mixed

Industry views on the government's use of cost-per-copy varied, ranging from ready acceptance of the present government requirements to a reported lack of interest in participating in future contracts. Representatives of copier firms and industry associations identified a number of suggestions that they believe can improve cost-per-copy service for the government. GAO also requested written comments from industry officials on a draft of this report. GAO received responses from three companies. These comments reflected a wide range of views on the cost-effectiveness of the service, as shown in appendixes IX, X, and XI.

Recommendations

GAO recommends that the Secretary of Defense and the Administrator, General Services Administration, determine the implications of various contract terms and use the resulting information to provide guidance for

agencies using cost-per-copy service. GAO also recommends that they improve the guidance for conducting cost analyses to ensure that

- cost analyses are done on a copier-by-copier basis;
- the cost-per-copy option is compared to the other procurement options—purchase, lease/rental, and lease/purchase, whether procured through the GSA catalog or a competitive award; and
- the required cost feasibility studies include all relevant cost factors.

GAO also recommends that the Administrator, GSA, publish and distribute catalogs and price lists to copier managers to help them identify the availability of cost-per-copy service in their geographic region.

Agency Comments and Our Evaluation

GAO received official written comments from DOD and GSA. DOD and GSA generally agreed with GAO's findings and recommendations and their comments have been incorporated where appropriate. Regarding the recommendation that DOD and GSA jointly study the implication of various contract terms, DOD stated it would contact GSA to initiate such a study. GSA partially agreed with GAO's recommendation and stated it would develop a regulation to assist agencies in deciding if cost-per-copy service is an appropriate option.

DOD agreed with GAO's recommendation that the services need to perform a copier-by-copier cost feasibility study of all available options, consider all costs in the study, and only convert to cost-per-copy when it is the most economical to the government. In response to GAO's recommendation on single vendor contract opportunities, DOD stated that it is planning to issue guidance requiring the services and defense agencies to incorporate applicable cost-per-copy provisions in single vendor contracts.

GSA partially agreed with GAO's recommendation that it publish and distribute catalogs and price lists to copier managers in their geographic region. GSA stated that price lists and pamphlets containing information on awarded contracts are already provided to the project manager. The purpose of GAO's recommendation, however, is to provide nonparticipating copier managers with limited cost-per-copy contract information so that they can assess its potential for use.

Contents

Executive Summary		2
<hr/>		
Chapter 1		10
Introduction	CPC Service Concept	11
	Objectives, Scope, and Methodology	12
<hr/>		
Chapter 2		14
Guidance Lacking for Establishing Contract Terms	Procurement Responsibility	14
	Performance Requirements Differ Among Contracts	14
	Conclusions	18
	Recommendation	18
	Agency Comments and Our Evaluation	19
<hr/>		
Chapter 3		20
Conversion to CPC Service Has Generally Reduced Cost	Preconversion Studies Show Potential Savings	20
	Guidance for Conducting Cost Feasibility Studies Needs to Be Improved	20
	Post-Conversion Computations Show Savings Were Achieved	23
	Cost Savings Computations Need to Be Improved	23
	Navy and GSA Studies Identify Potential Cost Reduction Under CPC	25
	Recent Actions Taken by DOD	26
	Conclusions	26
	Recommendations	26
	Agency Comments	27
<hr/>		
Chapter 4		28
Perceived Advantages and Disadvantages of CPC Service	Advantages Associated With CPC Service	28
	Advantages Are Not Necessarily Inherent to CPC Service	30
	Few Perceived Disadvantages Associated With CPC Service	31
	Conclusions	31
	Recommendation	32
	Agency Comments	32

Chapter 5		33
Potential for Expansion of the CPC Concept	Expanding CPC Service	33
	More Information Needed	34
	CPC Contract Information Could Increase Use	34
	Expanding the Application of the Cost-Per-Unit Concept	35
	Conclusions	35
	Recommendation	35
	Agency Comments and Our Evaluation	35
<hr/>		
Chapter 6		36
Industry Views	Companies' Policies and Structure Can Affect Costs	36
	Government Contract Terms	37
	Other Industry Concerns	40
	Private Industry and State Use of Cost-Per-Copy Service	40
	Industry Suggested Improvements for CPC Service	41
	Industry Comments	41
<hr/>		
Appendixes	Appendix I: Organizations Where Review Was Performed	44
	Appendix II: Copier Cost-Per-Copy Service Comparison of Contract Terms	46
	Appendix III: Copier Cost Comparison Pre- And Post-Conversion Cost Studies	48
	Appendix IV: Annual Administrative Work Load Reductions Experienced Under Copier Cost-Per-Copy Service	50
	Appendix V: Information on Copiers Located at the Pentagon as of September 30, 1988	52
	Appendix VI: Industry Suggestions on Service	53
	Appendix VII: Comments From the Department of Defense	55
	Appendix VIII: Comments From the General Services Administration	63
	Appendix IX: Comments From Canon U.S.A., Inc.	71
	Appendix X: Comments From Pitney Bowes	74
	Appendix XI: Comments From Xerox Corporation	76
	Appendix XII: Major Contributors to This Report	79

Tables

Table 1.1: Comparison of Government Copier Procurement Options	11
Table 1.2: Copier and CPC Costs by Military Department for Fiscal Years 1987 and 1988	12
Table 2.1: Procurement Offices for CPC Service	14
Table 3.1: GSA's Comparison of CPC Service Costs to Other Procurement Options	26

Abbreviations

CPC	Cost-Per-Copy
DOD	Department of Defense
GSA	General Services Administration

Introduction

Copying machines began emerging as standard office equipment in the 1950s, and now copiers are an integral part of almost all offices. Office copiers produce facsimiles of written or printed material, and are generally operated in a self-service mode and used for small volumes. They have a broad range of capabilities and accessories. Capabilities include fast or slow speeds, single or full color, and reduction or enlargement. Accessories include document feeders and sorters.

Currently, the government has four options available for acquiring copier services:

1. Lease/rental—The vendor provides a copier with specific features and accessories and provides maintenance on a rental basis. Rental costs include a flat monthly fee, a charge per copy based on volume levels, installation and removal charges, and, for removal at other than the end of an option or contract period, termination charges. The user provides all supplies, such as toner, developer, and paper.
2. Lease/purchase—The vendor leases a copier that has specific features and accessories to the user. The vendor provides maintenance and retains ownership during the lease period. At the end of the lease, the user becomes the owner and then provides the maintenance. Lease costs include an installation charge, monthly payments sufficient to cover the purchase cost, and termination and removal charges during the lease period. The user provides the supplies and, after acquiring ownership, assumes responsibility for removal.
3. Purchase—The user buys the copier outright and pays for the installation. The user provides the maintenance and supplies and is responsible for removal.
4. Cost-per-copy (CPC) service¹—The vendor provides a copier with specific features and accessories and retains ownership. The cost is based on the actual number of copies made and contract price per copy within various copier production quantity bands. There are no installation, removal, or termination charges and no guaranteed minimum number of copies. The vendor usually provides all supplies except where the users provide their own paper.

Table 1.1 compares the four options.

¹CPC service is referred to by various terms, such as single source copier service and cost service plan, within the Department of Defense (DOD). We have only used the term CPC service.

Table 1.1: Comparison of Government Copier Procurement Options

	Leased/ rental	Leased/ purchase	Purchase	Cost- per copy
Capital investment required	No	Built into the lease payments	Yes, up front	No
Costs include:				
monthly fee	Yes	Yes	No	No
per copy charge based on actual volume	Yes	No	No	Yes
installation and removal charges	Yes	Yes	Yes	No
termination charges	Yes	Yes	No	No
Copier ownership	Vendor	Vendor until end of lease, then user	User	Vendor
Maintenance costs paid by	Vendor	Vendor until end of lease, then user		User
Non-paper supplies provided by	User	User	User	Vendor

CPC Service Concept

The emergence of CPC service began in 1973 when the Air Force Tactical Air Command acquired copier services on a per copy basis for its subordinate military bases, and has since spread throughout the Air Force. The other military departments have started to use CPC much more recently. The Navy began using CPC service in fiscal year 1986 at the Mare Island Naval Shipyard, Vallejo, California. The Army first used CPC service in fiscal year 1988 at Fort Polk, Louisiana, and Fort Sheridan, Illinois.

According to information provided by the military departments, copier costs within the United States were at least \$84 million in fiscal year 1987 and at least \$116 million in fiscal year 1988. However, these costs are significantly understated since all DOD organizations are not included. DOD costs for CPC service within the United States, included in the \$116 million, were \$10.7 million for fiscal year 1988. However, total copier costs cannot be readily determined.

CPC service can be for specific geographic areas, such as a single military facility, or an area that serves several military facilities. Table 1.2 shows available information on total copier cost, the number of geographic areas served by CPC contracts, and total CPC costs for fiscal years 1987 and 1988.

Table 1.2: Copier and CPC Costs by Military Department for Fiscal Years 1987 and 1988

Dollars in millions

Military department	Available total U.S. copier cost		CPC service			
	1987	1988	Geographic areas served		Cost	
			1987	1988	1987	1988
Army	\$74.1	\$71.6	0	2	\$0	\$0.4
Navy ^a	9.8	13.6	4	17	^c	5.3
Air Force	^b	30.6	28	28	5.0	5.0
Total	\$83.9	\$115.8	32	47	\$5.0	\$10.7

^aExcludes costs for copiers managed by Navy commands and the Marine Corps in place of the Navy Publishing and Printing Service.

^bThe information was not readily available as the Air Force did not summarize its 1987 copier costs because of a reduction in headquarters personnel.

^cCPC service costs were not segregated from total copier costs until fiscal year 1988.

Although CPC has been used outside the United States, our review was limited to CPC service within the United States.

Objectives, Scope, and Methodology

The Chairman, Subcommittee on Readiness, House Committee on Armed Services, asked us to evaluate the CPC concept before the concept is broadly expanded. Also, the Subcommittee requested us to solicit industry views. Our objectives were to (1) identify the characteristics of CPC service contracts, (2) determine the advantages and disadvantages of CPC service and whether the concept has potential for expansion, and (3) solicit industry views on CPC service. We focused on the conversions of leased and government-owned copiers to CPC service in fiscal years 1987 and 1988 within DOD because of the availability of documentation and personnel familiar with the conversion and its effects.

We performed our work at various military headquarters organizations, major commands, and military installations, and the Federal Supply Service of the General Services Administration (GSA), Washington, D.C., involved with the procurement, management, and use of CPC services (see app. I). We (1) collected general information on department and commandwide copiers and copier services, (2) discussed procurement and management—including any management fees, advantages and disadvantages, and potential for expansion of CPC service—with headquarters and field personnel, and (3) reviewed documentation to validate cited advantages and disadvantages and obtain other pertinent information. For review purposes, we separated the advantages and disadvantages into (1) cost benefits derived from recurring direct operating costs

and nonrecurring costs and (2) other areas, including government administration.

We also obtained limited information on DOD agency and GSA civil agency CPC services and the Air Force's Tactical Air Command conversion from CPC service to government-owned copiers at Langley Air Force Base, Virginia.

We solicited industry views from seven companies and two associations (see ch. 6 and app. I) identified by the Subcommittee, but we did not verify the information we received.

The Committee was also interested in the impact of CPC copying on duplicating/printing² production and the generation of industrial fund revenues. We could not determine the impact, if any, of CPC copying on duplicating/printing production volume because summarized information on copier production volumes does not exist for some locations, and detailed copier information was available for only 2 or 3 earlier years at various locations. We did not examine the industrial fund issue because only the Navy charged a management fee for CPC service; however, there was only a nominal industrial fund gain (\$30,000) in fiscal year 1988.

DOD and the Army, Navy, and Air Force have not reported any internal control weaknesses associated with the procurement and management of copiers or CPC service in their Federal Managers' Financial Integrity Act reports for fiscal years 1986, 1987, and 1988.

We conducted our review from November 1988 to October 1989 in accordance with generally accepted government auditing standards.

²DOD has no clear definition to distinguish between duplicating and copying. Duplicating serves the same basic purpose as copying and sometimes uses the same equipment, but is generally used for higher volumes. The Joint Committee on Printing requires an annual report on duplicating/printing.

Guidance Lacking for Establishing Contract Terms

CPC contracts usually contain the same general terms, but the specific requirements of these terms vary by contract and military department or contracting office. However, we found DOD and GSA lack guidance on what factors to consider in determining what specific terms to include.

Procurement Responsibility

Normally, each CPC contract provides service within one military department. A military base or other local field activity, such as the Navy Publishing and Printing Service Detachment Office, administers and manages the CPC contract.

Several organizations have been involved in procuring CPC contracts for various DOD components. CPC services have been purchased for the military departments by major commands, military bases, and GSA, as shown in table 2.1.

Table 2.1: Procurement Offices for CPC Service

Service	Organization
Army	GSA, U.S. Army Forces Command, and individual Army installations
Navy	GSA and naval contracting centers
Air Force	Major commands and individual Air Force bases

Performance Requirements Differ Among Contracts

We found some basic characteristics were included in CPC contracts, regardless of which procurement office was involved. For example, the contracts

- specify geographic areas served;
- state estimates of the number of copiers and total production volume, but do not include guaranteed quantities;
- do not include installation, removal, or termination fees for adding or removing CPC copiers during the contract period;
- require the contractor to install new or remanufactured¹ copiers; and
- specify CPC band requirements in terms of monthly production volume, accessories, and features.

However, a number of provisions vary from contract to contract. Contracts differ by number of contract option years, copy volume bands, requirements for vendor-furnished supplies, and maintenance requirements.

¹Remanufactured is defined as a copier that has been disassembled, inspected and parts replaced as necessary, reassembled on a production line, and inspected to meet new copier requirements.

Contracts awarded by the Navy and GSA contained similar performance requirements, which are different from the other services. Air Force contracts also differed among themselves (see app. II).

Number of Option Years Vary by Contract

Of the 15 contracts we reviewed, most were for a 1-year term plus 2 option years (see app. II). However, several Air Force contracts, including Air Force Logistics Command bases, Strategic Air Command headquarters, and the Military Airlift Command at Norton Air Force Base, provided for 4 option years.

Shorter and longer option periods both have different advantages. Shorter option periods allow users to maintain pace with current technology. Also, the average age of the equipment would be lower under shorter option periods, which should lower maintenance downtime. Longer option periods could reduce the frequency of contracting and copier replacement, and allow vendors to recover their fixed costs, such as copier and installation costs, over a longer period, which could result in lower priced bids.

Neither DOD nor GSA has provided guidance on what option length is in the government's best interest or what factors are relevant to the selection of the number of option years.

The Number and Range of Copier Bands Vary by Contract

CPC contracts specify user requirements in terms of production volume bands. Each band has a specified minimum and maximum production volume range that specifies what accessories and features are required on a copier. The number of bands and their ranges varied by contract (see app. II). In general, contracts awarded by GSA for the Army or Navy used a common set of band categories, although the number of bands could vary, depending upon needs for higher volume capabilities. Contracts awarded by the Army and Air Force varied most in terms of the number of bands and the ranges of those bands. For example, the Air Force Logistics Command's contract for its six bases has one band covering 12,000 to 60,000 copies per month. The Strategic Air Command headquarters and Offutt Air Force Base contracts have four bands with copies-per-month categories ranging from 0 to 6,000; 6,001 to 12,000; 12,001 to 40,000; and a minimum of 40,001 with no maximum.

The various bands require different accessories and features on the copiers. These accessories and features increase in number and sophistication as the production volumes increase. For example, under one GSA

contract, band 1 (0 to 5,000 copies per month) requires a table-top copier with a minimum speed of 12 copies per minute; one tray for 8.5 by 11 inch paper and a second tray for 8.5 by 14 inch paper; and two modes to reduce the photocopied size of the original. Under the same contract, band 4 (30,001 to 50,000 copies per month) requires a table-top copier with a minimum speed of 45 copies per minute; a minimum of two paper trays to feed 8.5 by 11 inch paper and either 8.5 by 14 inch or 8.5 by 17 inch paper; an automatic document feeder with at least two stack feeds; two reduction modes; a 15-bin sorter with a 50-sheet capacity; and a job interrupt feature for stopping long runs.

As with production volume bands, accessories and features also differ among contracts. A vendor can use different machines to cover the various bands or use the same machine for two or more bands.

Copier production volume capabilities are not standard within the industry. Each supplier offers a variety of copiers with different capabilities, including various monthly production capabilities. For example, while soliciting industry views, we found that four of the seven suppliers currently offer copiers that exceeded 80,000 copies per month. Without guidance, agencies might establish bands that inadvertently limit competition if the production volume ranges exceed the copier capabilities of too many suppliers.

The question of band categories has been raised in a number of bid protests that have been filed with the Comptroller General concerning CPC service contracting.² The protests involved situations where the contract solicitation contained multiple copier band requirements for CPC service. The protesters argued, among other things, that the solicitations unduly restricted competition by requiring that one contract, including all volume bands, be awarded. The Comptroller General held that procurement on a total package basis was legally unobjectionable where the agency reasonably believed benefits, such as greater flexibility in redistributing copiers to meet changing user needs and increased competition for certain categories of copiers, would be achieved.

The Comptroller General also held in one case that requirements in contracts to obtain all of various Army installations' copier needs were valid even though the contract solicitation had not contained a limit on the number of copiers that installations could require. At the time, the

²B-231952, B-232018, B-232142, B-232159, B-232160, B-232167, B-232168, and B-232169, dated November 8, 1988; B-232262, dated November 30, 1988; and B-232560, dated December 5, 1988.

solicitation had contained the Army's best estimates of the number of copiers needed and current monthly usage figures. The Comptroller General's decisions do not prohibit future contracting for CPC service by production volume band or smaller groups of bands when it is in the government's best interest.

We believe that, to achieve the most economical service, bands should be established that would not limit potential competition. However, we found no guidance to assist agencies in setting the number or ranges of bands. Neither GSA nor DOD has tried to determine whether there are optimal numbers and ranges of bands to meet users' needs and maximize competition.

Differences in Required Contractor-Furnished Supplies

Under CPC contracts the contractors normally furnish all supplies, although the types of supplies differ between Air Force and other DOD contracts (see app. II). All government contracts require the contractor to furnish the chemicals, such as developer and toner. However, the Air Force requires the contractor to supply the paper, while in other contracts the user provides the paper and the contractor is only required to deliver it.

Air Force officials believe that contractor-furnished paper is less costly because it reduces the Air Force's administrative work load. Army and Navy officials believe that government-furnished paper obtained from GSA costs less. Also, some industry officials stated that the government can buy paper at the same or lower cost than their companies. In addition, according to some industry officials, contingencies against possible increases in their cost of paper increase their bids for CPC services. Neither DOD nor GSA has determined whether it is more economical for the government to purchase its own paper or to require the CPC contractor to provide it.

Maintenance Requirements Vary Among Contracts

The contracts specify a required response time (i.e., the maximum number of working hours to respond to the first call). In addition, they also specify that a machine must be replaced if it is inoperative for a certain number of working or continuous hours beyond the initial response time.

The contracts we examined required an initial response time of either 4 or 6 working hours. The time for machine replacement varied more, although the most common time was 36 continuous hours beyond the

initial 4 or 6 hours. Some Navy contracts called for repair within 24 or 36 hours of downtime, plus an additional 12 working hours to replace the copier. The Strategic Air Command's contract called for replacement if a given machine accumulated 20 hours of downtime in a month.

The shorter the response time required for repair or replacement, the higher the vendor's cost is likely to be, which is likely to affect the price bid. Neither DOD nor GSA has identified any optimal maintenance terms or established any guidance on what factors agencies should consider when establishing maintenance response requirements.

Unit Prices Vary by Contract

For the 15 contracts we examined, unit prices varied considerably from contract to contract and for different bands within contracts. The unit prices, regardless of copier band, ranged from \$.0072 to \$.0331 per copy. They varied among contracts for the same copier band and same length contract period. For example, for a band ranging from 0 to 5,000 copies per month, prices ranged from \$.0145 to \$.0331 per copy.

We did not find any relationship between the unit prices and contract size (number of copiers) or geographic location (within or near a major metropolitan area versus a rural area). However, we reviewed only the accepted contract prices and not the bids of unsuccessful bidders to determine if any pricing patterns were apparent. We did notice that the CPC unit prices generally decreased as contracts for existing copiers were replaced and as new CPC contracts were awarded in the Navy and Air Force.

Conclusions

Differences in the number of contract option years, production volume bands, contractor versus government-furnished paper, and maintenance requirements may affect total operating costs. However, neither DOD nor GSA has examined whether some terms may be more advantageous to the government, nor have they provided guidance to agencies on what factors to consider in establishing contract terms.

Recommendation

Since DOD and GSA both have experience with CPC contracts, we recommend that the Secretary of Defense and Administrator, General Services Administration, jointly study the implications of various CPC contract terms, particularly with regard to the number of option years, the number and ranges of production volume bands, and vendor-furnished supply and maintenance requirements. We believe that guidance should

be based on procurement and administration of CPC service experiences of the military departments, GSA, and other civil agencies. They then should use the resulting information to provide guidance for agencies to use in establishing terms for their specific contracts.

Agency Comments and Our Evaluation

DOD believes that due to varying military department/command requirements, specific guidelines on the optimum number of option years and volume band configuration may be detrimental. However, DOD agreed to determine what commonality can be achieved between the agencies and commands. It plans to contact GSA to initiate a joint study on the implication of various contract terms and, as appropriate, use the study results to provide guidance to the military departments. GSA partially agreed with the recommendation and stated it could develop a Federal Property Management Regulation to assist agencies in deciding if CPC is an appropriate option.

Conversion to CPC Service Has Generally Reduced Cost

Our analyses of Army and Navy studies conducted before and after converting to CPC service showed that converting to CPC service generally reduced costs, although some individual copiers were more cost-effective under other options. Studies by the Navy and GSA indicated similar results. However, we also found that potential users lack guidance regarding the factors to include in evaluating costs.

Preconversion Studies Show Potential Savings

Military departments' policies require a cost feasibility study prior to the acquisition of any equipment to determine the most cost-effective procurement option. Although these policies need some clarification and compliance can be improved, our analysis of studies for 15 organizations showed that CPC service resulted in significant savings (see app. III).

The Army and Navy cost feasibility studies for 15 organizations under 4 contracts—Fourth U.S. Army at Fort Sheridan, Bremerton, Portsmouth, and Norfolk—included estimated annual operating costs for existing copier costs of \$3.3 million and proposed CPC service of \$1.8 million. The annual savings are anticipated to be \$1.5 million, or about 45 percent. These studies were based on (1) actual production volumes of replaced copiers and estimated production volumes for new copiers, (2) cost of existing copiers, and (3) estimated unit prices prior to contract and contract unit prices for additions to existing CPC contracts.

Guidance for Conducting Cost Feasibility Studies Needs to Be Improved

The military departments' guidance varies for conducting cost feasibility studies to determine the most cost-effective procurement option. We analyzed the cost feasibility studies for converting to CPC service and generally agreed with their results. However, five studies were not performed, and according to DOD officials, two additional studies were performed but not retained.

In addition, we are also concerned about how some of those studies were conducted. For example:

- Some studies were done for all of an organization's copiers combined while others were done on a copier-by-copier basis.
- Some relevant cost factors, such as removal costs, were not included.
- The studies generally compared the CPC option to the user's existing copier costs without considering other procurement options (e.g., lease or purchase).

**Cost Studies Not Always
Done or Retained**

Required cost feasibility studies to support procurement of CPC services were not performed at Fort Polk and the base headquarters¹ at Fort Sheridan. In addition, the required cost feasibility studies were not performed at three of the four Air Force locations where we requested the information: the Military Airlift Command headquarters and Scott Air Force Base, Norton Air Force Base, and Strategic Air Command headquarters and Offutt Air Force Base. Further, according to copier managers, cost feasibility studies were performed but not retained at Mare Island Naval Shipyard for a follow-on CPC contract and Langley Air Force Base when converting from CPC service to government-owned copiers.

The absence of cost feasibility studies prior to contracting indicates a weakness in internal controls. Such weaknesses are potentially reportable under the Federal Managers' Financial Integrity Act. DOD and the military departments have not reported any internal control weaknesses associated with the procurement and management of copiers or CPC service in their Financial Integrity Act reports for fiscal years 1986, 1987, and 1988.

**Basis for Evaluating
Copiers Varies**

Military departments' guidelines do not specify whether copiers should be evaluated on a copier-by-copier or an aggregate basis. As a result, Fourth U.S. Army evaluated copiers individually while the Navy evaluated them by organization.

The base headquarters at Fort Sheridan converted all 44 of its existing copiers, consisting of 19 leased and 25 government-owned copiers, to CPC service without performing a cost feasibility study. However, Fort Sheridan prepared a post-conversion cost reduction computation in sufficient detail that we could analyze cost-effectiveness on a copier-by-copier basis. We found that of the 44 copiers, 29 conversions produced savings—16 leased and 13 government-owned copiers. Under the terms of CPC bid solicitations, the government may increase or decrease the number of machines it originally specified. Therefore, Fort Sheridan was not obligated to convert all 44 copiers and could have chosen to convert only the 29 that would have produced savings. By including the 15 lower cost leased and government-owned copiers, the Army's estimated annual savings was \$36,000 rather than \$51,100. In addition, the 12 government-owned copiers had residual cost balances (original cost less

¹Army correspondence designated this as a test location but did not waive the requirement for a cost analysis.

depreciation based on a 5-year service life) totaling \$20,900 at the time of conversion.

Some Relevant Cost Factors Not Included

Military departments' guidance varies on what cost factors to include when determining the most cost-effective solution. Air Force guidance, for example, specifies that costs for equipment, personnel, maintenance, and supplies should be included. The Navy's guidance provides more detail and defines equipment cost as the purchase and rental costs and additional factors as installation, removal, and associated overhead. Army guidance did not identify any specific cost factors.

Two cost factors not identified in any of the departments' policies are contract termination charges for leased copiers, if applicable, and the residual cost balances of government-owned copiers that are not being relocated, but disposed of. The departments' records did not indicate whether the equipment was being retained or disposed of.

In the cost feasibility studies we examined, none of the organizations considered applicable termination and removal costs or residual cost balances. For example, although removal costs applied, Fourth U.S. Army did not include them in its cost study. At our request, Fourth U.S. Army computed its removal costs to be \$2,100. Also, the Puget Sound Naval Shipyard did not include termination costs of \$30,500, removal costs of \$14,400, and residual cost balances of \$14,300 in its cost study. These costs would have reduced the savings in the first year or over the 3-year contract period.

Under government accounting, costs of goods and services are normally considered in the year incurred. We believe that the cost evaluations for copier replacement should consider such costs as annual depreciation for copiers being retained; one-time costs for installation, termination, and removal; and the residual undepreciated value of equipment to ensure that equipment is not prematurely replaced when it is not cost-effective to do so.

Other Copiers Options Not Evaluated

The Navy Publishing and Printing Service Detachment Office studies compared existing copier costs and estimated CPC costs before contracting for the Bremerton area, Norfolk Naval Base, and Portsmouth area contracts. The Puget Sound Naval Shipyard (Bremerton area) and Fourth U.S. Army also conducted studies before adding to existing contracts. These studies only compared the costs of existing copiers

acquired through the GSA catalog to CPC service. They did not consider acquiring new copiers under non-CPC options.

GSA has developed formulas to calculate costs of non-CPC options available under GSA contract schedules. Also, the Navy Publishing and Printing Service Detachment Office, Oakland, has developed a computer program to identify the least costly option. However, these tools only evaluate options for selecting new copiers or CPC service. They do not consider the costs of retaining the present copiers.

Post-Conversion Computations Show Savings Were Achieved

Some copier managers performed analyses called cost reduction computations after CPC service was installed. These computations show that, on an overall basis, the government reduced its annual operating costs for copiers in 11 organizations by \$1.4 million (see app. III). However, on an individual basis, the conversion of some copiers was not cost-effective. We reviewed the cost reduction computations for the Fort Sheridan headquarters' organization and Oak Harbor Naval Air Station, Naval Undersea Warfare Engineering Station, and Puget Sound Naval Shipyard under the Navy's Bremerton area contract.

At Fort Sheridan the cost reduction computations compared the prior year's operating costs (including rental, maintenance, depreciation, and supply costs) for replaced and discontinued copiers to the first year's cost for CPC service. The estimated cost difference was \$36,000, a savings of almost 22 percent. This was a conservative savings estimate because the pre-CPC year included the cost of existing copiers, while the CPC year included these copiers plus seven additional CPC copiers and an increased use rate without any adjustments.

The Navy used the same methodology to compute its cost feasibility study and cost reduction analyses for the three Bremerton area organizations by substituting actual volume and contract prices for the prior estimates. These studies showed an estimated savings of \$412,000, or nearly 43 percent.

Cost Savings Computations Need to Be Improved

The cost savings computations we examined did not consider all annual and one-time cost factors. Although the Army computations included the annual depreciation cost, the Navy computations did not. In addition, neither military department considered the residual cost balances of government-owned copiers and termination and removal costs of leased copiers.

For example, the Puget Sound Naval Shipyard cost reduction computation included an annual savings estimated for \$218,800. We believe that the savings estimate should be increased by \$7,200 for annual depreciation on the copiers converted, and be decreased (either in the first year or amortized over the term of the CPC contract) by \$59,200 in one-time costs for termination. The residual equipment value at the time of conversion should be considered as a CPC expense if the owned copier is being disposed of.

The analysis should also consider why new copiers are being added because this can affect the savings computations. Additions could either be new requirements or a redistribution of existing work load. However, it was not always possible to determine why a copier was added because of insufficient information.

We identified four methods to account for additional copier requirements. Two of these methods had no effect on the conversion computations because they either excluded the additional copiers or used offsetting costs. One of the other methods understated the savings while another overstated the savings. For example, the cost reduction computation for the headquarters' organization at Fort Sheridan included CPC costs for seven additional copiers without adjusting their previous copier costs for the increase. This method raised their CPC costs by \$17,400 for copiers that did not exist before CPC service, and, in effect, understated the savings attributable to CPC conversion. In another case the savings computations for the Naval Undersea Warfare Engineering Station and the Puget Sound Naval Shipyard included the higher estimated pre-CPC leased costs for the additional copier requirements and used the lower actual CPC costs for post-conversion costs. Since the estimated leased costs were higher than the CPC costs, the CPC savings were overstated by \$11,000.

We believe that cost studies should be thoroughly evaluated to ensure that cost-effective equipment is not prematurely replaced and that it is not being put to productive use. After converting to CPC service, the government returns leased copiers to the contractor, but must relocate or dispose of the copiers it owns. For example, the Army relocated 14 copiers from Fort Polk and Fort Sheridan to other commands or off-base locations. The remaining government-owned copiers at these bases and the Bremerton area were transferred to the Defense Logistics Agency's Reutilization and Marketing Offices and subsequent productive use of the equipment could not be readily determined.

Navy and GSA Studies Identify Potential Cost Reduction Under CPC

Separate studies conducted by the Navy and GSA found that CPC service is generally less costly to the government. In mid-1988, the Navy compared costs on then-existing 17 CPC contracts with estimated costs for the same leased copiers and actual production volumes. It compared similar operating costs for equipment (including maintenance) and supplies (except paper). It obtained leased copier prices from GSA's catalogs and price lists. The total CPC costs were lower than total leased copier costs for each CPC service band under all contracts. The total projected annual CPC costs were \$6.3 million lower than the \$13.1 million in leased copier costs.

In another study, GSA compared the pricing under five CPC contracts—Bremerton, Norfolk, Portsmouth, Fort Polk, and Fort Sheridan—with estimated costs for non-CPC procurement options for the same copiers. It used its own catalog and price lists to estimate costs. The GSA study included

- supplies (except fuser and paper) in quantities that represent typical ordering practices;
- maintenance at the lowest available cost;
- cabinets for table-top copiers, installation, and removal costs; and
- the lowest cost to the government under each procurement option and a 5-year estimated useful life for the lease/purchase and purchase options.

GSA made two comparisons for each band, one using one-half of the maximum production (e.g., 25,000 copies in the 30,001 to 50,000 band) and the other using the maximum production (e.g., 50,000 copies for the 30,001 to 50,000 band) in each CPC level. Out of 84 comparisons, CPC was less costly in 73 cases and equal to or more costly than the other options in 11 cases. Table 3.1 shows the results of these comparisons.

Chapter 3
 Conversion to CPC Service Has Generally
 Reduced Cost

Table 3.1: GSA's Comparison of CPC Service Costs to Other Procurement Options

Result	Lease/rental		Lease/purchase		Purchase ^a		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
CPC costs were lower	41	93.2	17	77.3	15	83.3	73	86.9
CPC costs were equal	1	2.3	2	9.1	0	0	3	3.6
CPC costs were higher	2	4.5	3	13.6	3	16.6	8	9.5
Total	44	100.0	22	100.0	18	100.0	84	100.0

^aExcludes those where catalog information was not available or special pricing was available only to certain organizations.

Recent Actions Taken by DOD

Subsequent to our review, DOD distributed CPC procurement guidelines in an October 25, 1989, memorandum to the military services and the Defense Logistics Agency. The guidance outlines the factors to be considered in performing a cost feasibility study on a copier-by-copier basis. The memorandum also emphasized the need to provide a full and complete cost analysis prior to the solicitation of bids for any copier services.

GAO believes it is too early to evaluate whether the memorandum is an effective mechanism to implement the guidelines.

Conclusions

Converting leased and government-owned copiers to CPC service can result in significant annual savings to the government. However, CPC service is not always the most cost-effective option on a copier-by-copier basis. Therefore, we believe the military departments need to perform the required cost feasibility studies on a copier-by-copier basis rather than in the aggregate, and only convert an individual machine when it is cost-effective to do so. They should also consider all four options—lease/purchase, rental, purchase, and CPC service.

Cost feasibility studies and cost reduction computations should include all pertinent cost factors, such as annual depreciation on owned machines and removal costs. Also, we believe that cost feasibility studies should be retained.

Recommendations

We recommend that the Secretary of Defense direct the Secretaries of the Army, Air Force, and Navy to

Chapter 3
Conversion to CPC Service Has Generally
Reduced Cost

- use CPC service as a procurement option along with other traditional options and select its use when it is the most economical to the government;
- perform the required cost feasibility studies, including all procurement options, ensure that cost feasibility studies and cost reduction computations are performed on a copier-by-copier basis considering all relevant cost factors, and retain the studies to support the procurement action; and
- incorporate DOD's recently distributed guidelines in the military departments' regulations or operating directives.

Agency Comments

DOD agreed with our recommendation. As a result of DOD's October 1989 memorandum, we have clarified the recommendation regarding the consideration of relevant cost factors in the cost feasibility study.

Perceived Advantages and Disadvantages of CPC Service

DOD officials cited several other advantages and disadvantages of CPC service. The advantages included improved copier administration, management, and maintenance, and disadvantages included contract default and possible reduced future competition. We found evidence to support several cited advantages. However, many of the advantages could occur under or be incorporated into contracts for leasing or purchasing copiers. We found that the potential disadvantages were either not significant or could occur under the leasing or purchasing options.

Advantages Associated With CPC Service

Military department headquarters, command, and field organization officials cited various potential advantages of CPC service. The advantages include a reduced administrative work load, improved management and maintenance, availability of the newest technology, and reduced operator training.

Reduced Work Load

According to officials, CPC service reduced the administrative work load. Officials estimated savings of \$48,400, \$35,000, and \$21,800 in personnel costs due to the reduced work loads resulting from the CPC contracts for Fort Polk, the base headquarters organization at Fort Sheridan, and the Mare Island area, respectively. We could not verify these figures because they were based on estimates.

Work load reductions were evident in the contract procurement and accounting and supply areas. For example, the number of invoices decreased from 4,908 to 36 per year, or about 99 percent, for 6 organizations under the Fort Polk, Fort Sheridan, and Bremerton area contracts. However, the reductions in procurement actions and vendors were nominal at Oak Harbor Naval Air Station, which had converted to CPC service from leased copiers furnished by a single contractor (see app. IV).

When copiers are leased or purchased, users must requisition, order, receive, store, and issue supplies. These activities are eliminated under CPC contracts because the contractor furnishes the supplies. A Navy industrial engineer estimated that 45 days in elapsed time and 4.95 personnel hours are required to perform the supply functions per order.

Improved Management

Before CPC service, each using organization managed its own copiers. However, after converting to CPC service, the management was centralized at the base level or, for an area serving several installations, an

organization such as the Navy Publishing and Printing Service Detachment Office. Prior to CPC service, some using organizations had no internal copier focal points, copier inventory records, or records on copier use. Officials also cited improved management because of the information included in contractors' invoices.

One contractor voluntarily furnished copy control devices for Fort Sheridan that require the users to enter their authorization code to operate the copiers and records the use by code. The contractor uses the codes to prepare invoices, and the headquarters organization uses it to prepare monthly and cumulative summaries. Prior to CPC service, such detailed information was not available and could not be readily provided to management.

Another aspect of improved management cited by officials was increased flexibility because copiers can be removed and installed whenever necessary during a year without incurring liquidation, installation, and removal costs. For example, CPC copiers were installed at Fourth U.S. Army and the Pudget Sound Naval Shipyard, Bremerton, without incurring any installation charges.

Improved Maintenance

Some officials stated that maintenance was improved in terms of reduced downtime and longer periods between copier failures because of on-site maintenance personnel and more rapid availability of parts. The improvement could not be verified because no maintenance records were maintained before converting to CPC service. The contractors' CPC maintenance records showed that the response times generally complied with contractual terms. Some officials attributed the maintenance improvement to the fact that downtime represented a potential loss of income to the contractor because the contract terms provide payments only for copies produced.

Improvements in maintenance were only marginal when a concentration of copiers from a single source was replaced. For example, according to Oak Harbor Naval Air Station officials, their replacement of 52 leased copiers from a single contractor showed little improvement in maintenance from converting to CPC service. All other using organizations selected for review replaced leased and purchased copiers from multiple manufacturers.

Other Advantages

A number of other advantages were also cited. For example:

- elimination of government capital investments because the government pays only as copies are produced,
- availability of the newest technology because copiers may be replaced more frequently under CPC contracts, and
- reduced operator training if personnel are reassigned or transferred among locations with the same copiers.

Advantages Are Not Necessarily Inherent to CPC Service

Some advantages are inherent to the CPC concept, such as reduced administration costs of maintaining supplies and payment based on actual usage. Other cited advantages already exist for copiers that are acquired through the GSA catalog or could be made requirements in competitively awarded contracts.

The GSA catalog provides information, such as prices, features, and accessories, by copier model. Currently, lease, lease/purchase, and purchase options are generally procured from a vendor in accordance with the prices and terms listed in the GSA catalog. Some of the CPC advantages available with GSA catalog-acquired copiers include

- use of the lease/rental option to avoid up-front capital outlays, although this may not be the least costly alternative;
- selection of multiple copiers from the same vendor; and
- use of more centralized copier management.

We believe that other advantages could be incorporated into competitively awarded copier contracts. These advantages include invoices that list copiers and production volume use, consolidated purchase orders, and improved maintenance with specified time requirements. Industry representatives were receptive to including similar terms in contracts competitively awarded for leased or purchased copiers. According to some company representatives, they already dedicate maintenance personnel to large concentrations of copiers used by the government, and they meet or exceed the CPC maintenance requirements at those locations.

Few Perceived Disadvantages Associated With CPC Service

DOD officials cited several disadvantages of CPC service. For example, contracts could be awarded to the lowest bidder without considering the vendor's ability to perform, which could disrupt service. They also said that CPC service could increase the volume of copying and users could resist changes in the brand of copiers. We found no evidence that these disadvantages were actually encountered or had any significant impact on CPC contracts or that they could not also occur under other procurement options.

Poor Contractor Performance

Maintenance generally improved after conversion to CPC service. One exception was at George Air Force Base, which had difficulties with a CPC contract that had been awarded to a small business. Despite these difficulties, the Air Force did not place the contractor in default for lack of performance and did not terminate the contract. No other location we reviewed indicated any potential performance problems after converting to CPC service.

Potential Increased Copying

Some officials said that CPC service could result in increased copying for both valid requirements and unnecessary use. We believe that regardless of the procurement option used, effective controls properly implemented and monitored are necessary to prevent unauthorized copier use. For example, a device that monitors copier use, such as the one provided by the contractor at Fort Sheridan, could help managers detect copier volume increases within organizational units.

Potential User Resistance

Some officials believe that CPC service could cause user resistance by replacing copiers from one contractor with copiers from another contractor. However, we believe this is a personal preference that could occur regardless of the procurement option.

Conclusions

Advantages, such as some reduction in administrative costs, avoidance of installation and removal costs, and payment only for actual use, are applicable to only CPC service. Other advantages attributed to CPC either already apply or could apply to non-CPC options. We believe that the potential disadvantages cited are either not significant or could occur regardless of the procurement option.

Several of the key CPC advantages appear to be more a function of concentration of copiers from a single vendor than an aspect inherent to the

CPC concept. Generally, industry representatives said they would be receptive to including similar terms in competitively awarded contracts for leased or purchased copiers. Consequently, we believe that DOD and GSA may be able to achieve benefits and savings from competitively awarded contracts that incorporated terms similar to those in CPC contracts. However, in some cases it may not be cost-effective. Therefore, competitive awards should be equally considered with copiers acquired through the GSA catalog or CPC service.

Recommendation

We recommend that the Secretary of Defense and Administrator, General Services Administration, identify opportunities to competitively award single vendor contracts for leased and purchased copiers that include terms similar to those in CPC service contracts.

Agency Comments

DOD partially agreed with the recommendation. It stated that it is planning to issue guidance requiring the military departments and defense agencies to incorporate applicable CPC provisions in single vendor contracts. DOD added that only some of the less significant CPC provisions could be applied to single vendor contracts for leased and purchased copiers. GSA agreed with the recommendation but added that the Congress has challenged the cost/benefit of single awards, and industry is opposed to expanding single-award contracts.

Potential for Expansion of the CPC Concept

Over the past couple of years, DOD has increased the number of CPC service contracts, and GSA awarded its first CPC contracts for civil agencies in fiscal year 1989. However, further potential for expanding CPC service still exists. Also, the underlying concept may be applicable as an alternative to leasing or purchasing other kinds of equipment.

Expanding CPC Service

DOD organizations have primarily expanded the use of CPC contracts either within a command or a military department. However, potential exists for expanding current contracts¹ or awarding new contracts within or among military departments and agencies.

For fiscal year 1989, DOD added organizations to existing contracts and awarded new contracts. For example, Fourth U.S. Army was added to the Fort Sheridan contract; several organizations were added to the Norfolk Naval Base and Portsmouth contracts; 2 new contracts were awarded for 14 Army locations; and 14 new contracts were awarded for Navy organizations.

Other organizations could be added to existing contracts because they are located within existing contract service areas. These include the U.S. Army Recruiting Command at Fort Sheridan and the Naval Station, Fleet Training Center, and Naval Medical Clinic at the Norfolk Naval Base. However, a number of locations without CPC service do not fall within present CPC service contract areas. These locations could potentially be included under new contracts.

Some CPC service on a multiservice basis exists. Army organizations at the Presidio of San Francisco, California, and Crane, Indiana, participate under Navy CPC contracts. We found several cases where the organizations are some distance apart. For example, the Presidio of San Francisco and Oakland Naval Supply Center are about 10 miles apart and yet are covered by the same CPC contract. Also, Oak Harbor Naval Air Station and Pudget Sound Naval Shipyard are under the same CPC contract, even though they are over 50 miles apart.

CPC contracts could be centrally awarded on a multiagency basis and locally administered and managed. We did not find any contracts jointly serving military and civilian activities; however, one was under consideration. In the Fresno, California, area a group of representatives from civil agencies performed a feasibility study for converting leased and

¹CPC service can be expanded or reduced for organizations within the contractual geographic area.

purchased copiers of 19 civil and defense activities to CPC service. The study estimated an annual cost reduction of \$137,183. Estimated savings ranged from \$255 a year for the Small Business Administration to \$61,000 a year for the Internal Revenue Service. Navy officials stated that the Internal Revenue Service and a few other civil agencies were coordinating future CPC service under the Lemoore, California, contract with the Navy. In addition, DOD could participate under GSA's 11 contracts for civil agencies in various geographic areas awarded for fiscal year 1989.

More Information Needed

To help ensure that future expansion or consolidation of CPC service contracts are in the best interest of the government, information is needed on the following:

- the optimal size of the geographic area and the number of CPC copiers that could be economically procured and managed by the government and installed and maintained by vendors;
- the existing state of competition among copier vendors and the probable effect of CPC service on competition;
- the minimum number of copiers that should be included to establish a production volume band; and
- what government policies and procedures, if any, would be necessary to effectively and efficiently coordinate, procure, and manage consolidated CPC service on a multiagency basis.

CPC Contract Information Could Increase Use

Publication and distribution of CPC service information would help copier managers to identify the availability of CPC service in specific geographic areas. GSA publishes and distributes catalogs and price lists to copier managers for leasing or purchasing and maintaining copiers under its contracts. However, neither GSA nor DOD publishes similar catalogs on the availability of CPC service. For example, the copier manager at the Naval Undersea Warfare Engineering Station, Keyport, Washington, managed leased copiers in Crystal City, Virginia, and San Diego, California, but was unaware of the existing CPC contracts for those geographic areas. Distribution of published CPC information to copier managers increases the potential for expanding CPC service to government organizations that are scattered throughout the United States, such as Fourth U.S. Army's off-base locations and many small Navy activities requiring copier services.

Expanding the Application of the Cost-Per-Unit Concept

The CPC concept involves paying for equipment use, maintenance, and supplies based on a unit price, and could be used as an option to leasing or purchasing other kinds of equipment. The price could be based on measurable units, such as pieces produced or processed, time measurements, or mileage.

The use of CPC service for duplicating is also being studied. The Army uses two CPC service copiers (50,001 to 80,000 copies per month) at Fort Sheridan for duplicating. Currently, the Navy is studying the potential use of the concept for duplicating in two areas—Bremerton, Washington, and Pearl Harbor, Hawaii.

The CPC concept might also be used as an option to leasing and purchasing other types of nontactical equipment, where use can be determined in measurable units. Possibilities include vehicle use (measured in miles) and medical equipment (measured in the numbers of x-rays or tests). GSA officials stated that expansion of the concept will be tested in their current bid solicitation for medical tests.

Conclusions

DOD has continued to expand its use of CPC service. In view of the benefits experienced in prior conversions to CPC service, we believe that expanding and/or consolidating CPC service should continue when it is in the best interest of the government. Disseminating CPC catalog information could also help other agencies when considering this procurement option.

Recommendation

We recommend that the Administrator, General Services Administration, publish and distribute catalogs and price lists to government copier managers to help them identify the availability of cost-per-copy service.

Agency Comments and Our Evaluation

DOD agreed that some expansion of CPC service is feasible and added that vendors might achieve the greatest economies of scale at the installation level, where copiers are concentrated. GSA partially agreed with our recommendation since it believes that the project manager and agencies within the scope of the contract already receive price lists and pamphlets containing contract administration information. The recommendation, however, is geared towards providing nonparticipating copier managers, located within or at a distance from the contractual serving area, with limited information so they can consider the potential for using CPC service.

Industry Views

At the request of the Subcommittee, we interviewed company officials about the advantages and disadvantages of CPC service. As agreed with the Subcommittee, we did not verify the information furnished by the industry. However, we have included information where we had data relevant to points made by industry officials.

We interviewed officials from seven copier companies and two associations that represented copier companies. One association represented five of the seven companies. The other association also represented two of those companies in addition to another copier company that we did not interview. Two of the seven companies were not represented by either association.

Company representatives expressed views that ranged from ready acceptance of the present government contractual CPC requirements to a lack of future interest because of bad experiences with government CPC service contracts.

Companies' Policies and Structure Can Affect Costs

Some companies were concerned about disadvantages related to variations in company policies on the sales of new or used copiers, depreciation, special wiring requirements, and sales organizations.

Some companies sell only new copiers while other companies sell new, remanufactured, reconditioned, and rebuilt copiers. CPC contracts require either new or remanufactured copiers. Officials from three companies suggested that remanufactured copiers do not always have the latest technology and the companies furnishing them have a slight edge over companies that only furnish new copiers. Officials from another company stated that remanufactured copiers are like new, carry the same warranties as new copiers, and do not represent outdated technology because new models are normally introduced with minimum changes in existing technology.

According to officials from three companies, CPC copiers are depreciated over 3 years. They also said that installing and removing CPC copiers after the start of the contract or declining to renew for the option years prevent the contractor from recovering its costs. Similar actions—installation, removal, and termination of leased copiers—could occur during or at the end of a fiscal year under GSA multiple-award schedules, but usually entail additional costs to the government. Officials of one company stated that removing their leased copiers when the government converted to CPC service resulted in significant costs for the company,

even after considering the predetermined additional costs to the government.

Some copiers use standard building electrical wiring while other copiers require special electrical wiring. According to one company official, because the government does not provide the special wiring, companies that have these costs for installing and relocating CPC copiers have a slight cost disadvantage compared to companies that use standard wiring.

Companies that have local branches sell, furnish, and maintain copiers using their own employees. Dealer-structured companies involve the manufacturer or dealer in sales, but the dealer furnishes supplies and maintains the copiers. According to officials from dealer-structured companies, their companies are at a cost disadvantage when compared with branch-structured companies because the company and dealer must share the income while the branch-structured company receives all the income.

Government Contract Terms

Company representatives had some concerns about the government's CPC contract terms. Their concerns included (1) the lack of any contract guarantee, (2) the size of geographic areas, (3) the numbers of copiers included, (4) the standard accessories and features required by each contract, (5) production band volumes, and (6) paper being included under some contracts.

Lack of Guarantees

Government contracts for CPC service do not guarantee the number of copiers or production volume over the life of the contracts. According to officials from three companies, the contractors had no assurance that their costs would be recovered.

The Size of Geographic Areas

Officials of two companies expressed concern over the large geographic areas included in a current solicitation for a single contract to cover some Navy activities in the Washington, D.C.; Annapolis, Maryland; and Baltimore, Maryland, areas. The largest geographic area under a single contract selected for our review was the Bremerton, Washington, contract, which included 527 copiers in May 1988. That contract generally included the Puget Sound area—Bremerton to Oak Harbor, about 56 miles to the northeast; Bremerton to Tacoma, about 20 miles to the

southeast; and Bremerton to Seattle, about 16 miles to the east. We found that this contract has resulted in savings to the government.

Indefinite Numbers of Copiers

Another concern was that some solicitations contained a large indefinite quantity of copiers. For example, the GSA solicitation for the Navy's Washington, Annapolis, and Baltimore area contract stated that the estimated number of copiers may increase from 467 to 750, a potential 61-percent increase. The reason for the companies' concern is that deletions or additions after the initial contract award may not allow them to recover their costs.

In the contracts we examined, the number of copiers included in the feasibility studies or bid solicitations sometimes changed before the contract award or copier installation. For example, the number of copiers increased for the Fort Sheridan headquarters organization from 48, including 4 where service was discontinued, to 53, including 2 copiers that were used and reported as duplicators. For 2 organizations in the Bremerton area, the number of copiers increased from 122 to 130. Conversely, the number of copiers under the Norfolk contract decreased from 229 to 199.

Features and Accessories

CPC contracts specify the standard accessories and features, if any, that are required for each production volume band. Company officials said that standard requirements may be more or less than the user needs and if only equipment that matched users' needs were provided, it would be less costly to the government.

According to officials from two companies, users under GSA contracts sometimes requested additional features and accessories after contracts were awarded. Officials of one company said it refused to provide the Navy anything outside the contract terms, and the other company said it provided civil agencies the additional accessories and features under two contracts at its own expense.

According to Navy Publishing and Printing Service Detachment Office officials, the Norfolk organizations had difficulty identifying requirements, and ultimately some existing copiers were not converted to CPC service because of the users' unique requirements.

Production Band Volumes

Contracts specify the estimated minimum and maximum production volume for each copier band. According to officials of two companies, they used the total estimated production volumes implied in the solicitation as the basis for preparing estimated unit prices. The estimated total volumes were computed by multiplying the estimated number of copiers times the maximum production volume for each band. However, the officials stated that lower production volumes are generally being experienced. According to other industry officials, they recognize that production volume can fall below each band maximum, so they consider this fact when estimating unit prices.

We found that copiers were generally replaced on a copier-by-copier basis according to use rates and production volume bands. Also, we found that under two contracts—Fort Sheridan and Bremerton—most copiers were operating within the specified band range, and that the average monthly use rates for all copiers in a given band were within the parameters for seven bands and below the minimum in two bands.

CPC contracts generally included production bands up to 50,000 copies per month. Officials from one company stated that CPC service should be limited to 25 copies per minute, which would be a monthly volume of under 30,000 copies per month. Officials from another company stated that CPC service should be limited to less than 50,000 copies per month because this was the range producing cost savings to the government.

Officials from two other companies supported the multiple-band concept because lower volume copiers provide little, if any, profit, and higher volume copiers provided an equitable balance. If CPC service was only purchased for lower volume copiers or the bands were split into separate contracts, the government's costs would probably increase, according to these officials. Using actual use rates, we found that the government had overall cost reductions for CPC contracts that included multiple production volume bands.

Paper Supply Requirements

Some CPC contracts require the contractor to furnish the paper. According to industry officials, the volatility of paper prices makes this requirement undesirable because prospective contractors will include a price factor in their bids that would make CPC service more expensive than other options. For example, officials of one company said that high prices quoted for an Air Force Air Training Command CPC solicitation led to its cancellation because CPC service would have cost more than the existing copiers. Also, other officials stated that GSA buys paper at

prices that are equal to or, in most instances, less than the prices paid by a copier vendor.

Other Industry Concerns

Industry representatives also expressed some other concerns, including (1) companies using CPC contracts to unload inventory buildups, (2) CPC service reportedly being more expensive than government-owned copiers, and (3) CPC service reportedly being provided to government contractors.

Unloading Inventory

One official stated that the CPC service bidding process allows companies to unload inventory buildups that could represent older technology. Also, the contract terms require continued production, which may cause a contractor to keep a production line open when a model is being phased out.

Cost of CPC Service

Officials of some companies stated that CPC service was more expensive for the government than purchase or lease/purchase options. However, we found that while government-owned copiers could cost more or less, CPC service generally costs less.

Possible Improper Use by Contractors

One company's officials believed the government is furnishing CPC copiers to its contractors at one location, and did not consider this appropriate since the contractor could use the copiers for both government and commercial business. We did not review this location and were not aware of any such arrangements.

Private Industry and State Use of Cost-Per-Copy Service

According to industry officials, some private sector companies, including some government contractors, and state governments use CPC service. However, they said these contracts generally provide more contract guarantees than the federal government.

A few large corporations use CPC service. According to industry representatives, contract terms for private sector CPC service generally guarantee (1) a minimum volume and (2) a 3-year period. For example, one large bank reportedly awarded a contract for 800 copiers, with terms including

-
- guaranteed volume of 150 million copies in year one, 250 million copies in year two, and a volume to be negotiated for year three;
 - a guaranteed contract period of 3 years;
 - a phase-in schedule for copiers; and
 - a guaranteed 3-year life for any copier added during the contract period.

Officials of one company added that their private sector contracts also allow for bidding on a fourth and fifth year, which allows the buyer to take advantage of lower costs incurred in these years by the vendor.

According to industry representatives, state governments that use CPC service have similar contract terms to those of private industry (e.g., guaranteed minimums and contract length). Also, some states have alternative techniques that use or consider CPC service. For example, one state solicits CPC bids and selects up to three bidders for inclusion in their multiple-award schedule. Another state solicits bids for all procurement options (CPC, lease/rental, lease/purchase, and purchased), evaluates the costs over the designated contract period, and awards the contract to the lowest bidder.

Industry Suggested Improvements for CPC Service

Industry officials made numerous suggestions to improve the government's CPC contracts. In some instances, they disagreed on the desirability of the suggested changes in CPC service. The suggested changes generally involved an increased definition of user's needs, reduction of the contractor's risks, and consideration of other procurement approaches. Appendix VI contains details on the industry representatives' suggestions.

Industry Comments

Industry associations and companies we visited were all afforded the opportunity to submit their written comments on this report. Three companies responded and we are including their comments in appendixes IX, X, and XI.

Industry comments varied widely. In addition, some comments concerned matters not included within the scope of our work, such as reviewing bid solicitation, bid evaluations, and contract awards. In some cases, the companies questioned the GSA study results based on the pricing GSA used. Our conclusions and recommendations were based on detailed analysis of conversions at selected locations. We did not verify the data used in the GSA study. One company indicated that rising prices for CPC service would not make it a cost-effective option, whereas

Chapter 6
Industry Views

another stated that CPC service has proven to result in substantial savings. In commenting on our draft report, DOD stated that some of the industry's suggestions are contractually prohibited, and others are simply preferences on the part of industry to minimize risk.

Organizations Where Review Was Performed

Department of Defense

- Office of the Director, Administration and Management, Office of the Secretary of Defense, Washington, D.C.;
- Office of the Joint Chiefs of Staff, Washington, D.C.;
- Washington Headquarters Services, Washington, D.C.; and
- Defense Logistics Agency, Alexandria, Virginia.

Department of the Army

- U.S. Army Publications and Printing Command, Washington, D.C.;
- U.S. Army Forces Command, Fort McPherson, Georgia;
- Base headquarters organization, Fort Polk, Louisiana;
- Base headquarters organization, Fort Sheridan, Illinois; and
- Fourth U.S. Army, Fort Sheridan, Illinois.

Department of the Navy

- Navy Publishing and Printing Service Management Office, Washington, D.C.;
- Navy Publishing and Printing Service Detachment Offices at Bremerton, Washington; Oakland, California; and Norfolk, Virginia;
- Navy Publishing and Printing Service Branch Offices at Lemoore and Vallejo, California;
- Base headquarters organization, Naval Air Station Oak Harbor, Oak Harbor, Washington;
- Puget Sound Naval Shipyard, Bremerton, Washington;
- Naval Undersea Warfare Engineering Station, Keyport, Washington;
- Base headquarters organization, Naval Air Station, Lemoore California; and
- Mare Island Naval Shipyard, Vallejo, California.

Department of the Air Force

- Air Force Publishing Division, Washington, D.C.;
- Air Force Logistics Command, Wright-Patterson Air Force Base, Dayton, Ohio;
- Military Airlift Command, Scott Air Force Base, Bellville, Illinois;
- Strategic Air Command, Offutt Air Force Base, Omaha, Nebraska;
- Tactical Air Command, Langley Air Force Base, Norfolk, Virginia;
- Norton Air Force Base, San Bernardino, California; and
- George Air Force Base, Victorville, California.

General Services Administration

- Federal Supply Service, Washington, D.C.

Appendix I
Organizations Where Review Was Performed

Industry—Companies

- Cannon U.S.A., Inc., Alexandria, Virginia;
- Eastman Kodak Company, Arlington, Virginia;
- Mita Copystar America, Inc., Gaithersburg, Maryland;
- Pitney Bowes, Washington, D.C.;
- Ricoh Corporation, Arlington, Virginia;
- Savin Corporation, Rockville, Maryland; and
- Xerox Corporation, Arlington, Virginia.

**Industry—
Associations**

- Coalition for Government Procurement, Washington, D.C., and
- Computer and Business Equipment Manufacturers Association, Washington, D.C.

Copier Cost-Per-Copy Service Comparison of Contract Terms

Organization/ location	Contract awarded by	Term first yr + no. of option yrs	Bands by range (Copies in thousands per month)					Consumable supplies furnished by vendor (Y = yes & N = no)		Maintenance requirements ^a	
			1	2	3	4	5	Paper	All Other	Reply to 1st call ^b	Replace machine by
Army/ FORCSOM ^c installations throughout CONUS ^e	Fort McPherson	1 + 2	50-100	25-50	10-25	5-10		N	Y	6WH	6WH + 36WH
Army/ FORSCOM/ Fort Polk, LA	GSA ^d	1 + 2	0-5	5-15	15-30	30-50		N	Y	6WH	6WH + 36WH
Army/ FORSCOM/ Fort Sheridan, IL	GSA	1 + 2	0-5	5-15	15-30	30-50	50-80	N	Y	4WH	4WH + 36WH
Navy/Bases in Geographic area of Bremerton, WA	GSA	1 + 2	0-5	5-15	15-30	30-50		N	Y	4WH	4WH + 36WH
Navy/Naval Base, Norfolk, VA	GSA	1 + 2	0-5	5-15	15-30	30-50		N	Y	4WH	4WH + 36WH
Navy Shipyard & Medical Center, Portsmouth, VA	GSA	1 + 2	0-5	5-15	15-30	30-50		N	Y	4WH	4WH + 36WH
Navy/Naval Air Station, Fallon, NV	GSA	1 + 2	0-5	5-15	15-30	30-50		N	Y	4WH	4WH + 24CH + 12WH
Navy/Navy Air Station, Lemoore, CA	Navy	1 + 2	0-5	5-15	15-30			N	Y	6WH	48CH
Navy/Mare Island Naval Shipyard, Vallejo, CA	GSA	1 + 2	0-5	5-15	15-30	30-50		N	Y	4WH	4WH + 24CH + 12WH
Navy/Naval Post Graduate School, Monterey, CA	GSA	1 + 2	0-5	5-15	15-30	30-50		N	Y	4WH	4WH + 24CH + 12WH
Navy/Bay Area, San Francisco, CA	GSA	1 + 2	0-5	5-15	15-30	30-50		N	Y	4WH	4WH + 36WH
AF Logistics Command bases within CONUS ^e	AF Logistics Command	1 + 4	12-60					Y	Y		Less than 90% effectiveness for 3 consecutive months
AF Military Airlift Command, Scott AFB, IL	Scott AFB	1 + 2	0-5	5-15	15-30 (or more)			Y	Y	4WH	4WH + 12WH

(continued)

**Appendix II
Copier Cost-Per-Copy Service Comparison of
Contract Terms**

Organization/ location	Contract awarded by	Term first yr + no. of option yrs	Bands by range (Copies in thousands per month)					Consumable supplies furnished by vendor (Y = yes & N = no)		Maintenance requirements ^a	
			1	2	3	4	5	Paper	All Other	Reply to 1st call ^b	Replace machine by
			AF Strategic Air Command, Offutt AFB, NE	Offutt AFB	1 + 4	0-6	6-12	12-40	40 & over		Y
AF Military Airlift Command, Norton AFB, CA	Norton AFB	1 + 4	0-15	15-50 (or more)				Y	Y	4WH	4WH + 12WH

^aWH and CH stand for working (normal duty) hours and continuous (clock) hours, respectively.

^bGenerally half the time is allowed in emergency situations.

^cFORSCOM: U.S. Army Forces Command

^dGSA: General Services Administration

^eCONUS: Continental United States

Copier Cost Comparison Pre- And Post- Conversion Cost Studies

Dollars in thousands; other figures are in percent									
Geographic location	Organization	Cost feasibility studies performed prior to cost-per-copy contract				Cost reduction computed while using cost-per-copy contract			
		Annual cost prior to cost-per-copy	Annual cost under cost-per-copy	Annual cost reduction from cost-per-copy		Annual cost other than cost-per-copy	Annual cost under cost-per-copy	Annual reduction from cost-per-copy	
Navy									
Bremerton, WA	Naval Air Station, Oak Harbor	\$166	\$81	\$85	51.2%	\$172	\$102	\$70	40.7%
	Naval Undersea Warfare Engineering Station	219	89	130	59.4	246	123	123	50.0
	Puget Sound Naval Shipyard	538	301	237	44.1	534	315	219	41.0
	Naval Submarine Base, Bangor	90	40	50	55.6	a			
	Trident Training Facility	42	25	17	40.5	a			
	Trident Refit Facility	67	32	35	52.2	a			
	Strategic Weapons Facility	45	17	28	62.2	a			
	Naval Supply Center	58	33	25	43.1	a			
	Total	\$1,225	\$618	\$607	49.6%	\$952	\$540	\$412	43.3%
Norfolk, VA	Naval Aviation Depot	188	96	92	48.9	173	88	85	49.1
	Naval Air Station	97	59	38	39.2	145	93	52	35.9
	Commander, Naval Air Force, U.S. Atlantic Fleet	49	30	19	38.8	45	29	16	35.6
	Naval Supply Center	240	144	96	40.0	211	121	90	42.7
	Total	\$574	\$329	\$245	42.7%	\$574	\$331	\$243	42.3%
Portsmouth, VA	Naval Shipyard	270	144	126	46.7	429	243	186	43.4
	Naval Hospital	552	330	222	40.2	209	105	104	49.8
	Total	\$822	\$474	\$348	42.3%	\$638	\$348	\$290	45.5%
Army									
Fort Polk, LA	Fort Polk	b				399	250	149	73.3
Fort Sheridan, IL	Fort Sheridan (headquarters)	b				164	128	36	22.0
	Fourth U.S. Army, Fort Sheridan	78	48	30	38.5	a			
	Total	78	48	30	38.5%	164	128	36	22.0%
Total		\$2,699	\$1,469	\$1,230	45.6%	\$2,727	\$1,597	\$1,130	41.4%

Note: This appendix only contains information on conversions to CPC service. No Air Force organizations are shown because their actions involved continuation of the use of CPC service.

^aWe did not request the organizations to provide these studies.

^bPre-cost-per-copy analysis not performed.

Annual Administrative Work Load Reductions Experienced Under Copier Cost-Per-Copy Service

Geographic location	Invoice processing		
	Number prior to conversion	Number added or reduced(-)	Number after conversion
Army			
Fort Polk, LA	816	-804	12
Fort Sheridan, IL (headquarters)	564	-552	12
Fourth U.S. Army, Fort Sheridan	204	-204	0
Navy			
Bremerton, WA	0	12	12
Naval Air Station	456	-456	0
Naval Undersea Warfare Engineer Station	468	-468	0
Puget Sound Naval Shipyard ^b	2,400	-2,400	0
Total	4,908	-4,872	36

**Appendix IV
Annual Administrative Work Load
Reductions Experienced Under Copier Cost-
Per-Copy Service**

Procurement actions			Numbers of vendors to interface with		
Number prior to conversion	Number added or reduced(-)	Number after conversion	Number prior to conversion	Number added or reduced (-)	Number after conversion
68	-67	1	15	-14	1
34	-33	1	8	-7	1
17	-17	0	4	-4	0
0	1	1	0	0	0
1 ^c	-1	0	1 ^c	0	1 ^a
10	-10	0	9	-8	1 ^a
18	-18	0	8	-7	1 ^a
148	-145	3	45	-40	5

^aEach command interfaces with the same vendor location (all have the same vendor telephone number).

^bExcludes copiers not converted to CPC service.

^cPrior to conversion a single vendor furnished and maintained copiers under an annual contract. All copiers were leased. Now they are part of the base contract.

Information on Copiers Located at the Pentagon as of September 30, 1988

Organization	Number of copiers			Annual volume (copies in millions)	Annual total cost (thousands)
	Lease/ rental	Lease/purchase & government owned	Total number		
Joint Chiefs of Staff	51	7	58	12	\$158
Washington Headquarters Service	168	84	252	unknown	262
Department of the Army	3	347	350	55	1,237
Department of the Navy	38	39	77	108	738
Department of the Air Force	81	213	294	51	1,952
Total	341	690	1,031	226	\$4,347

Industry Suggestions on Service

We did not verify or review the industry's suggestions outlined below.

Users' Needs

- Determine the users' average experienced monthly production volume and use these averages, in lieu of production volume band maximums, for establishing the contract cited estimated production volumes.
- Identify, for each band, users who require different features than those authorized for their band. Either identify the users and additional features in the CPC solicitation or contract for them separately.

Contractors' Risks

- Guarantee a 3-year contract period. (Contracts were awarded for 1-year with various numbers of annual renewal option years.)
- Guarantee copier use for 3 years after date of copier installation. (Contracts awarded contained no guarantees, even if copiers were installed during option years.)
- Guarantee a minimum monthly payment either by a flat amount or minimum number of copies. (Contracts awarded contained no guarantees.)
- Provide for economic adjustments in unit prices. (Contracts were awarded with fixed unit prices.)
- Exclude the requirement for the vendor to supply paper. (Some contracts awarded required the vendor to supply paper.)
- Revise the contractor's administration and maintenance requirements to be the same in other purchase options—lease/rental, lease/purchase, and maintenance of government-owned copiers.
- Require the government to assume the cost of any necessary wiring upgrades.

Other Contract Approaches

- Allow the contractor with a 3-year contract to have an opportunity to bid on the continued use of the copiers for a fourth and fifth year.
- Limit CPC contracts to copiers per monthly production volumes under 30,000 copies.
- Solicit bids by and award contracts to the lowest bidder for each production volume band.
- Solicit bids on the basis of variable pricing for specified production volumes below, within, and above the production volume band and a fixed unit price with the government selecting the most economical alternative offered by the bidders. (This approach was originally conceived for production volume bands exceeding 100,000 copies per month.)

Others

- Require the contractors to furnish only new copiers. (Contracts awarded permit new and remanufactured copiers.)

Comments From the Department of Defense



DEPARTMENT OF DEFENSE
WASHINGTON HEADQUARTERS SERVICES
WASHINGTON, D.C. 20301-1155

17 APR 1990

Mr. Frank C. Conahan
Assistant Comptroller General
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) Draft Report, "DoD PROCUREMENT: Cost-Per-Copy Service Can Reduce Copying Costs," dated March 1, 1990 (GAO Code 391618), OSD Case 8255. The Department generally concurs with the GAO findings and recommendations, and detailed DoD comments are provided in Enclosure 1. Additional technical changes have been separately provided.

The DoD goal is to provide copier services in the most cost effective manner, consistent with mission requirements. That position has been previously transmitted to the Chairman, Subcommittee on Readiness, Committee on Armed Services, in response to cost-per-copy guidelines from the Subcommittee (Enclosure 2). In the DoD response to the Chairman (Enclosure 3), the Department indicated that the guidelines had been disseminated to the DoD Components, and that they would be utilized to the extent they were consistent with and permitted by the controlling DoD procurement regulations. In addition, the DoD and the General Services Administration plan to jointly study the implication of various contract terms and, as appropriate, use the study results to provide guidance to the Services.

The DoD appreciates the opportunity to comment on the GAO draft report.

Sincerely,

A handwritten signature in cursive script, appearing to read "D. O. Cooke".

D. O. Cooke
Director

Enclosures

Appendix VII
Comments From the Department of Defense

GAO DRAFT REPORT - DATED MARCH 1, 1990
(GAO CODE 391618) OSD CASE 8255

"DOD PROCUREMENT: COST-PER-COPY SERVICE CAN
REDUCE COPYING COSTS"

DEPARTMENT OF DEFENSE COMMENTS

* * * * *

FINDINGS

- o FINDING A: Background: The DoD Cost-Per-Copy Program. The GAO reported that the DoD was leasing and purchasing copiers when cost-per-copy service was first introduced as a procurement option. According to the GAO, cost-per-copy service began in 1973, when the Air Force (Tactical Air Command) acquired copier services on a per copy basis for its subordinate military bases. The GAO reported that cost-per-copy service has since spread throughout the Air Force and more recently to the other Services. The GAO pointed out that the Navy began to use cost-per-copy service in FY 1986-- and the Army in FY 1988. The GAO pointed out that cost-per-copy services have been purchased for the Military Departments by major commands, military bases, and the General Services Administration. The GAO stated that, according to the DoD, copier costs in the U.S. were over \$116 million in FY 1988. The GAO noted that these costs include \$10.8 million for cost-per-copy contracts in 47 geographic areas. The GAO cautioned, however, that copier costs were significantly understated since all DoD organizations were not included. (p. 2, pp. 12-13, p. 18/GAO Draft Report)

DOD POSITION: CONCUR.

- o FINDING B: Guidance Lacking for Establishing Cost-Per-Copy Contract Terms. The GAO found that, while some basic characteristics were included in cost-per-copy contracts, a number of provisions vary from contract to contract. The GAO reported, for example, that performance requirements and the number of option years varied among the cost-per-copy contracts. The GAO also reported that the number and range of copier bands also varied by contract. (The GAO explained that a copier band is a production volume band that has a specified minimum and maximum production volume range, which specifies what accessories and features are required on a copier.) The GAO pointed out that, although all cost-per-copy contracts required the contractor to furnish chemicals, other types of supplies to be furnished by the supplier differed between the Air Force and other DoD contracts. The GAO also cited variances in cost-per-copy contracts regarding maintenance requirements. The GAO found that unit prices

Now on pp. 2, 11-12, and
14.

Enclosure 1

varied considerably from contract to contract and for different bands within contracts. The GAO also noted that prices varied among contracts for the same copier band and same length contract period.

The GAO also found that neither the DoD nor the General Services Administration has examined whether some terms may be more advantageous to the Government--nor have they provided guidance to agencies on what factors to consider in establishing contract terms. The GAO concluded that differences in the number of contract option years, production volume bands, contractor versus government-furnished paper, and maintenance requirements may affect total operating costs. (pp.2-3, pp. 18-27/GAO Draft Report)

Now on pp. 2-3, 14-19.

DOD POSITION: CONCUR. In regard to the statement that the DoD and General Services Administration lack guidance on what contract terms to include in cost-per-copy contracts, it must be realized that the cost-per-copy program in its present form evolved and developed quickly, because of the impetus of the Gramm-Rudman-Hollings legislation and the Paperwork Reduction Act. Moreover, program savings exceeded expectations and individual Service needs were met in compliance with procurement regulations. Also, whereas guidelines as to the optimum number of option years and volume band configuration are important, because of varying Service/command requirements, mandated guidelines may be detrimental in some cases. The underlying principle, and the Department's greatest concern, is the cost effectiveness of each cost-per-copy contract and the cost-per-copy program. Nevertheless, the DoD is amenable to pursuing what commonality can be achieved between the Services and commands without affecting the program's effectiveness. (See also the DoD response to Recommendation 1.)

- o FINDING C: The Conversion to Cost-Per-Copy Service has Generally Reduced Cost. The GAO reported that studies performed by the Navy and the General Services Administration indicated that conversion to the cost-per-copy service generally reduced costs. The GAO also reported that preconversion studies performed by the Services prior to the acquisition of equipment showed that cost-per-copy service resulted in significant savings. The GAO found that the guidance varied among the Services for conducting cost feasibility studies. In this regard, the GAO reported that cost feasibility studies to support procurement of cost-per-copy services were not always done or retained--and the basis for evaluating copiers, whether on a copier-by-copier or an aggregate basis, varied by Service. The GAO pointed out that Service guidance also varied on what cost factors to include when determining the most cost-effective solution, and other copiers options were not evaluated. The GAO further reported that post-conversion analyses showed savings were achieved through cost-per-copy contracts. The GAO observed, however, that the cost savings computations did not consider all

annual and one-time factors. Based on these results, the GAO concluded that Service guidance needs to be improved.

The GAO concluded that converting leased and Government-owned copiers to cost-per-copy service can result in significant annual savings to the Government. The GAO pointed out, however, that cost-per-copy service is not always the most cost-effective option on a copier-by-copier basis. The GAO concluded, therefore, that the Military Services need to perform the required cost feasibility studies on a copier-by-copier basis, rather than in the aggregate--and only convert an individual machine where it is cost-effective to do so. The GAO observed that the DoD should consider all four options--lease/purchase, rental, purchase, and cost-per-copy service. The GAO asserted that cost feasibility studies and cost reduction computations should include all pertinent factors, such as annual depreciation on owned machines and removal costs, and that cost feasibility studies should be retained. (pp. 3-4, pp. 29-41, GAO Draft Report)

Now on pp. 2-3, 20-27.

DOD POSITION: CONCUR. Conversion to cost-per-copy contracts has generally reduced DoD copying costs. Also, while cost-per-copy may be the best and most cost effective alternative approach, on a copier-by-copier basis, it may not always be the best option. The Department agrees that the Services need to perform a copier-by-copier cost feasibility study of all available options and only convert equipment to cost-per-copy when it is more cost effective and to apply the same criteria, (i.e., depreciation, removal/removal costs) when conducting cost studies on owned equipment. Though purchase can be a cost effective option, it is often restrained by the upfront capital investments required and the need to dedicate additional resources to its management. With cost-per-copy, the DoD minimizes its asset management requirements and it becomes instead a contractor responsibility, i.e., contractor owned, contractor investment.

- o FINDING D: Perceived Advantages and Disadvantages of Cost-Per-Copy Service. The GAO reported that advantages associated with cost-per-copy service, such as reduced administrative work load and improved management and maintenance, were cited by DoD officials. The GAO cautioned, however, that the advantages were not necessarily inherent to cost-per-copy service and some advantages already exist or could be required for copiers acquired through other means. According to the GAO, advantages such as some reduction in administrative costs, avoidance of installation and removal costs, and payment only for actual use are applicable to only cost-per-copy service. The GAO explained that other advantages attributed to cost-per-copy either already applied or could apply to non-cost-per-copy options. The GAO observed that potential disadvantages were either not significant, or could occur regardless of the procurement option. The GAO did observe that there were few perceived disadvantages with the service. The GAO also observed that

Appendix VII
Comments From the Department of Defense

Now on pp. 4, 28-32.

the DoD and the General Services Administration may be able to achieve benefits and savings from competitively awarded procurements incorporating terms similar to those in cost-per-copy contracts. The GAO again cautioned that, on the other hand, it might not be cost-effective. The GAO concluded, however, that competitive awards should be equally considered with copiers acquired through the General Services Administration catalog and cost-per-copy service. (pp. 4-5, pp. 43-51/GAO Draft Report)

DOD POSITION: CONCUR. There are unique advantages associated with cost-per-copy contracts, especially in the area of administrative savings in the contract procurement area, improved maintenance, and the avoidance of removal and installation costs. Even though some of these advantages are not necessarily inherent to cost-per-copy contracts, the administrative savings that the cost-per-copy program has brought about should not be minimized, since cost-per-copy has provided a simple and available mechanism for achieving such savings. Moreover, the cost-per-copy program eliminates capital investments, since the Government only pays for actual copies produced. The service response criteria on cost-per-copy contracts far exceeds the standard for the General Services Administration multiple award schedules. Service for major users with large volumes on General Services Administration multiple award contracts can be excellent. However, low volume users on General Services Administration multiple award contracts sometimes receive substandard service. The cost-per-copy contract provides for a consistent maintenance and service response for all machines not found in other types of contracts.

- o FINDING E: Potential Exists for Expansion of the Cost-Per-Copy Concept. The GAO reported that DoD organizations have primarily expanded the use of cost-per-copy contracts either within a military command or within a Service. However, the GAO found and discussed several examples indicating that the potential exists for expanding current contracts or awarding new contracts within or among Services or agencies. The GAO pointed out that the publication and distribution of cost-per-copy service information would help copier managers identify the availability of the service in specific geographic areas. The GAO found, however, that neither the General Services Administration nor the DoD publishes catalogs on the availability of cost-per-copy service. The GAO also reported that the application of the cost-per-unit concept could be expanded. The GAO explained that the concept could be used as an option to leasing or purchasing other kinds of equipment. The GAO concluded that expanding and/or consolidating cost-per-copy service should continue when it is in the best interest of the government. The GAO further concluded that dissemination of the cost-per-copy catalog information could also help other agencies when considering this procurement option. (p. 5. pp. 52-57/GAO Draft Report)

Now on pp. 4, 33-35.

Appendix VII
Comments From the Department of Defense

DOD POSITION: CONCUR. The DoD agrees that some expansion of cost-per-copy contracts among Services or agencies is feasible. However, care must be taken to ensure that contract expansion is limited and that costs are not increased because of that option. The best use of the cost-per-copy contract is at the installation level, where copiers are concentrated and the vendor can achieve actual efficiencies through economy of scale. A listing of cost-per-copy contracts and their scope would be helpful. However, the General Services Administration is the most logical and appropriate agency to perform this service in that they are the Government commodity manager for copiers.

- o **FINDING F: Industry Views on Cost-Per-Copy Service.** The GAO reported that it interviewed officials from copier companies and associations representing copier companies to obtain views on the advantages and disadvantages of cost-per-copy service. The GAO reported that industry views on the Government's use of cost-per-copy varied--ranging from ready acceptance of the present contractual requirements to lack of interest in participating in future cost-per-copy contracts. According to the GAO, industry officials believed that the structure and policies of a company could affect costs. In addition, the GAO reported that industry officials also stated that some private sector companies, including some Government contractors, and state governments use cost-per-copy service. However, the officials stated that the contracts generally provided more contract guarantees than the Federal Government. The GAO also reported that industry officials made numerous suggestions to improve Government cost-per-copy contracts, including (1) increased definition of user needs, (2) reduction of contractor risks, and (3) consideration of other procurement approaches. (p. 5, pp. 58-68/ GAO Draft Report)

Now on pp. 4, 36-42.

DOD POSITION: PARTIALLY CONCUR. The Department has no method to verify industry's opinions, however, some industry views have been adjudicated through GAO protests. Some industry suggestions are contractually prohibited and others are simply preferences on the part of industry to minimize risk. One of the needs cited by industry is to determine the user's average experienced monthly production volume and use those averages, in lieu of production volume band maximums, for determining the contract cited estimated production volumes. In a decision by the Comptroller General of the United States, November 29, 1989 (Xerox Corporation), it was determined that the Government was sustained when estimates were obtained from and verified by specific user agencies as realistic estimates of their copier needs based on historical agency use and best estimates of future demand for copying services. In addition, the need expressed by industry to solicit bids and award contracts to the lowest bidder for each production volume band was rejected in the Comptroller General decision of November 8, 1988 (Eastman Kodak Company).

The Department has adopted several recommendations made by industry which are beneficial to both the Government and industry, such as extending the cost-per-copy contracts from two to three and four option years, depending upon the normal useful life of the equipment involved. This allows industry to spread its costs over a longer period, which should result in lower cost-per-copy to the Government. However, minimum guarantees, price adjustments, etc., are contrary to a "fixed price, no guarantee, requirements contract," which is the basic contracting method for cost-per-copy contracts. In addition, it is against DoD contracting policy to adopt recommendations concerning contract terms and conditions that are beneficial only to a potential contractor. Other issues, such as three year contracts, minimum guarantees, economic adjustments in unit prices, etc., are contracting issues and are simply preferences on the part of industry to return to contract terms and conditions similar to those offered on General Services Administration multiple award copier schedules. The Department's position is to allow the marketplace to determine the viability of cost-per-copy contract terms and conditions. It is the Department's view that there are very real economic advantages available to contractors through economy of scale.

* * * * *

RECOMMENDATIONS

- o RECOMMENDATION 1: The GAO recommended that the Secretary of Defense and the Administrator, General Services Administration, jointly study the implication of various cost-per-copy contract terms, particularly with regard to (1) the number of option years, (2) the number of ranges of production volume bands, (3) vendor-furnished supply requirements, and (4) maintenance requirements-- and use the resulting information to provide guidance for agencies to use in establishing terms for their specific contracts. (p. 6, 27-28/GAO Draft Report)

DOD POSITION: CONCUR. The Secretary of Defense with the Administrator, General Services Administration, will jointly study the implication of various contract terms and, as appropriate, use the study results to provide guidance to the Services. The DoD will contact the General Services Administration by June 15, 1990, to begin the study effort. (See the DoD response to Finding B.)

- o RECOMMENDATION 2: The GAO recommended that the Secretary of Defense direct the Secretaries of the Army, Navy, and Air Force to use cost-per-copy service as a procurement option, along with other traditional options, and select its use when

6

Now on pp. 4-5, 18-19.

Appendix VII
Comments From the Department of Defense

Now on pp. 4-5, 26-27.

it is the most economical to the Government. (p. 6, p. 42/
GAO Draft Report)

DOD POSITION: CONCUR. The DoD has always considered cost-per-copy as an option to other procurement methods only when it is the most cost effective alternative. This position was re-emphasized by the Department in a memorandum to the DoD Components on October 25, 1989. (See the DoD response to Finding c.)

RECOMMENDATION 3: The GAO recommended that the Secretary of Defense direct the Secretaries of the Army, Navy, and Air Force (1) to perform the required cost feasibility studies, including all procurement options, (2) to ensure that cost feasibility studies and cost reduction computations are performed on a copier-by-copier basis considering all relevant cost factors, and (3) to retain the studies to support the procurement action. (p. 6, p. 42/GAO Draft Report)

Now on pp. 4-5, 26-27.

DOD POSITION: CONCUR. On October 25, 1989, the Office of the Secretary of Defense issued guidelines to the Services to perform the required cost feasibility studies and to consider all options, etc. consistent with DoD procurement regulations.

- o **RECOMMENDATION 4:** The GAO recommended that the Secretary of Defense and the Administrator, General Services Administration, identify opportunities to award single vendor contracts competitively for leased and purchased copiers that include terms similar to those in cost-per-copy service contracts. (p. 6, p. 51/GAO Draft Report)

Now on pp. 4-5, 32.

DOD POSITION: PARTIALLY CONCUR. It is the Department's view that only some of the less significant cost-per-copy provisions could be applied to single vendor contracts for leased and purchased copiers. For example, specific service response requirements, contractor provided consumables, key operator training, contractor provided meter readings, consolidated monthly invoices, etc. However, the DoD will issue guidance within the next six months requiring the Services and Defense Agencies to incorporate applicable cost-per-copy provisions in single vendor contracts. (See the DoD response to Finding D.)

- o **RECOMMENDATION 5:** The GAO recommended that the Administrator, General Services Administration, publish and distribute catalogs and price lists to copier managers to help them identify the availability of cost-per-copy service in their geographic region. (p. 6, p. 57/GAO Draft Report)

Now on pp. 4-5, 35.

DOD POSITION: CONCUR.

Comments From the General Services Administration

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



Administrator
General Services Administration
Washington, DC 20405



April 10, 1990

Mr. Frank C. Conahan
Assistant Comptroller General
National Security and International
Affairs Division
General Accounting Office
Washington, DC 20548

Dear Mr. Conahan:

The General Services Administration has reviewed the draft report entitled "PROCUREMENT: DOD Use of Copier Cost-Per-Copy Services Can Reduce Costs" (assignment code 391618), dated March 1, 1990. While we generally agree with the report's findings and recommendations, specific comments are provided in the enclosed statement. I request that these comments be considered when preparing this report for formal issuance.

Thank you for the opportunity to comment on this report.

Sincerely,

A handwritten signature in cursive script, appearing to read "Richard G. Austin".

Richard G. Austin
Acting Administrator

Enclosure

Appendix VIII
Comments From the General
Services Administration

GSA COMMENTS ON THE GENERAL ACCOUNTING OFFICE (GAO)
DRAFT REPORT "PROCUREMENT: DOD USE OF COPIER
COST-PER-COPY SERVICES CAN REDUCE COSTS"
DATED MARCH 1, 1990

General Comments

The Federal Supply Service (FSS) agrees with GAO's findings that the Cost-Per-Copy (CPC) program is a cost-effective option in acquiring copier services, even with the deficiencies noted in the report. However, we would point out that the CPC audit report was conducted early-on in the CPC program. Since the beginning of this audit, several changes have been made to the FSS solicitations which we believe will make the program even more cost-effective, i.e., FSS terms, conditions, and descriptions have been standardized to the extent possible for consistency and uniformity.

The CPC program is a growing program which has been subject to many changes as we have crossed the learning curve and developed expertise. Flexibility has been maintained to adjust to changes as required to ensure cost-effectiveness. The program is managed by FSS for civilian Federal agencies and FSS conducts the procurements. The guidance required by the agencies is in terms of how to evaluate copier needs to develop realistic requirements. This should be done at the time agencies initially contact FSS to discuss the possibility of obtaining a CPC contract for their activity.

The CPC prices are compared to the least expensive rental contracts prior to award. This is one basis used to determine price reasonableness. The FSS study done in December 1989 compared CPC costs with the lowest available rental costs for similar equipment available from the Multiple Award Schedule (MAS).

Specific Comments

Finding

Page 14, first paragraph after chart, "Outside the United States, the Navy has used CPC service on board ships and at one military installation in Italy, and the Air Force has used it for copy centers and self-service locations in Central Europe."

Comment

Since 1985, shipboard copier service has been provided under the Standardization of Shipboard Reprographics Equipment (SSRE) Program. These are not considered CPC programs, and we are not aware of CPC being used for shipboard copier service.

Now on p. 12.

Appendix VIII
Comments From the General
Services Administration

- 2 -

Now on p. 14.

Finding

Page 18, first paragraph, second sentence, "However, we found DOD and GSA lack guidance on what factors to consider in determining what specific terms to include."

Comment

See comment 1.

FSS has improved and is consistent in its terms and conditions since the study was conducted. Any variances between solicitations are designed to meet the specific needs of an agency.

Finding

Now on p. 15.

Page 21, second paragraph, "Neither DOD nor GSA has provided guidance on what option length is in the government's best interest or what factors are relevant to the selection of the number of option years."

Comment

See comment 1.

FSS has based its three-year contract (one year with two options) on the reasonable time an office volume copier can be expected to provide dependable service. FSS has relied on industry publications and studies in making this determination. Efforts to improve our ability to establish optimum contract length, including options, will continue.

Finding

Now on p. 15.

Page 22, second paragraph, first sentence, "The various bands require different accessories and features on the copiers."

Comment

See comment 1.

FSS has made changes to standardize solicitations and offer standard features to ensure that purchase descriptions will be consistent and uniform throughout all solicitations.

Finding

Now on p. 16.

Page 23, second paragraph, third sentence, "The protestors argued, among other things, that the solicitations unduly restricted competition by requiring that one contract, including all volume bands, be awarded."

Comment

FSS believes the concerns about the potential limiting of competition are unfounded in FSS contracts. FSS monitors the copier market on an ongoing basis. One of our first considera-

Appendix VIII
Comments From the General
Services Administration

- 3 -

tions in any copier requirement for either CPC or other copier options is determining that we have sufficient competition. We are constantly attempting to improve our service to customers and to maximize competition.

Finding

Now on p. 17.

Page 24, second paragraph, third sentence, "Neither GSA nor DOD has tried to determine whether there are optimal numbers and ranges of bands to meet users' needs and maximize competition."

Comment

See comment 1.

Based on conferences, discussions and surveys with industry, FSS has determined the technical requirements, which established the minimum range of bands for the contracts to be cost-effective to the agency and at the same time beneficial to the contractor. It has also been determined that there must be minimum utilization of machines. All of these changes are reflected in our revised solicitations.

Finding

Now on p. 18.

Page 26, fourth paragraph, first sentence, "We did not find any relationship between the unit prices and contract size (number of copiers) or geographic location (within or near a major metropolitan area versus a rural area)."

Comment

Our findings indicated that if the number of machines falls below a minimum level (somewhere around 40, depending on the contractor) that the cost per copy would rise due to the loss of economies of scale. FSS has consciously avoided contracts for smaller numbers. Similarly, larger contracts do not seem to have vast potential for additional savings, possibly due to the fact that more machines require more service personnel.

Finding

Now on p. 22.

Page 36, second paragraph, second sentence, "However, we believe that the cost evaluations for copier replacement should include such costs as annual depreciation for copiers being retained, and consider one-time costs for installation, termination, and removal, and the residual undepreciated value of equipment to ensure that equipment is not prematurely replaced when it is not cost-effective to do so."

Appendix VIII
Comments From the General
Services Administration

- 4 -

Comment

See comment 2.

FSS feels only the actual ongoing expenses of operation under the different choices should be considered.

Finding

Now on p. 26.

Page 41, second paragraph, third sentence, "Therefore, we believe the services need to perform the required cost feasibility studies for individual copiers on a copier-by-copier basis rather than in the aggregate, and only convert an individual machine where it is cost-effective to do so."

Comment

See comment 3.

FSS disagrees with the conclusion that cost analysis be conducted on a copier-by-copier basis. The CPC methodology is best applied on a programmatic basis, and the objective is to achieve overall cost savings. Exempting specific copier sites would have an adverse impact on pricing and service for the remaining CPC sites awarded. Also, the benefits, i.e., reduced administration associated with ordering of supplies and reduced cost of maintenance, of having a large concentration of the same brand of copier in a location would be decreased.

Finding

Now on pp. 31-32.

Page 50, fourth paragraph, first sentence, "Several of the key CPC advantages appear to be more a function of concentration of copiers from a single vendor than an aspect inherent to the CPC concept."

Comment

See comment 4.

FSS agrees that several of the key CPC advantages result from having a large number of machines from a single vendor. This was one of the guiding precepts in the development of the program. However, there are other benefits that probably cannot be realized through any other method. These would include the absence of capital investment; no installation charges, no removal charges, or termination charges; no basic monthly charge; etc. Certainly there are savings potentials in other procurement forms. For instance, an aggregate, single award purchase covering an entire military base or grouping of civilian activities could probably yield lower per copy rates than even CPC. However, this would require a significant capital investment and careful management.

Appendix VIII
Comments From the General
Services Administration

- 5 -

Recommendation

"Since DOD and GSA both have experience with CPC contracts, we recommend that the Secretary of Defense and Administrator, General Services Administration, jointly study the implications of various CPC contract terms, particularly with regard to the number of option years, the number and ranges of production volume bands, vendor-furnished supply requirements, and maintenance requirements, and use the resulting information to provide guidance for agencies to use in establishing terms for their specific contracts."

Comment

FSS partially agrees with the recommendation to issue guidance to agencies for their use in establishing their CPC contracts. FSS has the responsibility and the expertise for the CPC program; therefore, the procurement authority is not being delegated. Agencies wishing to participate in the program must submit their requirements to FSS. However, a Federal Property Management Regulations (FPMR) Bulletin can be developed to assist agencies in deciding if CPC is an appropriate option at their location.

Recommendation

"We recommend that the Secretary of Defense and Administrator, General Services Administration, identify opportunities to competitively award single vendor contracts for leased and purchased copiers that include terms similar to those in CPC service contracts."

Comment

FSS agrees with this recommendation. The requirement for competitive contracting currently exists as a requirement under the FPMR for consolidated procurements for all requirements which will exceed the maximum order limitations of the Federal Supply Schedule. We have also made single awards for a number of low volume copiers. However, there is significant customer and industry opposition to expanded single award contracts and serious questions from the Congress challenging the cost/benefit of single awards.

Recommendation

"We recommend that the Administrator, General Services Administration, publish and distribute catalogs and price lists to copier managers to help them identify the availability of cost-per-copy service in their geographic region."

**Appendix VIII
Comments From the General
Services Administration**

- 6 -

Comment

FSS partially agrees with this recommendation. Price lists and catalogs showing typical cost-per-copy service in a geographic region could be helpful in informing agencies of the potential benefits of CPC. In most cases, however, awarded contracts are for specific agencies within a complex or predefined area. Price lists and pamphlets containing contract administration information are provided to the project managers and agencies covered within the scope of a contract.

The following are GAO's comments on GSA's letter dated April 10, 1990.

GAO Comments

1. We did not intend to imply that (1) solicitations should not be designed to meet the specific needs of an agency, (2) GSA does not have a basis for calculating a reasonable contract length, or (3) GSA's purchase descriptions are inconsistent. Our point concerns the lack of guidance on what factors to consider in determining specific contract terms on a governmentwide basis.
2. GSA excludes depreciation in its definition of ongoing expenses. We agree that government accounting practices do not normally include depreciation of capital investments. However, to ensure that property is not prematurely replaced at the government's expense, we believe that annual depreciation costs, and when applicable, the residual undepreciated costs, should be considered in the cost analyses when acquiring or replacing government-owned copiers. The only exception to considering these costs would be when replacement involves an obsolete copier.
3. During the course of our work, we found no indication that excluding some copiers from CPC contracts would necessarily increase the government's costs. However, Navy officials in Norfolk stated that to lower government costs certain copiers were excluded from CPC service because of the users' requirements. In addition, we found that the government's savings with CPC service could have been increased if certain lower cost copiers had not been converted. Therefore, we believe that cost analyses should be performed on a copier-by-copier basis. In addition, administrative costs that can be identified should be included in the cost analyses and cost reduction computations. Other administrative costs should be considered in management decisions and documented to support each procurement.
4. We recognize that some CPC contract provisions, such as maintenance response requirements and consolidated invoices, could be incorporated into other procurement options. Other CPC contract provisions, such as no cost for installation, removal, and termination, and payment only for each copy produced, are unique to the CPC service option. Also, we agree that good and careful management is important regardless of the procurement option. We recognize that lack of funds could limit procurement to other than the purchase option.

Comments From Canon U.S.A., Inc.

Canon

CANON U.S.A., INC.
5701 GENERAL WASHINGTON DRIVE
ALEXANDRIA, VIRGINIA 22312-2488
Telephone: (703) 642-8050

April 2, 1990

Mr. Frank C. Conahan
Assistant Comptroller General
U.S. General Accounting Office
Washington, D.C. 20548

Subject: Procurement: DOD Use of
Copier Cost-Per-Copy
Service

Reference: GAO Assignment Code
391618

Dear Mr. Conahan:

Thank you for the opportunity to submit comments concerning the referenced document.

It is Canon's position that the most cost effective method for the government to meet their photocopying requirements is the outright purchase of the specific photocopier which best suits their needs. This is most efficiently accomplished by issuing a purchase order against a General Services Administration (GSA) Multiple Award Schedule. Any plan other than this represents a higher cost to the agency and, of course, to the U.S. taxpayers.

When an agency has not selected outright equipment purchase, some have proceeded to the less cost-effective method of Cost-Per-Copy Contracts (CPC) -- the subject of your report and on which I offer the following comments:

1. The basis used in the report for establishing a comparison of CPC to rental took the highest cost rental plan provided by GSA. It would seem more appropriate to use the best available rental pricing under the GSA Copier Copier Multiple Award Schedule as a comparison. Many vendors have very attractive and cost-effective rental rates under their Multiple Award Schedule which are as much as 20% less from the rates used for purposes of your comparison.
2. There was no mention of interviews with the actual end users. These are the people who could best describe the success or failure of the program at their location.

Appendix IX
Comments From Canon U.S.A., Inc.

Mr. Frank Conahan
Page Two
April 2, 1990

3. Prices bid by responsible bidders have, substantially increased from 1986 to 1990 indicating that once vendors develop a background of information and experience as a result of previous such awards they must more realistically view their actual costs as compared to the data presented in solicitations.

4. As a result of the number of CPC awards, the Multiple Award System, one of the most effective government-wide procurement programs, could be adversely affected due to the reduction in real potential in the Federal Government market.

5. Reduced competition. A few companies have found this type of contract to put them in a money-loss position and have stated publicly that they will not bid on them in their present format.

6. Severe adverse impact on small business.

The report did not mention that this type of "Sole-Source" Award severely and adversely affects thousands of small businesses (other manufacturer's dealers or distributors) -- which the Federal Government is mandated to help. Under the Multiple Award System they may compete for Federal dollars. Under CPC the majority of these dealers or distributors are precluded from sharing in the government business since the award by location is often made to only one company to the exclusion of these other small business establishments representing the various manufacturers who do not receive or share in the specific CPC award.

* * * * *

Canon, U.S.A., Inc. has been a successful bidder in several CPC procurement actions. We currently hold 12 major CPC contract awards, 9 of them awarded by General Services Administration with 5 on behalf of the Navy.

As a result of our experience in administering our CPC contracts I would note the following:

1. The anticipated copy volumes stated and upon which we based our pricing has been found to be so inaccurate as to be negligent. Such inaccuracies result in a company bidding unacceptable price levels. Inaccurate and misleading solicitation information as to volume levels thus far has been standard. GSA relies on the input from the user agency. GSA is currently making an effort to provide more accurate data.

Mr. Phil Conahan
Page Three
April 2, 1990

2. I would question the government administrative savings cited in the report. It has been our experience that the administrative nightmares generated by copier under utilization, copiers moved without vendor permission, contractually unauthorized purchase orders (initially ordered wrong unit, ordered with wrong accessories, proliferation of copiers and splitting of volumes,) has taken hours upon hours of personnel time to resolve. There is continual back and forth paperwork and at times necessary intervention by GSA to eliminate customer (government) abuse of the contract. Under these circumstances the administrative cost to all three parties (government customer, GSA, Canon) is incalculably high.

The above scenario is not peculiar to Canon. It is the same for several other vendors who are already on record with identical statements regarding CPC contract administration.

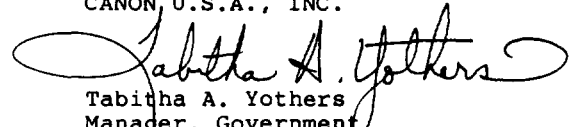
There are several improvements which could be made to these solicitations which would result in more palatable contracts. Some of these were noted in your report, but remain unimplemented in recent follow-on solicitations.

It is our desire to provide excellent products to the Federal Government at fair prices. As is the case with all markets we must continually examine the costs and potential returns. At this point in time it would appear that the costs associated with administering CPC Contracts far outweigh the financial returns that one generally expects from a Sole Source Contract. Based on our observations of the increase in the actual number of copiers on site, the administrative problems and the increase in bid prices, it would appear that the savings you projected are overstated.

We appreciate your willingness to receive our comments. It is our sincere desire that this process will result in better contracts for the Government and industry.

Very truly yours,

CANON U.S.A., INC.


Tabitha A. Yothers
Manager, Government
Contract Administration
Business Machines Group

fp:TAY

Comments From Pitney Bowes



Pitney Bowes

Washington D.C. Region Office

March 29, 1990

Mr. Frank C. Conahan
Assistant Comptroller General
United States General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Conahan:

Pitney Bowes is a leader in the innovative procurement method known as Cost-per-Copy (CPC). We are pleased to have an opportunity to comment on the GAO Draft Report "DOD Procurement: Cost per Copy Service Can Reduce Copying Cost."

The findings of the Report largely mirror our own analysis of Cost-per-Copy, that

- * Cost-per-Copy has proven to result in substantial savings;
- * Cost-per-Copy reduces the administrative workload for the procuring command; and
- * Cost-per-Copy allows the services to keep pace with ever-changing technology without requiring sizeable outlays for the acquisition of new hardware.

In short, Cost-per-Copy serves as a cost-effective option for the procurement of copier services.

We would also like to take this opportunity to comment on the section of the Report entitled "Industry Suggestions on Service" in Appendix VI of the Report:

"-- Limit CPC contracts to copies per monthly volume of 25,000 copies or less."

Pitney Bowes recommends against such a limitation. To do so would effectively limit CPC services to the bottom three volume bands. It would thereby require the agencies to make significant outlays for the procurement of copiers for the top two bands or contract with multiple vendors resulting in increased paperwork and cost.

5580 Port Royal Road Springfield, VA 22151-2392 703 321-0508



"--Solicit bids by and award contracts to the lowest bidder for each production band."

Pitney Bowes feels that to make contract awards by bands would undermine the cost savings resulting from the award of CPC contracts. Awards by bands would likewise increase the administrative workload. The GAO Report makes similar findings.

"--Require the contractors to furnish only new copiers."

Pitney Bowes notes that some companies have suggested that remanufactured copiers do not provide the current technology available from new copiers. It is the position of Pitney Bowes that remanufactured copiers do indeed offer current technology. As per current contract regulations, remanufactured copiers may be offered only if that model is in current production. Any remanufactured copier offered by any vendor must be a model in current production. Models in current production offer current technology.

Pitney Bowes has reviewed the findings of the GAO Report with interest. We find them to be in concert with our own internal review of CPC. Cost-per-Copy is cost-efficient, reduces the administrative burden of procurement activities, and provides a viable option for agencies seeking to optimize the productive use of resources.

Pitney Bowes encourages the consideration of these additional comments in order to better reflect the benefit to all parties engaged in CPC contracts. We are available to respond to any additional concerns that might arise.

Sincerely,

A handwritten signature in cursive script that reads "William J. Moriarity".

William J. Moriarity
Region, National Account Director
Washington, D.C.

Comments From Xerox Corporation

Xerox Corporation
1616 North Fort Myer Drive
Arlington, Virginia 22209
703 527-6400

March 30, 1990

Mr. Frank C. Conahan
Assistant Comptroller General
United States General Accounting Office
Washington, D.C. 20548

XEROX

Ref: Draft Report- "DOD Procurement: Cost-Per-Copy Service Can Reduce Copying Costs"

Dear Mr. Conahan

In response to the invitation extended in your March 1, 1990 letter, Xerox Corporation welcomes the opportunity to comment on the referenced draft report.

Our comments are divided into two sections:

Section I: Response to GAO's audit/analysis of in-place Cost-Per-Copy (CPC) contracts and,

Section II: Expansion on the concerns of industry

Section I

Xerox recommends that as part of the final report, GAO ensure that the contracting agency, as well as the user agency, conduct a thorough analysis of all alternative pricing. Since the General Services Administration (GSA) is the primary contracting agency (the five locations referenced on page 30 of the report were GSA solicitations on behalf of the agencies), the analysis should be performed by GSA and made available to the public. GSA management has a vested interest in these types of contracts since they are the sponsor of the Multiple Award Schedule (MAS) program which is a primary competitive contracting alternative to these types of contract offerings. Prior to award, it is our recommendation that GSA provide supporting data to demonstrate that the CPC prices were compared to the best MAS contract rental, Lease to Ownership Plan or outright purchase prices available to the agency requesting CPC service.

All agencies mentioned on page 30 of the draft report are eligible for Xerox' very best MAS contract prices; however, in the analysis that GSA performed (Attachment 1), apparently used by GAO for comparison to establish the 42% savings statement, we believe an invalid premise existed for the comparison. Utilizing the Single Unit List price for a purchase comparison, rather than the purchase price actually available to the Agency, resulted in a distorted conclusion. For example, in Xerox' case, the Navy was eligible for purchase prices 20.2% to 51.6% less than those which were utilized for the comparison and presumably the development of the 42% savings statement.

Now on p. 25.



Appendix XI
Comments From Xerox Corporation

Mr. Frank C. Conohan
U.S. General Accounting Office
March 30, 1990

It is possible that if valid comparisons had been made, the agency requesting the CPC might well have been advised to explore an MAS contract solution.

XEROX

Section II

A key message delivered in the report is that, based on the prices offered by industry in the past on CPC contracts, the Government stands to realize significant cost savings in the future. In our view, this conclusion is unsound since it is based on inaccurate comparisons.

As GAO personnel learned during the industry interviews leading to the release of the draft report, the majority of firms with CPC contract experience have serious concerns regarding future participation. A large number of the CPC contracts in place within DoD were solicited and negotiated by the GSA. In general, all GSA initiated CPC solicitations for fiscal Year 1986 through 1989 were essentially the same. Many firms offered prices based on the assumption that the copy volumes identified as benchmark evaluation levels in these solicitations were accurate estimates of anticipated Government usage. As industry advised GSA in open forums and written communication, actual copy production has fallen far short of the volumes implied. In utilizing only five of the earlier installations, GAO used early information, which now contributes to invalid assumptions, in support of a 42% savings statement. Average winning prices in subsequent CPC awards have risen substantially, as much as 200% in the lower volume bands and as much as 40% in the higher volume bands, over those prices utilized by GAO to develop their findings. Attachment 2 is a detailed history of the awarded bid prices issued by GSA.

In recognition of the valid concerns of its industry suppliers, GSA recently changed the CPC price evaluation criteria. Now, rather than base the analyses on the maximum copy volume of each volume band (for example, 5,000 copies for Band 1), GSA evaluates the offered price against historical agency usage data. This means that potential offerors now know in advance that although the copy volume for Band 1 could reach 5,000 copies in a given month, GSA is stating that the actual volume is known to be different and will base the price analysis on the actual historical data, often 50% of the volume band stated requirements. This more accurate volume assumption when coupled with the history of rising prices, puts into real question any price savings over the Purchase or Lease to Ownership MAS prices.

It is acknowledged that there are certain non-price savings that accrue under CPC plans. However, to conclude that these non-price savings are only available under CPC would be incorrect. Such items as summary billing, scheduled supply delivery, fixed rate billing, standardized equipment configurations and focused service support are now, and have been, available to customers who meet certain minimum installation parameters much like those in CPC clustered requirements. There is no magic in CPC programs that generates these savings that can not be delivered by normal focused management attention and vendor / user agency agreement.

Appendix XI
Comments From Xerox Corporation

Mr. Frank C. Conohan
U.S. General Accounting Office
March 30, 1990

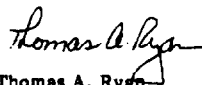
XEROX

GSA has recently acknowledged that the risks imposed on the vendor community are too one sided and through a cooperative effort with industry has made several improvements to recent solicitations to address this imbalance. In so doing, the uncertainty that existed has been reduced. Without that uncertainty, which caused many vendors to back away from this procurement concept, these types of solicitations are now more closely aligned to the essence of good business principles.

As this healthy dialogue continues, industry has commented to GSA that additional work should be done to put the CPC concept on a more equitable footing.

With this as background, we urge GAO to revisit the specifics of the more recent awards and to utilize comparisons that are consistent with customer environment, before finalizing its conclusions.

Very truly yours,



Thomas A. Ryan
Manager, Government
Sector Marketing

Major Contributors to This Report

National Security and
International Affairs
Division,
Washington, D.C.

William E. Beusse, Assistant Director
Jerome P. Pederson, Evaluator-in-Charge
Gerald L. Payne, Evaluator
Carolyn S. Blocker, Writer-Editor
Priscilla Miller, Secretary