



UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

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LOGISTICS AND COMMUNICATIONS  
DIVISION

NOV 4 1976

B-115369



The Honorable  
The Secretary of Defense

Dear Mr. Secretary:

Recently we completed a survey of automated data processing activities, including utilization of computer-output-microfilm (COM) equipment, at various DCD locations in the Far East. The COM equipment that we surveyed prepares reports on microfilm faster than printers by reading computer-generated magnetic tapes and producing the reports on microfilm. These reports also are less costly compared to paper reports and the microfilm can be readily viewed or reproduced, using appropriate readers and printers. Our work involved visits to sites in Hawaii, Korea, Japan, the Philippines, and Taiwan.

Our survey identified a proliferation of COM equipment at computer facilities in Hawaii. Although we did not make a detailed review or cost analysis of the operations of these facilities, we believe there is a potential for savings by consolidating the COM operations which warrants management attention. This matter has been discussed with local officials; however, we are bringing it to your attention because of the various commands involved and the possibility of similar situations at other locations throughout DOD.

It appears probable that consolidating existing facilities could provide adequate lower cost COM services to users. We believe your office should consider consolidating military COM facilities in Hawaii and conduct studies to determine whether similar conditions exist in other DOD locations.

BACKGROUND

COM is a method of printing computer output on either of two types of microfilm. One type of microfilm consists of a cartridge containing a short reel of film that is easily

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read or reproduced with a variety of microfilm equipment. The second type is a flat sheet produced by cutting a wide reel of microfilm into short lengths called microfiche. Microfiche are small enough to mail in an envelope--typical size is 4 X 6 inches--and are easily read or reproduced by standard equipment. The capacity of the COM equipment is so great that usually no single activity has enough computer output to keep it operating full time.

Based on studies concerning the Federal Government's use of COM, we suggested in an October 18, 1972, letter report to the Office of Management and Budget that executive agencies join with us in a study to determine efficient and effective methods for acquiring and using COM technology. The suggested approach was to determine the feasibility of establishing interim COM service centers in certain geographical areas as a means of giving economical service and controlling proliferation of systems while studying the long range needs for this technology.

The Office of Management and Budget established a joint steering committee composed of representatives from several agencies with the DOD representative as chairman. The committee was charged with forming a study plan, arranging its conduct, reviewing the results, and making recommendations. At the committee's first meeting on June 21, 1973, a project team was named to conduct a feasibility study for a pilot COM center in the Norfolk, Virginia, area. The Navy Publications and Printing Service agreed to act as the COM service center. The steering committee monitored the center's operation and issued its report in February 1976.

The report concluded that the most economical way COM services can be obtained is from another Government agency that already has the capability or from a Government-operated service center. Also, depending upon availability of COM equipment in the area, sharing should be the alternative selected unless there are

- complicated security requirements,
- restrictive turnaround requirements, or
- volume that cannot be handled by the agency with COM equipment.

In addition, Federal Property Management Regulations, Subpart 101-32.2, requires an agency to give first consideration to obtaining the service from existing sources.

OUR OBSERVATIONS IN HAWAII

The Navy operates three COM centers at Pearl Harbor. The centers are managed by the Navy Publications and Printing Service; the Pacific Fleet Data Processing Service Center; and the Fleet Intelligence Center, Pacific. In addition, the Fleet Marine Force, Pacific, will soon install a COM center about 3-1/2 miles from Pearl Harbor at Camp H. M. Smith, headquarters of the Commander in Chief, Pacific.

We presented our observations in a March 29, 1976, letter to the Commander in Chief, Pacific Fleet, including various alternatives to the existing systems. In response, Pacific Fleet representatives agreed that there is a potential for cost savings through consolidating COM facilities, but noted that, since the Navy Publications and Printing Service is not within the Pacific Fleet chain of command, the issue of consolidation should be addressed to the Navy Supply Systems Command.

In response to a later Naval Audit Service draft report, the Commander in Chief, Pacific Fleet, notified the Officer in Charge, Naval Audit Service, Hawaii (memo dated May 20, 1976), that the Fleet Data Processing Service Center and Fleet Intelligence Center will test the concept of one COM center serving both activities. If feasible, one COM processor will be released to the vendor and consolidated operations will begin. After a reasonable period to determine manpower requirements, volume, and duplicating efficiency, the Naval Shipyard, which is currently the only user of the Navy Publications and Printing Service facility, will be advised of the COM center's capability and accessibility.

This type of action appears to be applicable to other Defense activities in Hawaii, not just the Navy.

Present Department of the Navy systems

The Navy Publications and Printing Service is a subordinate command of the Naval Supply Systems Command. Its mission is to publish both microfilm and hard copy paper for all Department of the Navy activities. Since April 1974, the Printing Service has leased Datagraphix 4360 COM equipment at a base rental of \$27,800 annually. The system is currently being used an average of 20 hours a week. The Pearl Harbor Naval Shipyard is its only user. The System is not cleared to produce classified documents.

The present system will soon be replaced by a more sophisticated, more expensive Datagraphix 4561 COM recorder.

The 4561 system was justified on the basis that it would (1) significantly reduce computer run time and improve computer tape availability for the Naval Shipyard and (2) enable the Printing Service to extend COM services to other activities. This flexibility is possible because the new COM equipment includes a minicomputer which eliminates the need to reformat data before using the COM recorder. The new system is valued at \$110,000 and will be leased initially for a period of 1 year at an annual rental of \$49,900, including \$8,200 for maintenance.

The Fleet Data Processing Service Center leases a 3M Laser Beam Recorder at an annual rental of \$42,500. The three customers serviced by this equipment are Commander-in-Chief, Pacific Fleet; Marine Aircraft Group-24; and the Naval Supply Center, Pearl Harbor. Though available for use one shift a day, 5 days a week, the machine is used an average of less than 2 hours a day. To meet its customer requirements, the equipment is cleared to process data classified as high as "Top Secret."

The Fleet Intelligence Center leases a KODAK KOM-80 microfilmer at a rental cost of \$18,200 annually. The Fleet Intelligence Center facility is required to operate at two levels of security--system low for collateral (Top Secret and below) and system high for data more sensitive than Top Secret which requires a special security check and clearance. Of the three COM centers, only the Fleet Intelligence Center is cleared to process both types of classified data. Fleet Intelligence Center officials said that the KOM-80 system is capable of absorbing the classified reports now produced by the Fleet Data Processing Service Center COM facility. We were told that because of the controls necessary to maintain system high security, the present design prevents the solicitation of COM customers with requirements for only low classification or unclassified documents.

#### Proposed Marine Corps system

As of June 1976, the Fleet Marine Force, Pacific, was in the process of installing a COM center at Commander-in-Chief, Pacific, Headquarters. The California Computer Products "MMS-UMT" microfiche unit and related equipment were purchased in May 1976 for approximately \$145,000, and were scheduled for operation in July. This COM equipment, like that of the Printing Service, includes a minicomputer. Operating costs are estimated at \$19,000 annually.

A Marine Corps official estimated that the average monthly microfiche production would consist of about 1,250

microfiche masters and 6,100 duplicates. As a comparison the Printing Service produces 1100-1200 masters and 30,000 duplicates during a 20-hour work week.

The subject of consolidating COM facilities was discussed with Marine Corps officials. They said that the feasibility of consolidating Marine with other COM centers in Hawaii depends on whether the consolidated COM center was able to adequately meet Marine Corps requirements.

#### Present Army system

The United States Army Support Command, Hawaii, located at Fort Shafter, Honolulu, also operates a COM center. The center has Government-owned equipment valued at about \$128,000. The center provides services to all customer activities and operates about 70 hours a week.

#### CONCLUSIONS AND RECOMMENDATIONS

In view of the multiplicity of COM centers that are not fully utilized and the potential savings by eliminating unneeded equipment, we recommend that the Secretary of Defense consider appropriate action to consolidate COM facilities in Hawaii. Consolidation is possible since two of the COM centers have minicomputers which should alleviate the problem of noncompatibility with DOD data processing systems. As stated previously, security considerations apparently preclude using the Fleet Intelligence Center's COM facility for other than producing classified microfiche. We did not evaluate this contention, but we do not think it would prevent consolidating COM facilities.

The potential savings to be realized from consolidation depends on the final configuration of COM equipment to meet DOD needs in Hawaii. However, we estimate that by consolidating existing work on the Fleet Marine Force COM equipment annual savings of about \$110,600 would result through eliminating equipment rental and maintenance costs alone, as shown below.

<u>Organization</u>	<u>Rental and maintenance costs avoided</u>
Navy Publications and Printing Service	\$ 49,900
Fleet Data Processing Service Center	42,500
Fleet Intelligence Data Processing Center	<u>18,200</u>
Estimated annual savings	<u>\$110,600</u>

We estimate that processing the entire known workload on the Marine Corps COM equipment could be accomplished in about 88 hours each month. A 7-day-a-week, 24-hours-a-day operation provides about 720 available processing hours each month. Thus, the Marine Corps COM equipment seems to be more than sufficient to meet known and future workloads.


We have not included additional costs of transportation in our computation of savings. However, any additional costs because of transportation should be nominal due to the close proximity of each of the COM centers and could be more than offset by the potential savings.

We recommend that you consider consolidating military COM facilities in Hawaii and inquire into the feasibility and economy of similar consolidations at other DOD locations.

As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

If you have any questions, we will be glad to discuss them with you or your representatives. If you so desire, please contact Mr. C. O. Smith, Assistant Director, on 275-6042.

Sincerely yours,

  
for Fred J. Shafer  
Director