

BY THE COMPTROLLER GENERAL  
**Report To The Honorable  
Fortney H. Stark, Jr.  
House Of Representatives  
OF THE UNITED STATES**

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**Forest Service's Region 5 Should Consider  
Less Costly Ways To Meet Word  
And Data Processing Needs**

The Forest Service's region 5 leased advanced word processing equipment with communications and data processing capabilities. Although the region is benefiting from the equipment, GAO found the procurement to be unnecessarily costly.

The Forest Service has agreed with GAO's recommendations that the region conduct (1) a review to measure the equipment's cost effectiveness and (2) an economic analysis of ways to meet the region's requirements but at a lower cost.



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COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

B-200565

The Honorable Fortney H. Stark, Jr.  
House of Representatives

Dear Mr. Stark:

In response to your April 10, 1980, request, we have reviewed the procurement of word processing equipment carried out during 1979 by the Forest Service's Pacific Southwest Region (region 5). At that time, the regional office and 10 of the region's national forest offices leased advanced word processing equipment with communications and data processing capability for 2 years. Another four national forest offices leased equipment with only word processing capability. The advanced equipment was acquired to develop a regional network integrating communications with the equipment's word and data processing capabilities to support mission requirements. The annual rental and maintenance costs for the leased equipment are about \$1.4 million.

Although the equipment is providing benefits, we found the procurement to be unnecessarily costly. Our review disclosed that region 5

- prepared a feasibility study of equipment alternatives that did not adequately support the data processing requirements or the procurement alternative selected;
- leased the equipment even though its lease-versus-purchase analysis showed that purchasing the equipment was more economical because it did not want to request a waiver from a Washington office directive freezing purchases; and
- did not comply with Federal procurement policy, which requires that full consideration be given to consolidating individual small-volume orders and that competitive procurement be used whenever feasible to obtain the lowest possible price.

In addition, we believe the region should have followed Federal procurement regulations applicable to automatic data processing because a significant portion of the equipment's function and use was intended for data processing.

We believe that significant savings--perhaps hundreds of thousands of dollars--might have been possible if the region had prepared an adequate feasibility study, followed Government procurement regulations on consolidating small-volume orders, and acquired the equipment competitively. Details of our review are included in appendix I.

Region 5 officials defended the procurement by emphasizing that word processing and automatic data processing (ADP) technology were needed to carry out an expanding mission. These officials felt that they would not have been able to obtain the benefits of ADP technology on a timely basis if they had followed normal procurement procedures. They also felt that the benefits from the equipment would more than offset the extra costs involved in their procurement approach.

However, the concerns we now have are whether the current equipment is cost effective and whether a less expensive alternative than the region's current leasing arrangement exists. Therefore, we recommend that the Secretary of Agriculture direct the Forest Service to conduct a postinstallation review to measure the cost effectiveness of region 5's systems, including both word and data processing capabilities, after 6 months of operation.

We also recommend that after completion of this review, the Secretary of Agriculture direct the Forest Service to conduct an economic analysis of alternatives available to region 5 that could meet its requirements at a cost lower than its present leasing arrangement. The alternatives analyzed would depend on the results of the review.

You also requested the following information:

- A chronology of events explaining why Forest Service headquarters froze purchases of word processing equipment. (See appendix II.)
- A chronology of events associated with region 5's procurement of word processing equipment. (See appendix III.)

Appendix IV includes information provided by region 5 that shows the word processing equipment procured by each national forest office in region 5 and the associated costs and installation dates.

Our review focused on the appropriateness of region 5's procurement of word processing equipment. However, our review also raised broad ADP management issues including the adequacy of management control by the Forest Service's Washington office over the procurement and use of word and data processing equipment by field units. These issues will be examined in our work for the House Government Operations Committee pursuant to its request for a comprehensive ADP management review of the Department of Agriculture. When our report to the committee is released, we will send you a copy as requested.

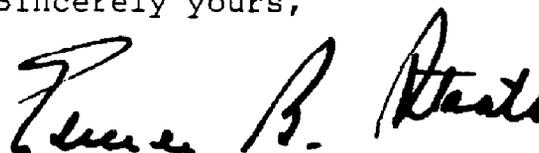
We asked the Forest Service to provide comments on a draft of this report. Its comments have been considered where appropriate.

The Forest Service agreed with our findings regarding the problems associated with region 5's procurement of word processing equipment. The Forest Service told us that a postinstallation review would be conducted in the near future. It also said that it had already initiated an economic analysis of alternatives and would further develop the analysis after completion of the postinstallation review.

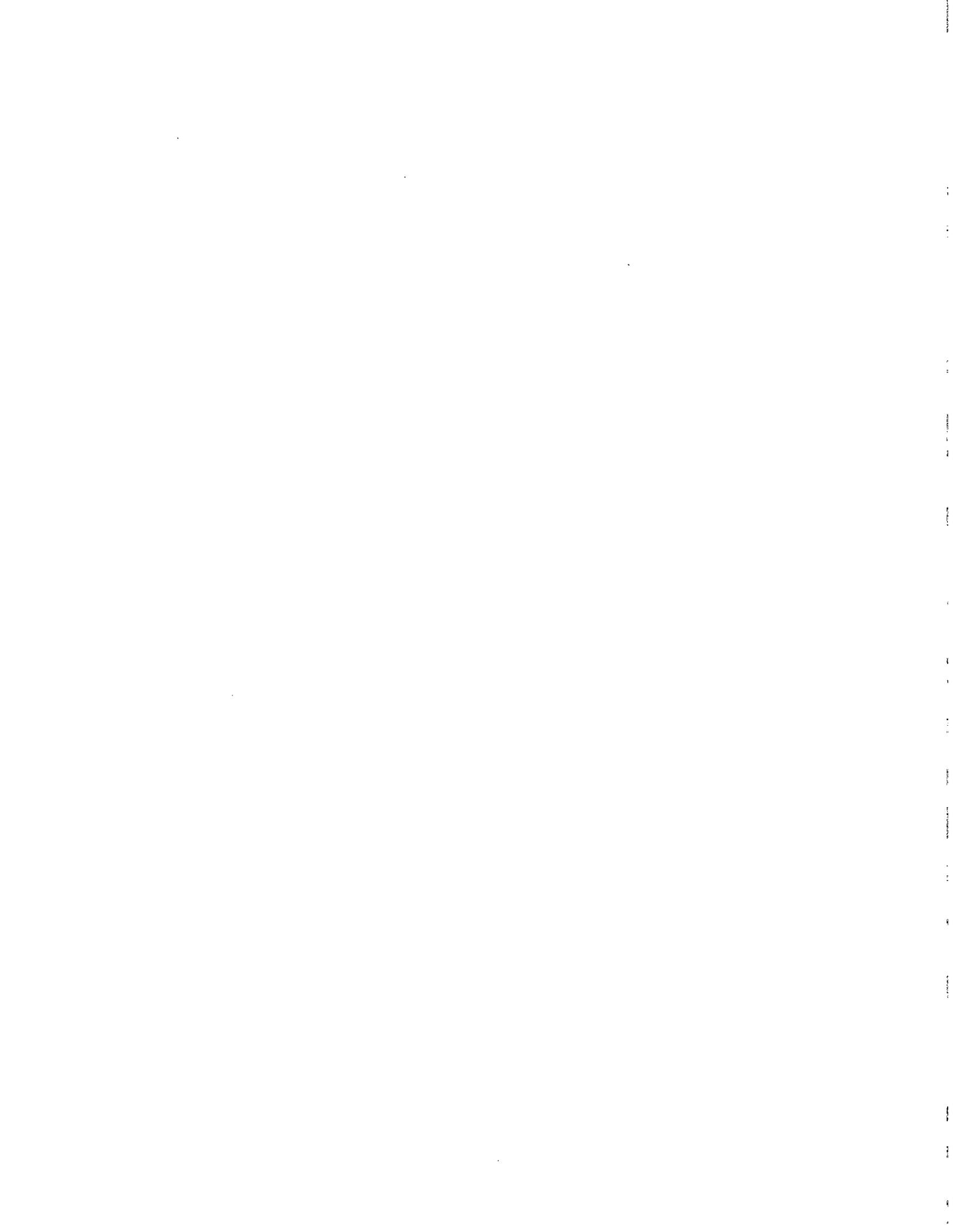
The Forest Service also stressed its belief that the problems identified in this report are an isolated occurrence. It believes that adequate management control does exist and that similar questionable procurements will not occur in the future.

As arranged with your office, we are sending copies of this report to the Secretary of Agriculture and the Director, Office of Management and Budget. Copies will also be available to other interested parties who request them.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Eugene B. Steats". The signature is written in a cursive, somewhat stylized font.

Comptroller General  
of the United States

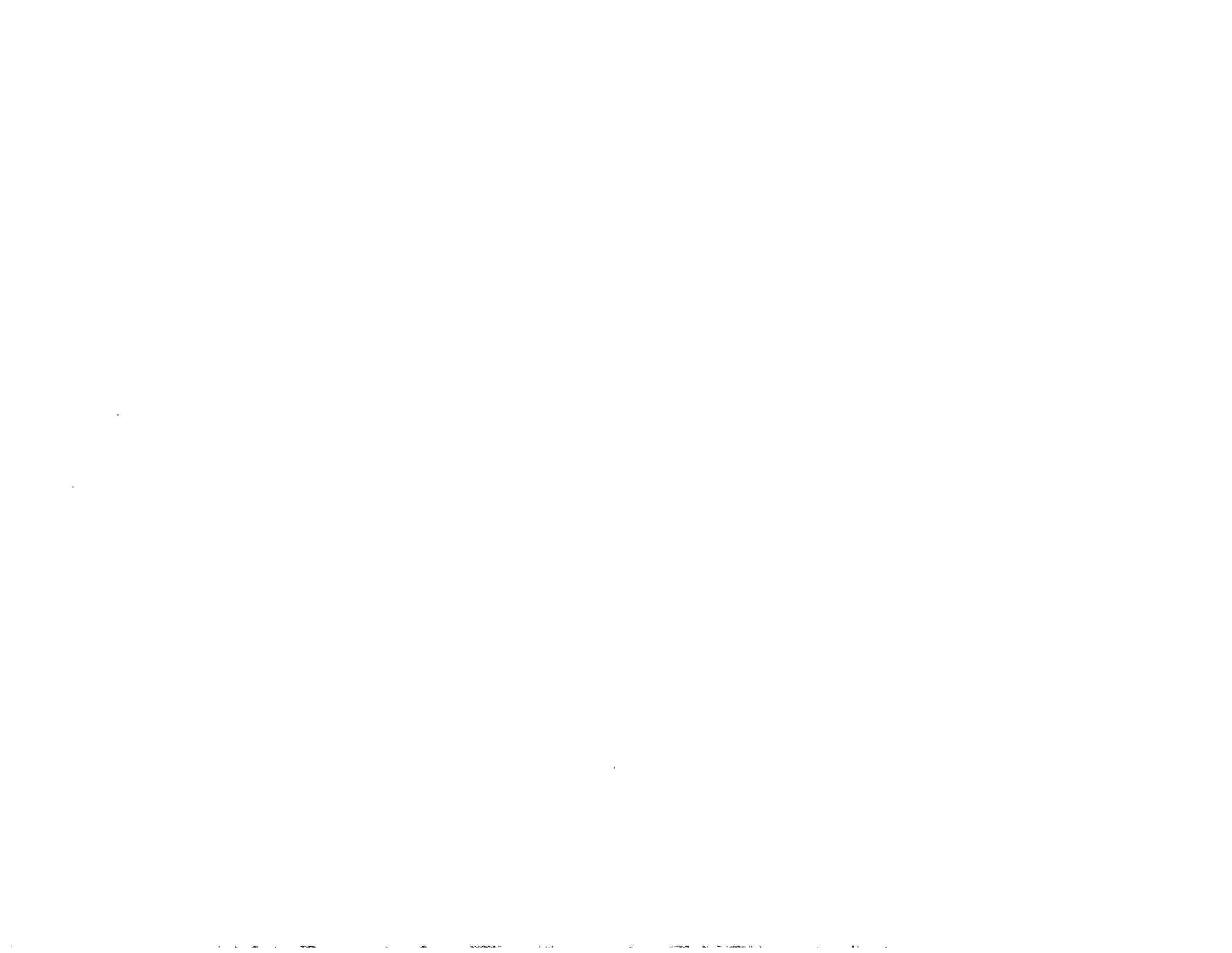


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### ABBREVIATIONS

ADP	automatic data processing
GAO	General Accounting Office
GSA	General Services Administration
MOL	maximum order limitation
USDA	United States Department of Agriculture



DETAILS OF GAO REVIEW OF PACIFIC SOUTHWEST REGION'SWORD PROCESSING PROCUREMENTOBJECTIVES, SCOPE, AND METHODOLOGY

We evaluated the Pacific Southwest Region's (region 5's) procurement of word processing equipment. Our evaluation included examining (1) the justification for the procurement, (2) compliance with procurement regulations, and (3) the equipment's operation and use.

To carry out the review we

- examined how region 5 implemented policies, procedures, standards, and guidelines established by the General Services Administration (GSA) that relate to procuring word processing and data processing equipment;
- analyzed plans, studies, and other documents relating to the procurement;
- examined GSA contract files and talked with GSA contracting officers;
- interviewed Forest Service officials in the Washington office and in region 5;
- interviewed the Department of Agriculture (USDA) official responsible for giving technical approval for ADP procurements; and
- visited three national forest offices to observe the equipment in operation.

MISSION AND MANAGEMENT STRUCTURE  
OF THE FOREST SERVICE

The Forest Service manages the multiple use of 187 million acres of Federal land to ensure the continued flow of goods and services. These goods and services include timber, water, wildlife, recreation, and forage.

Since its establishment in 1905, the Forest Service has been decentralized; responsibility and authority are delegated to the lowest feasible level of the organization. The national forest system has four levels of line managers--district rangers, forest supervisors, regional foresters, and the Chief of the Forest Service. District rangers (who are

the first-line resource managers) manage projects and activities on lands within their district. Forest supervisors supervise from three to eight district rangers and manage the respective districts to assure district program balance, program accomplishment, and support to local communities. Nine regional foresters supervise from 6 to 22 national forests to assure forest program balance, program accomplishment, and support for regional needs. The Chief of the Forest Service supervises the regional foresters and manages the national forest system to assure that national goals and objectives are met and that programs are carried out.

The regions within the Forest Service have considerable authority, including procurement authority.

Region 5, which encompasses California and Hawaii, is one of the Forest Service's major timber-producing regions. The region is highly dispersed with 17 national forest offices, 75 district offices, and a regional office in San Francisco.

HISTORY OF REGION 5 PROCUREMENT:  
TAHOE/PLUMAS EXPERIMENT

Region 5's efforts to develop a regional network integrating communications with word and data processing began in 1978 when two national forest offices in the region, Tahoe and Plumas, investigated various word processing 1/ equipment capabilities to meet their management needs. These forest offices were looking for ways to handle their growing volume of repetitive typing requirements, such as environmental impact statements, timber sale contracts, and bid preparation.

In August 1978 representatives from Tahoe and Plumas informed the region's ADP Management Council 2/ that they had

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1/The National Archives and Records Service, the agency responsible for providing Government-wide leadership in word processing, defines word processing as "the manipulation of textual material through the use of a keyboarding device capable of controlled storage, retrieval, and automated typing."

2/The Region 5 ADP Management Council is an advisory committee of ADP professionals and managers in the region with representatives from the regional and forest offices. Its chairman is the Deputy Regional Forester for Administration.

concluded that advanced word processing technology featured multiple capabilities and uses beyond strictly typing functions. Such technology could not only meet their typing needs at the forest supervisor's office but also could (1) tie their districts and the forest supervisor's office together by using communications and common equipment and (2) begin distributed data processing, 1/ a stated goal of the Forest Service and region.

The council authorized the two forest offices to experiment with advanced word processing technology and share their experience with other forest offices. Before the end of 1978, Tahoe and Plumas purchased advanced word processing equipment.

In January 1979 the council reached a general consensus that the traditional distinctions between word and data processing were becoming obsolete. Based on this consensus and the Tahoe/Plumas experiment, the council recommended a plan for a regional network of advanced word processing systems with multipurpose capability.

The plan was contingent on the results of a feasibility study that began in February 1979 and ended in May 1979. (Before word processing equipment is acquired, a feasibility study is required by Federal Property Management Regulations in §101-11.903 to determine among other things whether the equipment would be cost effective.)

REGION 5's FEASIBILITY  
STUDY WAS INADEQUATE

Region 5's feasibility study did not adequately support the data processing requirements or the procurement alternative selected.

The study identified four alternatives for consideration:

1. The current method (a mixture of various standard typewriters and automated typing systems).

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1/Distributed data processing, as defined by the Forest Service, is "local and remote processing of data at both the central and distributed facilities via a network of computers, data communication lines, and terminals that permits the use of more than one of the facilities in the network to accomplish processing requirements."

2. Standalone word processing equipment. 1/
3. Shared-logic word processing equipment. 2/
4. Shared-logic equipment allowing integration of word processing with data processing (advanced word processing technology).

The study found that alternatives 2, 3, and 4 offered significant cost savings, as shown in the table below. The study recommended alternative 4, which the study found allows for multiple use of shared-logic equipment and offers the greatest overall savings by reducing data processing costs. During the following month, the council and the regional forester accepted the recommendation. Approval by the Chief of the Forest Service was not necessary at that time for leasing office automation equipment, but was needed for purchasing.

Cost Savings In Millions of Dollars Over 5 Years

Cost savings by function	Alternative			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Word processing	-	\$3.90	\$3.06	\$2.14
Data processing	-	None	None	2.49
Communications	-	<u>None</u>	<u>None</u>	<u>0.47</u>
Total	-	<u>\$3.90</u>	<u>\$3.06</u>	<u>\$5.10</u>

Under alternative 4, 42 percent of the cost savings is attributable to word processing and 58 percent is attributable to data processing and communications. Yet, the stated purpose of the feasibility study was to "investigate and compare the benefits of various approaches to installing word processing equipment throughout Region 5."

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1/Standalone equipment functions as independent work stations, each having its own display, keyboard, processor, storage medium, and printer.

2/Shared-logic equipment has a central processor or controller (minicomputer) that can link multiple-typing stations to a large variety of entry and output devices, including electronic keyboards, visual displays, and printers. With some shared-logic equipment, adding data processing software gives the equipment the potential to also provide data processing.

As specified by the feasibility study, alternatives 2 and 3 do not have data processing or communication capability, which is why no savings for data processing or communications are claimed in the above table for these alternatives. In other words, by limiting alternatives 2 and 3 to only word processing equipment, but allowing alternative 4 to include data processing capability in addition to word processing, alternative 4 was inappropriately favored.

As noted above, the purpose of the feasibility study was to investigate approaches to word processing--not data processing. However, if the region's intention was to acquire multipurpose equipment, a more appropriate methodology for conducting the study would have been to identify and analyze alternatives, each of which would be able to meet both word processing and data processing needs. The Forest Service official in charge of the feasibility study agreed that the methodology used could have been improved.

Further, although the study included extensive data on the region's word processing requirements, it did not address data processing requirements. The cost savings attributable to the equipment's data processing capabilities were to result from replacing existing and planned data processing equipment. However, the study should have documented the region's functional or mission requirements for data processing that the equipment was to support.

REGION 5's PROCUREMENT APPROACH  
WAS UNNECESSARILY COSTLY

During the summer of 1979, 10 national forest offices in the region and the regional office individually leased advanced word processing equipment with data processing capability from a GSA Federal Supply Schedule contract. Another four national forest offices leased equipment with only word processing capability. We believe this procurement approach was unnecessarily costly. Specifically, region 5 leased the equipment even though its lease-versus-purchase analysis showed that purchasing the equipment was more economical. (The region leased the equipment because it did not want to request a waiver from a Washington office directive freezing purchases.) Also, the region did not comply with Government procurement policy, which requires that full consideration be given to consolidating individual small-volume orders and that competitive procurement be used whenever feasible to obtain the lowest possible price.

Equipment was leased by individual forest offices

In June 1979 after completion of the feasibility study, the regional office conducted a market analysis of word processing systems available from the Federal Supply Schedule and selected a vendor. The ADP Management Council directed each forest office to determine its own needs and issue its own delivery orders.

Almost all equipment was leased for 24 months from a contract included in GSA's Federal Supply Schedule, Group 74, Part I, Office Machines--Word Processing Systems. The equipment was leased because the Forest Service's Washington office had frozen purchases of office automation equipment, including word processing systems, pending completion of a study to develop agencywide policy for office automation. As mentioned previously, Tahoe and Plumas had already purchased their equipment in 1978 as part of a pilot test.

The leased equipment was acquired under the region's delegated authority to procure office automation equipment. Washington office, USDA, or GSA approval was not required at that time for leasing word processing equipment. However, if the procurement had been described as ADP equipment, as we believe it should have been, Washington office, USDA, and GSA review and approval would have been necessary, given the high cost.

Appendix IV shows the equipment acquired by region 5. The schedule, provided by region 5 in response to our request, shows that about \$571,000 was paid for purchased equipment, about \$1.1 million is being paid annually for leased equipment, and about \$281,000 is being paid annually for maintenance on the leased equipment. The schedule also indicates that most equipment was installed from October 1979 through June 1980. Equipment configurations selected by forest offices ranged from two work stations for an entire forest office to large systems involving multiple terminals at the forest supervisor's office and work stations at each district.

Lease terms were costly

The Federal Supply Schedule contract under which region 5 leased its equipment included a rental plan with a purchase option. Under the purchase option, the vendor will apply 60 percent of the rental payments (excluding maintenance) to a maximum of 75 percent of the equipment's purchase price. According to the GSA contracting officer for this contract, these terms were similar to those offered in other contracts available from the Federal Supply Schedule.

The rental plan also included a 3-percent quantity discount, which applies to any quantity leased. On the other hand, the contract's purchase plan offered a 7-percent quantity discount for 1 to 9 systems and a 13-percent discount for 10 or more systems.

Region 5 figures showed that if the region had initially purchased the equipment from the Federal Supply Schedule contract, it would have cost about \$2.74 million based on a 7-percent discount. If the orders had been consolidated to obtain a 13-percent discount, the purchase cost would have dropped to about \$2.57 million and the region would have saved an additional \$170,000. On the other hand, if region 5 purchases the equipment after leasing for 12 months under its current lease arrangement, the total cost will be about \$3.20 million, or \$630,000 more than if it had consolidated its orders and purchased the equipment initially.

Region 5's market analysis of word processing systems available from the Federal Supply Schedule included a limited lease-versus-purchase analysis for a typical configuration. It showed, for the vendor selected, that purchase was preferable, as shown below.

<u>5-Year costs</u>		<u>Rate of return</u>
<u>Purchase</u>	<u>Rent/lease</u>	
\$277,663	\$479,340	33 percent

The market analysis did not include other factors, such as technological obsolescence, that might suggest that leasing was preferable to purchasing the equipment. For example, considering that manufacturers will introduce better price-performance computer systems or that present systems may suffer technological obsolescence would tend to move users to lease rather than purchase information-processing equipment. However, region 5's feasibility study assumed a 5-year life for the equipment and did not indicate that the equipment should be leased because new, improved systems might be introduced.

A waiver from the freeze  
was not requested

Region 5 leased its computer equipment because of a directive dated February 27, 1979, from the Washington office freezing purchases of major office automation facilities. This freeze was put into effect pending completion of an agencywide study of office automation. The study was undertaken to develop improved policies and procedures to manage

and operate office automation technology in Forest Service offices. The plan that defined the scope of the study noted that a major problem with office automation in the Forest Service was the proliferation of word processing equipment which could lead to incompatible systems. In this regard, the plan stated:

"We are currently acquiring a proliferation of equipment and software within the Forest Service that may lead to the acquisition and development of incompatible systems. There are several reasons for this problem. First, our policies, standards, and guidelines are not adequate to guide our acquisition of this equipment. Most of our knowledge about equipment capabilities and cost effectiveness is provided by vendors. Second, the feasibility studies that have been made to justify equipment are not conducted properly. Many of them justify equipment for the wrong reasons or don't consider all the factors. These studies need to be thorough, objective, and complete. Finally, there is a lack of communication and coordination between units that contribute to incompatible systems of varying capabilities."

The purpose of the freeze was to avoid locking in users to equipment that might not be compatible with agency policy that was to be developed by the study. However, the Washington office directive allowed an exception, or waiver, to the freeze if purchasing equipment would result in significant cost savings to the Government. Under the directive, a waiver required the Washington office's administrative management staff to approve a report from the Forest Service unit requesting the purchase. The report was to include

- a needs study and requirements analysis,
- equipment alternatives,
- a feature analysis evaluating each applicable feature of the equipment, and
- a cost/benefit analysis.

According to region 5 officials, a waiver was not requested to avoid possible delays. These officials claimed that for several years the Washington office and USDA had held up a region 5 request to acquire three minicomputers and they did not want similar delays to occur. However,

the Director of the Washington office's computer technology staff stated it would have been "prudent" for region 5 to have requested a waiver.

ADP officials from the Washington office told us that the region's request was not intentionally held up. They said that there were several reasons why the region's request was delayed including (1) a 6-month moratorium on the procurement of minicomputers imposed on all USDA agencies by the Assistant Secretary for Administration and (2) uncertainty in USDA regarding the Department's policy on distributed data processing.

After completion of our audit work, region 5 ADP officials stated that another reason the equipment was leased was that funds for purchase were not available in the region. However, Washington office officials told us that if a waiver had been requested and approved, funds for purchase may have been available from other sources.

#### GSA's Federal Supply Schedule Program has limitations

Under the Federal Supply Schedule Program, GSA's Federal Supply Service contracts with commercial firms to provide supplies and services at stated prices for a given period of time. User agencies place orders with the contractors for direct shipment and are billed by the vendor. (Currently, the Federal Supply Service does not administer the Federal Supply Schedule's program for ADP equipment. This segment of the program is handled by GSA's Automated Data and Telecommunications Service.)

The Federal Supply Schedule contract used by region 5 was part of a multiple-award schedule. Under a multiple-award schedule, a number of commercial firms are awarded indefinite quantity contracts for a particular product category. Agencies select the particular product that best meets their needs and order directly from the vendor.

Although the multiple-award program generally gives each agency the opportunity to buy the item best meeting its needs at a price lower than available through open market purchases, it may not result in the lowest possible price. Competition, through formally advertised bids, is generally recognized as the means to achieve the lowest possible price.

Region 5 did not follow consolidation  
and maximum order limitation requirements

Even if region 5 had sought the most economical terms available from the Federal Supply Schedule contract, greater savings may have been possible through a consolidation of individual orders and a competitive procurement.

The maximum order limitation (MOL) is the quantitative ceiling of a Federal Supply Schedule contract above which agencies may not submit orders and contractors may not accept orders. The MOL enables the Government to seek lower prices for quantities exceeding the limitation through alternatives such as competition. The MOL requirement is set out in the Federal Property Management Regulations in § 101-26.401-4(c). This section also states that agencies should consolidate their requirements to take advantage of price savings available through separate procurement of quantities exceeding the MOLs.

The MOL stipulated for the rental plan in region 5's procurement contract was \$200,000. Because each national forest office issued its own delivery order, individual orders issued by region 5 forest offices did not exceed this MOL. However, we believe that these orders should have been consolidated because

- all forest offices bought equipment from the same vendor under the same contract during approximately the same time period for the same purpose;
- the equipment was intended to be tied together through a regional communications network; and
- the success of the region's procurement was tied to a coordinated effort, compatibility of equipment acquired, and the active participation of all forest offices.

As noted above, the annual rental payments including maintenance for the equipment leased by region 5 amount to about \$1.4 million--well above the contract's MOL. By consolidating these orders for the entire region, the region would have been able to seek a competitive procurement and thus possibly achieve significant savings.

REGION 5 SHOULD HAVE FOLLOWED  
ADP PROCUREMENT REGULATIONS

As explained previously, region 5 considers its equipment to be word processing equipment with data processing capability. At the time of the procurement, word processing equipment was not classified as ADP equipment in the Government ADP procurement regulations. Consequently, the region had the authority to lease the equipment and was not required to submit documentation to USDA and GSA for review as required by procurement regulations and procedures for ADP equipment.

However, we believe the procurement should have been treated as an ADP procurement because a significant portion of the equipment's function and use was intended for data processing. The region's intent is shown in its feasibility study and related correspondence. First, the feasibility study emphasized the equipment's data processing benefits. In fact, the study's cost/benefit analysis showed that 58 percent of the benefits will result from data processing and communications. Second, documents provided by the region listed the following data processing objectives for the equipment:

- Using equipment for data entry and editing.
- Using equipment for transmission of data to the Fort Collins Computer Center.
- Fully utilizing the equipment's capabilities for integrating word processing and data processing.

ADP procurement process

Procurement of ADP equipment by Federal agencies is governed by the Brooks Act (Public Law 89-306) and a set of procurement regulations (Federal Procurement Regulations 1-4.11, Procurement and Contracting for Government-Wide Automated Data Processing Equipment, Software, Maintenance Services, and Supplies). The law and regulations are meant to ensure that (1) agencies acquire their ADP equipment at the lowest overall cost through competitive procurement, (2) agencies acquire only what they need, and (3) agency procurements are consolidated and opportunities for sharing are explored, where feasible.

To carry out the intent of the Brooks Act and ADP procurement regulations, agencies that plan to purchase or lease ADP equipment above certain dollar levels (generally \$300,000 for purchase and \$7,500 a month for rental) must submit a request including documentation to GSA. GSA, in turn, will review the request and either procure the equipment itself or issue the agency a delegation of procurement authority. <sup>1/</sup> USDA's Office of Operation and Finance serves as the primary contact with GSA. In this capacity, the Office of Operation and Finance also reviews agencies' procurement requests and related documentation to ensure that all procedural and regulatory requirements have been met before the request is forwarded to GSA.

Reclassification of word  
processing equipment

Before October 1, 1979, word processing equipment was classified by GSA as office machines and could be purchased from Federal Supply Schedule Group 74, Part I, administered by the Federal Supply Service. As word processing systems became more sophisticated and more closely tied to automatic data processing, however, agencies began to recognize that some equipment available from Schedule 74 offered considerable potential for data processing. ADP equipment, on the other hand, was available from Federal Supply Schedule 70, administered by GSA's Automated Data and Telecommunications Service and subject to Government ADP regulations.

Because of the ADP capabilities of new, advanced word processing systems, GSA reclassified word processing equipment as ADP equipment, and effective October 1, 1979, all Federal Supply Schedule contracts for word processing equipment came under Schedule 70, administered by the Automated Data and Telecommunications Service. All procurements of word processing systems are now subject to the ADP procurement regulations.

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<sup>1/</sup>A delegation of procurement authority is a GSA document granting an agency permission to procure ADP equipment on its own.

CONCLUSIONS AND RECOMMENDATIONS

We believe that if region 5 had adequately justified its procurement, followed procurement regulations on consolidating small-volume orders, and developed a competitive procurement approach, possibly hundreds of thousands of dollars could have been saved. However, the concerns we now have are whether the current equipment is cost effective and whether a less expensive alternative than the region's current leasing arrangement exists.

While our visits to three national forest offices indicated that the equipment is providing word processing benefits, we were not able to evaluate how cost effective the systems were because of their recent acquisition. Also, the national forest offices are only beginning to develop the equipment's data processing and communications capability.

In a 1979 report 1/ that evaluated word processing in the Federal Government, we concluded that most agencies cannot demonstrate that they have increased their productivity nor that their word processing systems are, in fact, cost effective. Most agencies that did analyze their systems have discovered that they were not cost effective.

We stated in the report that once a system has been operational long enough to establish a recognizable pattern, good management techniques dictate that a review be made to determine how the system is working in light of benefits anticipated in the planning phase. In such a postinstallation review, the system's cost effectiveness should be determined. The review should determine if increased typing productivity is sufficient to offset the increased cost of the system. If not, management should consider making changes so that the system is cost effective, relocating or returning the equipment, or seeking other alternatives. Periodic audits, which include measuring system productivity, should then follow to determine if further changes are needed.

Therefore, we recommend that the Secretary of Agriculture direct the Forest Service to conduct a postinstallation review to measure the cost effectiveness of region 5's systems, including both word and data processing capabilities, after 6 months of operation. In order to prepare a proper

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1/"Federal Productivity Suffers Because Word Processing Is Not Well Managed" (FGMSD-79-17, Apr. 6, 1979).

postinstallation review, the Forest Service will need baseline production data and production statistics on its word and data processing operations.

We also recommend that after completion of the post-installation review, the Secretary of Agriculture direct the Forest Service to conduct an economic analysis of alternatives available to region 5 that could meet its requirements at a cost lower than its present leasing arrangement. The alternatives analyzed will depend on the results of the postinstallation review. If the review finds the current equipment to be cost effective, alternatives would include exercising the purchase option or terminating the lease and carrying out a competitive procurement. If the review finds the current equipment to be not cost effective, alternatives would include returning the equipment and acquiring less sophisticated systems.

If the Forest Service identifies an alternative that meets its requirements and is more economical than the current lease arrangement, it should implement that alternative.

Our review focused on the appropriateness of region 5's procurement of word processing equipment. However, our review also raised broad ADP management issues at the agency and Department levels. Specifically, these issues include the adequacy of

- management control by the Forest Service's Washington office over the procurement and use of word and data processing equipment by field units;
- procurement procedures followed by the Washington office and USDA's central ADP office;
- guidance and assistance available to field units to help ensure that sound feasibility studies are prepared;
- USDA's policy on distributed data processing and the procurement of minicomputers; and
- communication among the Washington office, field units, and USDA.

These issues will be examined in our work for the House Government Operations Committee pursuant to its request for a comprehensive ADP management review of USDA.

AGENCY COMMENTS

We asked the Forest Service to provide comments on a draft of this report. Its comments have been considered where appropriate.

The Forest Service agreed with our findings regarding the problems associated with region 5's procurement of word processing equipment. The Forest Service told us that a postinstallation review would be conducted in the near future. It also said that it had already initiated an economic analysis of alternatives and would further develop the analysis after completion of the postinstallation review.

The Forest Service also stressed its belief that the problems identified in this report are an isolated occurrence. It believes that adequate management control does exist and that similar questionable procurements will not occur in the future.

CHRONOLOGY OF EVENTS:FOREST SERVICE WASHINGTON HEADQUARTERS FREEZEON PURCHASES OF MAJOR OFFICE AUTOMATION FACILITIES11/15/78 Work group established to develop a plan to study office automation:

A letter from Forest Service's Washington office announced that a working group had been established to develop a plan to study office automation in the agency.

1/3/79 Study plan and interim guidelines freezing purchases sent to Forest Service offices:

A letter to regional foresters, station directors, area directors, and Washington office staff directors from Forest Service's Washington office Associate Deputy Chief transmitted the study plan.

The Associate Deputy Chief acknowledged the study plan's recommendation and set up a study team. Objectives of the study are to "develop Forest Service policies, standards, guidelines, and procedures for management, acquisition, and use of office automation facilities." The study plan stated that the study should take 4 months to complete; however, the letter stated the study should take approximately 6 months to complete.

The letter included interim guidelines that were established to freeze purchases of major office automation facilities until the study is completed. The freeze was put into effect so that no one is locked in on equipment that may not be compatible with the national policy to be developed by the study team.

2/27/79 Official guidelines promulgated for acquiring office automation equipment:

Forest Service Interior Directive No. 2, Forest Service Handbook 6309.31, was issued. This directive included generally the same guidelines as

those in the 1/3/79 letter. In effect, the directive is the official promulgation of the guidelines. This directive authorizes only renting or leasing with a purchase option when acquiring word processing and other office automation equipment. However, the directive allows an exception, or waiver, to the freeze. A waiver to purchase word processing equipment requires the specific approval of the Washington office administrative management staff. This approval is based on a review of the following items: (1) a needs study and requirements analysis, (2) equipment alternatives, (3) a feature analysis evaluating each applicable equipment feature, and (4) a cost/benefit analysis. The directive states that a "primary consideration [for approval] will be evidence that equipment purchase will result in a significant cost savings to the Government."

9/13/79 Study team's report transmitted for review:

A letter from the office automation study team transmitted the study report to the Washington office Deputy Chief for Administration and others for review. The study report was dated August 1979.

2/15/80 Policy problems with word processing equipment resolved by GSA reclassification:

In a telephone conversation with us, the Director of the Forest Service Washington office computer technology staff said that although the study report did not accomplish its objectives, Forest Service policy problems with the technical approval process for word processing equipment procurements were resolved when GSA reclassified word processing equipment as ADP equipment in September 1979.

CHRONOLOGY OF EVENTS:REGION 5'sACQUISITION OF WORD PROCESSING EQUIPMENT

Sept. and Oct. 1978 Word processing equipment purchased by two national forest offices in region 5:

Purchase orders were issued by Tahoe and Plumas national forest offices to purchase advanced word processing systems. These purchases were approved by Region 5's ADP Management Council as an experiment. Areas of interest that were to be addressed by the experiment were (1) using word processing equipment, (2) tying districts and supervisors' offices together by using common equipment, and (3) beginning distributed processing.

Jan. 1979 Recommendations made to move ahead on regional network of multipurpose equipment:

A meeting of region 5's computer service staff and other computer specialists was held to determine the region's direction for using ADP hardware. The meeting resulted in recommendations to move ahead in fiscal year 1979 on a regional network of shared-logic word processors with multipurpose capability, contingent on the results of a feasibility study.

Feb. 1979 Feasibility study initiated to investigate ways to install word processing equipment.

May 1979 Feasibility study on word processing was completed and recommended an approach that integrates word processing and data processing:

The purpose of the feasibility study was to "investigate and compare the benefits of various approaches to installing word processing equipment throughout Region 5." The study considered four alternatives: the current method, standalone word processing, shared-logic word processing, and integrated word and data processing. The fourth alternative (integrated word and data processing) was the approach recommended at the meeting held in January 1979.

The study found that each alternative offers significant cost savings over the current approach. The study recommended the fourth alternative, which allows for multiple use of shared-logic equipment, because it offers by far the greatest overall savings by reducing data processing costs.

5/18/79 Feasibility study recommendations accepted:

The feasibility study was presented to the Region 5 ADP Management Council and the study's recommendations, including selection of alternative 4, were accepted.

6/07/79 Field notified of Council decisions:

ADP Management Council decisions made on 5/18/79 were sent to the field in a letter from the regional forester.

June 1979 Market analysis of word processing equipment conducted:

A market analysis of word processing systems available from GSA Federal Supply Schedule Group 74, Word Processing Systems, was conducted to select a vendor. The analysis included a limited lease-purchase comparison for a typical configuration which showed that purchasing the equipment was preferable. However, the market analysis noted that lease plans were of immediate importance due to current regulations restricting purchase.

June to Sept. 1979 Advanced word processing equipment acquired:

The regional office and 14 of the national forest offices in region 5 issued delivery orders to lease word processing equipment for a 2-year period. The equipment was leased because Forest Service Interim Directive No. 2 authorized only renting or leasing with a purchase option when acquiring word processing and other office automation equipment.

The equipment was acquired from GSA Federal Supply Schedule 74 under the region's delegated authority to procure office automation equipment. Washington office, USDA, or GSA approval was not required

at that time for leasing office automation equipment. (If the procurement had been described as ADP equipment, Washington office, USDA, and GSA review and approval would have been necessary.)

09/07/79 GSA classified word processing equipment as ADP equipment:

Announcement in the Federal Register, Volume 44, No. 175, dated September 7, 1979, amended Federal Procurement Regulations, §1-4.1102-1, to include word processing equipment in the definition of automatic data processing. Also, word processing equipment that was classified under Federal Supply Schedule Group 74 was reclassified into Federal Supply Schedule Group 70.

REGION 5 (note a)  
 WORD PROCESSING EQUIPMENT (note b)  
 April 25, 1980

Unit (National forest/ regional office)	Date central processor installed	Equipment		Date work stations and printers installed	Annual cost	
		Number of work stations installed	Number of printers installed		Rental	Maintenance
<u>Rented equipment</u>						
Angeles	(e)	5	5	10/79	\$ 29,472	\$ 7,116
Cleveland	(e)	5	4	10/79	26,280	6,204
Inyo	4/80	6	5	8/79	78,120	24,996
Klamath	3/80	11	7	11/79	106,812	28,224
Lassen	4/80	5	4	10/79	83,148	16,620
Los Padres	(e)	2	1	10/79	9,588	2,160
Mendocino	2/80	2	1	2/80	52,332	10,992
Modoc	c/3/80	6	5	1/80	61,440	16,308
San Bernardino	4/80	9	7	10/79	92,112	22,356
Sequoia	(e)	4	4	11/79	22,260	7,008
Shasta-Trinity	4/80	9	9	9/79	117,564	30,192
Sierra	d/5/80	10	6	7/79	104,796	20,424
Six Rivers	c/3/80	8	2	10/79	87,816	19,476
Stanislaus	d/6/80	8	7	11/79	106,728	38,808
Regional office	d/6/80	14	10	10/79	<u>159,384</u>	<u>30,300</u>
Total					<u>\$1,137,852</u>	<u>\$281,184</u>
<u>Purchased equipment</u>						<u>Cost</u>
Eldorado		2	2	10/79	\$ 28,980	
Plumas	6/79	10	1	1/79	235,670	
Tahoe	1/79	8	6	11/78	233,157	
Regional Office	d/5/80	1		2/79	<u>73,584</u>	
Total						<u>\$571,391</u>

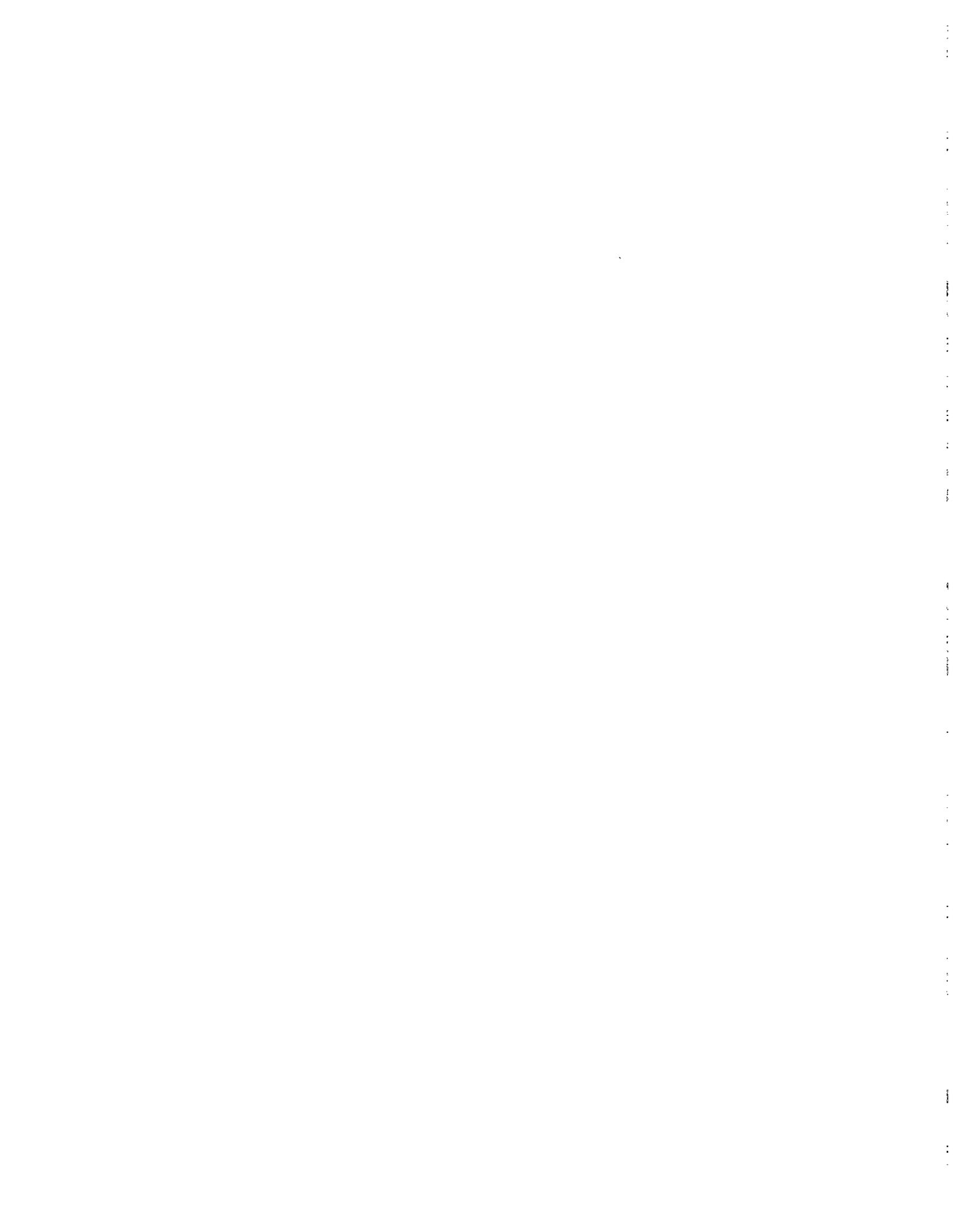
a/Information included in this schedule was provided by region 5 at our request.

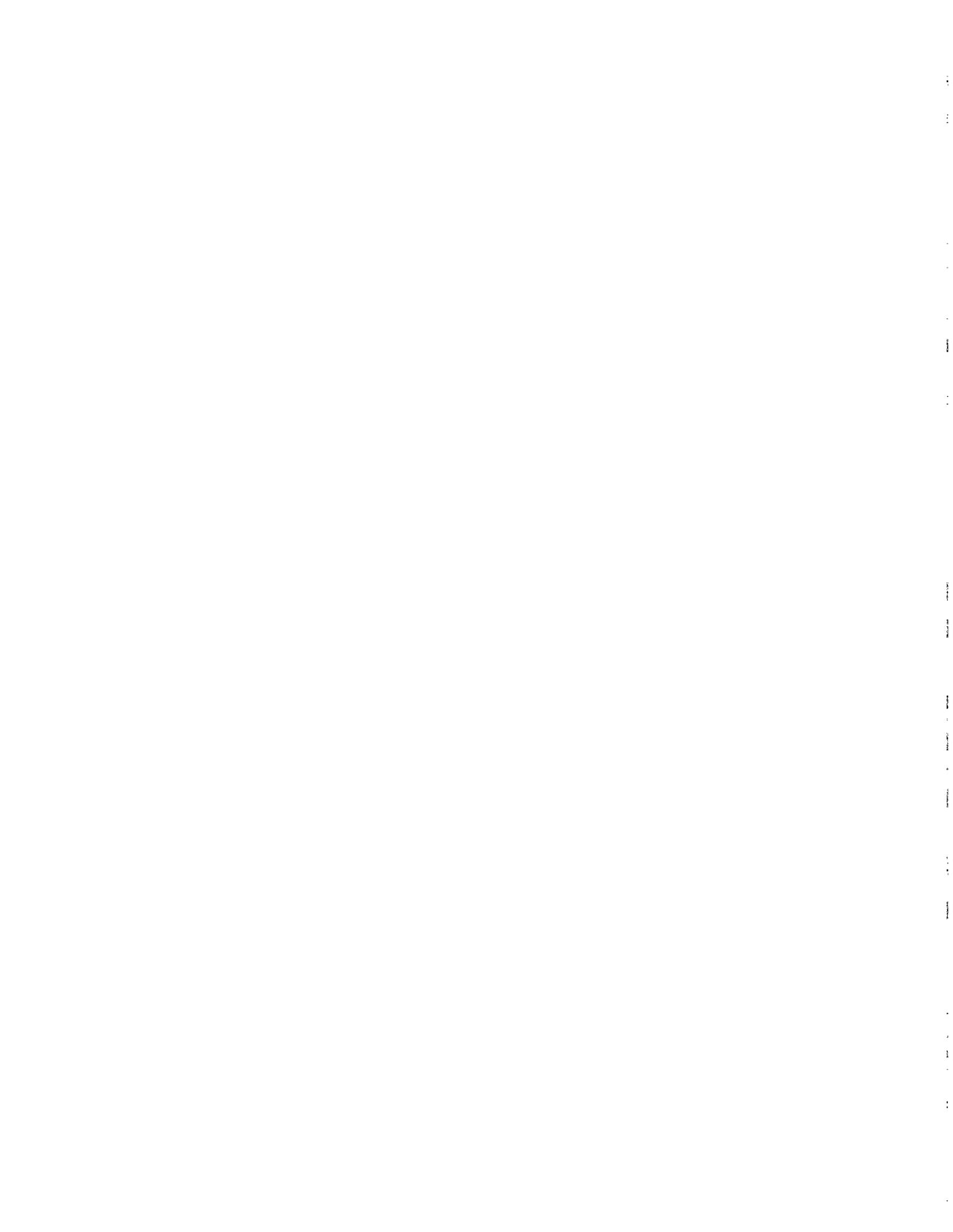
b/The equipment has word processing, data processing, and telecommunications capability.

c/Delivered but not installed.

d/Estimated delivery schedule.

e/These national forest offices leased equipment with only word processing capability.  
 A central processor was not acquired, thus limiting the equipment's capability.





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