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UNITED STATES GENERAL ACCOUNTING OFFICE

WASHINGTON, D C 20548

CIVIL DIVISION

AUG 19 1969

Dear Mr. Thrower:

The General Accounting Office has completed a review of selected activities of the Internal Revenue Service's (IRS), Data Center (DC), Detroit, Michigan. The review was limited because not all records pertinent to the areas of our inquiry were made available to us. However, our review showed that there are certain matters which in our opinion, warrant consideration at the IRS national office level. We found that there is an apparent low productive-time utilization of computers, a possibility for eliminating, consolidating or revising some of the tables utilized in the management information system, and a possibility of substantial savings in computer time through the use of microfilm instead of hardcopy (paper reports) for computer output.

The resolution of these matters might result in significant improvements in the computer operations at DC, therefore, we believe that IRS should consider them prior to acquiring new third generation computers for DC. The purpose of this letter is to obtain your views and comments on these matters.

The DC was established in Detroit in July 1965. Its function is to perform all computer operations not directly related to the automatic data tax returns processing system. It is a service organization, and, as such, receives work requests from, and provides services to, various IRS functional areas. The Management Information Division (MID), located in Washington, D.C., provides line supervision over the DC and acts as a liaison between it and other organizational units of IRS.

The IRS budget for fiscal year 1970 includes about \$1 million for the lease of third generation computers for DC for a period of about 5 months. We understand that the acquisition of this equipment, valued at about \$6.5 million, was justified primarily on the premise that the present computers are inadequate to handle current and planned workloads.

Low productive-time utilization  
of computers

There is an apparent low productive-time utilization of computers at DC. The DC production rate for fiscal year 1969 was 40 percent as

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compared with a production rate of 63 percent for similar equipment Government-wide. Also, as shown in the following table the percent of computer utilization for production time spent on final output is significantly lower at DC than at apparently similar type computer service centers located at the Departments of Labor (DL) and Housing and Urban Development (HUD).

<u>Computer time utilized for:</u>	<u>1968</u> percent			<u>1969</u> percent		
	<u>DC</u>	<u>DL</u>	<u>HUD</u>	<u>DC</u>	<u>DL</u>	<u>HUD</u>
Production of final output	31	54	67	40	50	60
Reruns of output due to errors	7	8	2	6	8	2
Testing of programs	27	28	10	25	30	17
Set up and halt for programs	25	5	17	27	10	17
Maintenance, repairs and adjustments	5	5	4	-	2	4
Other	<u>5</u>	<u>-</u>	<u>-</u>	<u>2</u>	<u>-</u>	<u>-</u>
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

National office officials stated that the low production rate at DC is due to the mutiplicity of computer programs required to meet the needs of its various users. According to these officials, computer programs, which number about 2,000, result in considerable computer time being spent on testing, and set up and halt operations.

Although DC officials stated that they believed DC operations were unique in the Government we found that computer operations at DL and HUD apparently can be compared with computer operations at DC since each is service oriented and each processes a variety of programs daily. DL and HUD have about 700 programs for each of their 7074 computers as compared with the 2,000 programs of DC for its three 7074 computers. As noted in the above statistics the percent of time expended by DL and DC for testing computer programs is generally comparable, however, the percent of the time expended by HUD for similar operations is somewhat lower. Also, the

statistics show that the percent of computer time for set up and halt operations at DL and HUD was significantly lower than the percent of time for similar operations at DC.

We were told by the Director of DC that the 9 percent increase in the 1969 production rate over the 1968 production rate was due in part to general improvements in the method of testing computer programs.

Even though testing has been improved the 1969 production rate still appears low and raises the question as to whether additional improvements might be possible in other areas.

Possibility that some tables could be eliminated, consolidated or revised

It appears that some of the tables utilized in the management information system for the projects we reviewed could either be eliminated, consolidated or revised to be more meaningful to the user. The effect of such actions is an important consideration since the production of management information reports (13 projects producing 294 tables) takes up about 18 percent of DC's workload. The results of our review of only 3 of the 13 projects involved with management information reports are as follows:

--For Project 838, which is designed to provide the Chief Counsel's Office and the Appellate Division with data on tax cases in 54 individual tables, we were told by the Chief, Operations Analysis Branch that table numbers 30, 33, and 82 currently being received could be eliminated and table numbers 57, 58, and 59 should be issued quarterly instead of monthly. The Assistant Chief, Refund Litigation Division told us that table number 6-1 could be eliminated and that table numbers 9-2 and 9-3 are not currently useful but may be in the future.

--For Project 821, which is designed to provide the Collection Division with data on delinquent tax returns in 37 individual tables, the Director of the Collection Division told us that many of the tables could be eliminated or consolidated with other tables. We were further told that many tables from DC contain only raw data which the Collection Division has to process on its own desk computers to be meaningful.

--For Project 803, which provides tables accounting for personal property in IRS, an analyst in the Facilities Management Division told us that of the six tables being produced he considered number 5 as useless. He said too much data is included in the other tables and that present plans indicate that revision of the computer program for Project 803 to produce more meaningful tables may not take place until fiscal year 1971.

The elimination, consolidation, or revision of these tables could result in savings of computer time at DC. Our review, however, included only 97 of the 294 tables for 13 projects. There are about an additional 2,400 tables and/or reports produced by DC in its other program areas. Therefore, it may be that some of the other tables or reports not reviewed by us could also be eliminated, consolidated or revised.

#### Possible use of microfilm

One method of obtaining a greater utilization of DC computers might be to replace the present output, which is in the form of hardcopy (paper reports), with reports on microfilm. In our discussions of the possibility of using microfilm instead of hardcopy, both national office and DC officials said that operations at DC represented good potential for microfilm output. We understand that the Systems Division at DC has recently begun a study into the feasibility of using microfilm for the DC output.

In 1965 IRS began microfilming weekly settlement registers directly from magnetic tapes. The settlement registers support revenue collections and disbursement transactions numbering into the millions and the elimination of hard copies of these registers resulted in substantial savings to IRS.

The two pieces of equipment utilized by IRS for microfilming are located at the National Computer Center (NCC), Martinsburg, West Virginia. IRS statistics for the year ended December 31, 1968, show that the microfilm equipment at NCC was idle from a low of 38 percent of the time in one quarter to a high of 71 percent of the time in another quarter. It might be feasible to send magnetic tapes from DC to NCC for microfilm production during the periods the NCC equipment is not being used for master file activities.

A major savings resulting from the use of microfilm stems from the fact that the computer can produce data on tape for microfilming purposes considerably faster than it can write this same data on hardcopy. This

savings in computer time can be utilized to process additional computer programs. Other savings would also result because the cost of microfilm is less than the cost of an equivalent amount of hardcopy and microfilm requires considerably less storage area than hardcopy.

A recent 1-year test at three Army test sites showed the advantages of replacing hardcopy output with microfilm output. This test resulted in the collective elimination of over 19,459,000 pages of hardcopy and freed 8,821 hours of computer time at an annual savings of about \$430,000. The potential for savings at DC appears equally significant in view of the voluminous number of reports on hardcopy. In one program area alone--management information reports--we estimate that the computers produce about 2,140,000 pages of hardcopy reports annually.

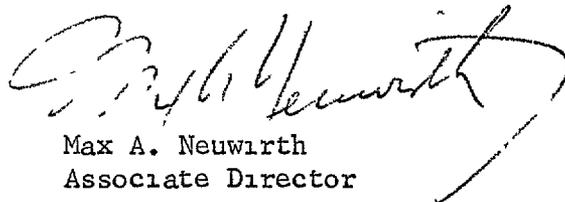
Conclusion

Increasing the productive utilization of computers, eliminating, consolidating or revising tables used in reports, and using microfilm instead of hardcopy, should result in significant savings in time of the DC computers. We believe, therefore, that the above matters should be considered by IRS prior to completing action to acquire new third generation computers for DC.

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We would appreciate your views and comments on these matters and their possible effect on the planned acquisition of third generation computers.

Sincerely yours,



Max A. Neuwirth  
Associate Director

The Honorable Randolph W. Thrower  
Commissioner of Internal Revenue  
Department of the Treasury