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Better Management Needed
Of Health Research
Equipment By NIH Grantees B-164031(2)

National Institutes of Health
Department of Health, Education,
and Welfare

**UNITED STATES
GENERAL ACCOUNTING OFFICE**

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JULY 17, 1973



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

MANPOWER AND WELFARE
DIVISION

B-164031(2)

The Honorable
The Secretary of Health,
Education, and Welfare 22

Dear Mr. Secretary:

This is our report on the better management needed of health research equipment by NIH grantees, National Institutes of Health, Department of Health, Education, and Welfare.

Our principal observations are summarized in the digest of the report and have been discussed with officials of the National Institutes of Health.

We are sending copies of this report to the House and Senate Committees on Appropriations and Government Operations and the Director, Office of Management and Budget. We are also sending copies to your Assistant Secretary for Health; Assistant Secretary, Comptroller; and Director, National Institutes of Health. 300 1500

Sincerely yours,

A handwritten signature in cursive script that reads "Gregory J. Hart".

Director, Manpower and
Welfare Division

Enclosure

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APPENDIX

Principal officials of the Department of Health, Education, and Welfare responsible for the administration of activities discussed in this report

23

ABBREVIATIONS

AEC Atomic Energy Commission
GAO General Accounting Office
HEW Department of Health, Education, and Welfare
NIH National Institutes of Health

GENERAL ACCOUNTING OFFICE
REPORT TO THE SECRETARY OF
HEALTH, EDUCATION, AND WELFARE

BETTER MANAGEMENT NEEDED
OF HEALTH RESEARCH EQUIPMENT
BY NIH GRANTEEES

- 1 National Institutes of Health 28
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- and Welfare B-164031(2)

D I G E S T

WHY THE REVIEW WAS MADE

Research grants to such institutions as universities, colleges, and medical schools constitute the largest part--about \$676 million in fiscal year 1971--of the research program of the National Institutes of Health (NIH).

These grants for research to improve the health of all Americans provide funds for expenses, such as salaries, supplies, travel, and equipment. About 13 percent of the direct costs incurred under NIH research grants was for equipment during 1965--the latest year data was compiled on funds spent in this category.

The amount of NIH research grant funds has increased since 1965, when equipment costing \$60 million was purchased. GAO wanted to know how equipment bought with these grant funds was being managed.

FINDINGS AND CONCLUSIONS

Buying equipment

Department of Health, Education, and Welfare (HEW) instructions specify that a grantee carefully screen existing equipment before purchasing more and require that a grantee certify that equipment is not already on hand and available.

Institutions lacked records adequate to enable them to comply with these instructions. Moreover, NIH had not issued guidelines suitable for grantees to carry out HEW's instructions. Adequate records would have enabled researchers to locate and use available equipment and would have prevented unnecessary expenditure of research money for equipment.

Sharing equipment

At the grantee institutions visited, the most effective use of equipment was not being made because NIH has not taken appropriate steps to carry out HEW instructions urging researchers to share equipment. (See p.12.)

NIH equipment pool

In 1970 NIH established an equipment pool in Bethesda, Maryland, for researchers' use. However, NIH does not

--require researchers to use available pool equipment or

--have any procedures for determining whether researchers' equipment needs can be met with available equipment.

As a result, the equipment is not used most of the time. From July 1971 through February 1972, the amount of equipment used averaged only 13 percent.

Less than 1 percent of NIH's equipment worth \$64 million is in the pool, a factor which also contributes to the low use rate.

The Atomic Energy Commission has successfully carried out a central laboratory equipment pool in Richland, Washington, since 1959. Among the advantages of that pool were net savings since its inception through November 30, 1969, of \$3.7 million. (See p. 16.)

Reporting

Title to property acquired with grant funds for conducting scientific research by nonprofit institutions of higher education or nonprofit organizations whose primary purpose is conducting scientific research is usually vested in the grantee under the authority of Public Law 85-934.

Section 3 of the law provides that each Federal agency exercising this authority shall annually report to the Congress on the number and dollar amount of grants made pursuant to the law and the institutions receiving title to equipment.

HEW's Grants Administration Manual states that this law authorizes agencies to waive accountability to equipment under research grants but that any operating agency exercising the waiver authority shall prepare, as required by section 3, an annual report for submission to the Congress.

NIH waives accountability under Public Law 85-934 to property acquired with grant funds but the reports required by that act are

not being prepared.

NIH claimed that the reporting provisions do not apply to it because it has authority to make research grants to institutions under the prior provisions of the Public Health Service Act, as amended. It appears that other HEW agencies may be waiving accountability to property, under the provisions of the law, without reporting under section 3. (See p. 21.)

If NIH, or any other HEW agency, waives accountability under authority of the law to equipment purchased with grant funds, they are bound to the congressional reporting requirements of that act.

RECOMMENDATIONS OR SUGGESTIONS

We recommend that the Secretary of HEW direct NIH to:

- Instruct grantees to improve their records so that their officials can screen all major items of equipment before new equipment is purchased.
- Issue guidelines or instructions to its grantees to develop policies and procedures for establishing equipment pools and other means for sharing equipment.
- Establish screening procedures to determine whether equipment from the NIH pool is available for use before purchasing new research equipment.
- Consider expanding the NIH equipment pool by including more of NIH's scientific equipment and requiring participation in the pool, unless special research situations or the

need for extended continual usage of certain equipment requires individual purchases of equipment.

In addition, HEW should provide the information to the Congress that is required by section 3 of Public Law 85-934.

AGENCY ACTIONS AND UNRESOLVED ISSUES

GAO submitted a draft of this report to NIH for comment. NIH officials generally agreed with GAO's findings, conclusions, and recommendations and its views are included in the report.



CHAPTER 1

INTRODUCTION

The National Institutes of Health (NIH) mission is to improve the health of all Americans through conducting and supporting research concerning the nature, causes, prevention, detection, diagnosis, treatment, and cure of disease. It does this through research in its own facilities and by supporting others' research through grants and negotiated contracts.

GRANTS FOR HEALTH RESEARCH

Research grants constitute the largest part of NIH's extramural research program and are awarded to universities, colleges, medical schools, hospitals, and other institutions sponsoring health research. In fiscal year 1971 NIH awarded 11,000 such grants amounting to about \$676 million. Research grants provide funds for salaries, equipment, supplies, travel, and other expenses. Due to budgetary restrictions, NIH's 10 institutes were able to fund only about 50 percent of the approved competing research grant applications during fiscal years 1970 and 1971. Because funds are not available to finance all approved grant applications, it is essential that such funds be prudently spent.

It is Department of Health, Education, and Welfare (HEW) and NIH policy that equipment may be acquired with grant funds to facilitate successful research projects.

Under Public Law 85-934 (42 U.S.C. 1892), the title to property acquired with grant funds for conducting scientific research by nonprofit institutions of higher education or nonprofit organizations whose primary purpose is conducting scientific research is usually vested in the grantee. This authority extends to situations where it is deemed to further the agency's objectives. The law also provides that each Federal agency exercising the authority cited above shall annually report to the Congress on the number and dollar amount of grants made pursuant to this law and the institutions which received title to equipment.

Grantees and contractors under HEW programs make sizable expenditures for equipment. For example, during fiscal year 1965--the last year data on funds spent for equipment

was compiled--\$60 million was spent for equipment under NIH research grants. These expenditures represented about 13 percent of direct costs incurred under research grants. Between fiscal years 1965 and 1971, NIH research grant funds increased by about \$140 million, or about 25 percent.

HEW AND NIH INSTRUCTIONS APPLICABLE TO GRANTEE EQUIPMENT MANAGEMENT

HEW instructions, as set forth in chapter 1-410 of the Grants Administration Manual, dated April 1969, stipulate that minimum management standards must be met by grantee institutions, including the following measures.

1. Screening available equipment before acquiring new equipment to insure that it cannot meet the need and certifying that equipment to be obtained is not already on hand and available for use.
2. Considering incentives to encourage researchers to share or relinquish equipment when the equipment and its relation to the grant-sponsored activity is feasible.

NIH policy, as set forth in Manual Issuance 5602, dated July 1971, requires that grantees be prudent when acquiring and managing equipment and that a review should take place before purchasing new equipment to insure that equipment already possessed cannot meet the need.

NIH IN-HOUSE RESEARCH

NIH scientists conduct biomedical research in the laboratories and clinical center in Bethesda, Maryland. Estimated in-house laboratory and clinical research costs for fiscal year 1972 were about \$113 million. Total research equipment acquired by March 1972 for the use of NIH's scientists was valued at \$64 million. In 1970 NIH established a formal equipment rental pool by accumulating excess laboratory and institute equipment. Pool equipment is rented to researchers at a monthly fee of 3 percent of the equipment acquisition cost.

SCOPE OF REVIEW

We limited our review to management of major research equipment costing \$1,000 or more per unit. Our work was performed primarily at NIH headquarters in Bethesda and at six grantee institutions receiving large sums (approximately 12 percent of all grant funds obligated by NIH during fiscal year 1970) of NIH grant funds.

During 1971 NIH issued new instructions for disposing of equipment acquired with grant funds. The procedures had not been in effect long enough for us to evaluate their adequacy at the time of our fieldwork in late 1971 and early 1972.

CHAPTER 2

UNNECESSARY PURCHASES OF RESEARCH EQUIPMENT

HEW instructions specify that careful screening should take place before acquiring equipment and require the grantee to certify that equipment is not on hand and available. The institutions we visited lacked records adequate to enable them to comply with these instructions. NIH has not issued suitable guidelines to the grantee institutions to implement HEW's instructions. This lack of adequate records has resulted in the unnecessary expenditure of research funds.

UNNECESSARY PURCHASES

The following examples of unnecessary acquisition of equipment show what can happen when management procedures are inadequate.

At one grantee institution, a researcher acquired a new spectrophotometer costing about \$5,000 for use on his project. At the time of acquisition, the institution owned a comparable unit which had not been used in 3 years,¹ according to the official having custody of the unit. The researcher said that he had no way of knowing that such equipment was on hand and expected the purchasing department to be aware of such equipment. However, purchasing officials said they rely on the researchers to screen for available equipment.

At another institution an ultracentrifuge was virtually unused for about 2 years. The researcher in charge of the ultracentrifuge felt it should have been used but did not want to relinquish it. During the same 2 years this institution purchased five comparable ultracentrifuges, each costing about \$7,300.

In 1971 an institution purchased three ultramicrotomes at an average cost of \$5,300. We identified at least 30 ultramicrotomes on hand at the end of 1971, 10 of which had low use, including 2 which were used 1 hour per week or less and another which had not been

¹Because statistics on equipment use are generally not maintained, we obtained our data primarily by discussion with grantee personnel.

used in almost 5 years. The highest use for any of the remaining six ultramicrotomes was about 12 hours per week.

At another grantee institution, a new ultracentrifuge was purchased, even though an identical unit was conveniently located nearby. The researcher purchasing the new unit said he was not interested in identical equipment in other departments. Ten months later this same researcher purchased another \$10,000 ultracentrifuge with NIH grant funds, even though two comparable units were available and receiving combined use of only 12 to 14 hours per week. This second ultracentrifuge, purchased in November of 1969 for planned expansion and as a spare unit, was never used and was eventually transferred with the researcher to another grantee institution.

None of the institutions cited above had records suitable for institutionwide screening of available equipment.

INADEQUATE EQUIPMENT RECORDS

To be suitable for screening, records should list equipment by class, common name, make, type, model number, location, and custodian. Institutions' records were not suitable for screening in the following instances.

1. Equipment terminology was not uniform. One institution, for example, classified the same type of equipment as spectrometers, detector scintillation, system scintillation, and counter scintillation.
2. Various types of equipment were mingled in the records, making it difficult to locate desired items. At one institution it would be necessary to canvass as many as 277 pages of the inventory records listing about 6,700 items to ascertain availability.
3. The sheer bulk of some records made them impractical for screening. Such records list all equipment, significant and insignificant, and have thousands of pages of entry.

4. Descriptions were usually not adequate to allow researchers or purchasing officials to determine whether the equipment was suitable for use on the projects. For example, the make or model was often omitted.
5. The custodian or other person responsible for the equipment was not indicated, thereby making it difficult to obtain information on availability.
6. Campuswide inventory records were not maintained, and at one institution a physical inventory had never been taken. Each department maintained records independently.

HEW AUDIT DISCLOSURES

In a 1968 report addressed to the Director of NIH and other HEW agency heads, the HEW Audit Agency concluded that many institutions needed to substantially improve their practices relating to equipment purchased with HEW funds. The principal problem areas concerning the acquisition and control of equipment under HEW programs included the following.

1. Adequate property records and use and physical controls were not used.
2. Available equipment was not screened before new equipment was purchased.
3. Procurement practices did not insure that needed equipment was obtained at the most reasonable price.

NIH officials said that as a result of the Audit Agency's report, HEW issued a manual chapter entitled "Management of Equipment and Supplies Acquired Under Project Grants" and NIH issued an implementing section to its manual.

On another review conducted in 1971, HEW auditors again noted weaknesses in management which resulted in inadequate controls over nonexpendable personal property. The auditors concluded that the responsible operating agencies had inadequately monitored grantees' property control systems. They recommended that the operating agencies insure that grantee property control systems are adequate and that:

--Property records are adequate for control and accountability.

--Property is not purchased until it has been determined that the property is not already on hand.

--Property is not acquired unless it is needed.

CONCLUSIONS

NIH has not taken appropriate action to avoid institutions' purchasing of research equipment when existing equipment is available. Grant funds are being used to purchase unneeded equipment while other grant applications for research cannot be funded.

RECOMMENDATION TO THE SECRETARY OF HEW

We recommend that NIH be directed to instruct grantees to improve their records so that grantee officials can screen all major items of equipment before new equipment is purchased.

NIH officials agreed generally with our recommendation.

CHAPTER 3

BETTER UTILIZATION OF EQUIPMENT BY SHARING

At the grantee institutions we visited, optimum use of equipment was not being made. This condition exists because NIH has not taken appropriate steps to implement HEW instructions which encourage researchers to share equipment.

NEED FOR SHARING

Sharing research equipment--by establishing centralized equipment pools at institutions, for example--is important as a means of reducing the need for additional purchases of equipment.

Most of the equipment at institutions we visited was not included in any sharing or pooling programs. Of 142 major equipment items selected at 4 institutions,¹ 28 percent was used an average of 2 hours or less per day and 42 percent was used an average of 4 hours or less per day. Equipment use was based on the institution's normal working hours of 8 hours a day, 5 days a week.

Grantee institutions visited had weaknesses in their equipment management systems. For example, most had large inventories of scientific equipment yet lacked appropriate institutionwide policies or procedures to encourage sharing. As a result, sharing is apparently carried out informally and is based on researchers' personal incentives and knowledge of equipment availabilities.

When equipment is shared it is used more. For example, we were advised that the five ultramicrotomes in a pool at one institution were receiving an average daily use of 6 hours, compared with 2 hours for four other ultramicrotomes included in our review that were not associated with a pool.

¹ We analyzed in detail use of specific equipment at only four of the six institutions visited. We selected the 142 items of equipment from inventory records, where feasible. Selection processes were designed to insure that items within each class were comparable. At two institutions, items were selected with the assistance of grantee officials, due to inadequacies of inventory records.

At one institution Pathology Department officials formed an electron microscope pool "* * * to create the most efficient operating arrangement * * *." The department chairman of this school said it was inefficient for each researcher or research group to have their own electron microscope and also inefficient to have a maintenance technician for each microscope. He estimated that the pool operates with one-third to one-half the number of microscopes that would be necessary to accomplish the same amount of work without the pool.

The department chairman also said that the pool not only reduces costs but also provides improved and less expensive maintenance because in-house maintenance personnel can be justified. He said that immediate maintenance service is available, thereby reducing equipment downtime, and that the overall condition of equipment is improved by using maintenance staffs' free time do to preventive maintenance.

RESEARCHERS' RELUCTANCE TO SHARE EQUIPMENT

Several researchers said that most major research equipment can be shared. In the institutions visited, however, we received many adverse comments from some researchers.

Project grants are usually awarded to an institution in the name of the principal investigator and specify the amount of funds budgeted for purchase of equipment to be used on a specific project. Some researchers regard the equipment purchased as their personal property and are opposed to sharing it. For example, one researcher had an ultramicrotome that had been unused in almost 5 years. The researcher advised us that he had not informed anyone of the equipment's availability because "* * * the machine was purchased on my own grant for my own use."

Other researchers advised us they did not want to share equipment because of (1) added confusion and interruptions within their laboratory or office, (2) increased noise from equipment running longer hours, (3) possible damage persons sharing might do to equipment, and (4) need for immediate access.

However, other researchers indicated that an equipment pooling operation can not only fulfill researchers' needs

more inexpensively but can also result in several additional benefits, such as:

1. Equipment is made available to researchers not possessing such items.
2. An institution's equipment needs can be more accurately determined.
3. Equipment maintenance is facilitated and less costly by having equipment centrally located and maintained by the grantee institution's own personnel.
4. Economies can be obtained from maximizing use of research equipment before it becomes obsolete. (Research equipment generally becomes obsolete long before it wears out.) By sharing available research equipment, purchases can be avoided until such time as the shared equipment has reached maximum utilization, thereby reducing the effects of obsolescence on the equipment inventory.
5. Reduces noise and confusion in researchers' laboratories due to equipment and traffic.
6. Conserves space in laboratories.
7. Brings out communication between researchers on different projects.

INSTRUCTIONS FOR EQUIPMENT MANAGEMENT

HEW instructions point out that optimal equipment use may be inhibited by researchers' concern, since equipment availability is frequently a critical factor in successful conduct of grant projects. In anticipation of a future need, researchers may be reluctant to relinquish equipment after it has served its purpose. Accordingly, grantee institutions are expected to employ management techniques that will insure justification of equipment retained by researchers. HEW instructions stipulate that awarding agencies must obtain certification from the grantees that they have established effective equipment management systems.

NIH guidance to grantee institutions, which assertedly implements chapter 1-410 of HEW Grants Administration Manual,

requires only that grantees be prudent in acquiring and managing equipment and that a review take place to insure that needs cannot be met from equipment already possessed. NIH has not issued guidelines, however, to define the elements of prudent management.

NIH instructions do not mention methods for optimizing equipment use through sharing or incentive techniques to encourage sharing and to avoid unnecessary duplication of equipment.

CONCLUSIONS

Although HEW encourages the sharing, NIH has not issued appropriate implementing instructions to grantees. Grantee institutions we reviewed have generally not implemented institutionwide policies or procedures for optimizing equipment use through pooling and other sharing techniques. As a consequence, much equipment was significantly underused at grantee institutions.

To foster sharing NIH should consider restricting the use of NIH funds to purchase major items of equipment, unless the grantee institutions have guidelines which specify that such equipment, to the extent possible, will be available for use in pools or at least will be available for sharing. NIH could do much to foster sharing by making known to grantees, when feasible, other institutions' successful sharing operations.

RECOMMENDATION TO THE SECRETARY OF HEW

We recommend that HEW require NIH to issue guidelines or instructions to its grantees to develop policies and procedures to foster establishment of equipment pools and other means for sharing equipment. NIH officials agreed with our recommendation.

CHAPTER 4

OPPORTUNITIES FOR INCREASING

BENEFITS OF NIH EQUIPMENT RENTAL POOL

Although NIH has established an equipment pool, mostly from surplus equipment, for the use of its researchers in Bethesda, we found that NIH does not (1) require researchers to use equipment available in the pool or (2) have any procedures for determining whether researchers' equipment needs can be met with available equipment. As a result, the equipment pool is not fully used. Less than 1 percent of NIH's equipment worth \$64 million is in the pool, a factor contributing to the low use rate.

FACTORS LEADING TO ESTABLISHMENT OF POOL

Federal Property Management Regulations, chapter 101, prescribe that:

"Laboratory and research equipment pools shall be established when the circumstances indicate such pools are appropriate so that such equipment can be made available to activities and individuals whose average usage does not warrant the assignment of such equipment on a permanent basis."

During 1966 NIH officials visited an experimental station of a large private corporation which had a scientific equipment rental program. A NIH report discussing the visit noted that NIH equipment management procedures were behind the pooling operation.

At the time of the NIH visit, the station estimated that it was annually saving over \$1 million from the rental program; the value of the equipment, adjusted for depreciation, was \$12 million. The NIH officials noted that all equipment was controlled by one department and requests for equipment by other departments were supplied from the inventory, if available. The controlling department's approval was required before additional equipment could be purchased.

In February 1967 these officials reported favorably on the establishment of an NIH equipment pool composed of portable equipment to be furnished nonpermanently. Other NIH officials were reluctant about the proposal, and NIH did not establish such a formal equipment rental pool until September 1970. At the time, NIH cited the general benefits of such a pool as follows:

1. Ready availability of a variety of scientific instruments in good working condition.
2. Reduced delays in ongoing and new programs.
3. Reduced capital investment in equipment, especially for short- and intermediate-term projects.
4. Reduced burden on laboratory research and technical staff for care and procurement of equipment.
5. Extension of instrument life by more thorough programs for preventive maintenance.
6. Opportunity to test and evaluate newly developed instruments in the laboratory setting with little or no direct capital investment.
7. More complete centralized information on equipment performance, reliability, and maintenance costs.
8. Improved use of laboratory space--reduced clutter.

NIH initiated pooling operations by obtaining equipment from its laboratories and institutes. A monthly rental fee of 3 percent of the equipment's acquisition cost is charged for use of the equipment. An official responsible for pool operations said that the pool contained about 250 items of equipment of about 25 different types. At the time of our review, the equipment had a total acquisition cost of about \$228,000. The cumulative cost of all scientific laboratory equipment at NIH was about \$64 million in March 1972. Therefore, the pool encompasses less than 1 percent of the total NIH research equipment inventory.

LOW USE OF POOL EQUIPMENT

Before the pooling program began NIH estimated that, after 2 years of operations, the amount of equipment leased from the pool would stabilize at about 80 percent. Projected annual savings for the pool were estimated at 10 percent of the value of the equipment. Based on the depreciated value of the pool's limited inventory as of December 1971, this would amount to an annual savings of approximately \$12,000. However, from July 1971 through February 1972, the amount of equipment on loan averaged only 13 percent and the highest use during this period was 16 percent.

NIH officials advised us that as of March 1973 the acquisition cost of the pool equipment was about \$365,000 and that the use rate had climbed to 21 percent.

An NIH pool official advised us that participation in the pool and its services is strictly voluntary. He stated that institutes are not required to forward new equipment requisitions to the pool to determine whether the equipment could have been rented from the pool.

The primary reason for the low equipment use is that NIH does not require participation in the pool. One NIH researcher stated that he would never use the pool because he would rather purchase the equipment outright rather than pay a monthly fee and have nothing to show for it.

The Atomic Energy Commission (AEC) in Richland, Washington, has successfully carried out a central laboratory equipment pool since 1959. AEC property management officials said that this pool consists of a central store of research equipment available for loan to AEC researchers. The pool was developed from idle or excess equipment already on hand at the Richland facility. Such equipment was identified by walk-through inspections of the research laboratory areas. All purchases are initially screened against pool listings for available equipment to avoid any unnecessary purchases of new equipment.

Information provided by an AEC property management official disclosed that monetary savings and advantages of the laboratory central pool have exceeded all expectations through cost savings, improved equipment use, laboratory space, housekeeping, and recordkeeping. Other benefits may

be realized because equipment is readily available to scientists and technical personnel:

1. Requests for additional equipment can be filled much more rapidly by borrowing from the equipment pool.
2. The selection of the most suitable piece of equipment for proposed experimentation be enhanced through use of items from the equipment pool on a trial basis.
3. In the initial stages of consideration of a research problem, several alternative approaches to the problem may be proposed. Through availability of an equipment pool, preliminary work may be done with equipment borrowed from the equipment pool to determine the optimum approach.

AEC estimates net savings from the equipment pool since its inception through November 30, 1969, at \$3.7 million.

CONCLUSIONS

To maximize savings from the equipment rental pool, NIH should consider expanding the scope of pool operations. Presently, the pool encompasses less than 1 percent of the total NIH scientific equipment inventory. If the pool is to maximize potential benefits, its inventory should be expanded to include a much larger portion of available NIH scientific equipment. In addition, we believe that (1) procedures should be developed for determining whether researchers' equipment needs can be met with available equipment and (2) participation in the rental pool should be required unless special research situations or the need for extended continual usage of certain equipment requires individual purchases.

RECOMMENDATIONS TO THE SECRETARY OF HEW

We recommend that NIH be directed to establish screening procedures to determine whether equipment from its pool is available for use before purchasing new research equipment. We also recommend that NIH consider expanding its equipment pool by including more of the scientific equipment owned by NIH and requiring participation in the pool, unless special research situations or the need for extended continual usage of certain equipment requires individual purchases of equipment.

NIH officials agreed with our recommendations and advised us that steps would be taken to expand pool operations by obtaining high-demand, general-purpose research equipment for inclusion in the pool. They advised us, however, that the pool was never intended to serve as a primary source of purchase or as a massive equipment depot. They stated that it was intended primarily to make available equipment, which otherwise might be surplus, to meet the temporary requirements of researchers. Such equipment was identified by NIH by an annual walk through where all unused research equipment was identified for inclusion in the pool.

CHAPTER 5

LEGAL REPORTING REQUIREMENTS NOT MET

Federal agencies that vest title with grantees under Public Law 85-934 to equipment purchased with grant funds are required to make annual reports to the Congress. Such reports are to list the number and amount of research grants awarded and the names of the institutions in which title to equipment is vested. NIH, however, has not complied with these requirements. HEW has advised all of its constituent agencies that such reporting was not required.

Public Law 85-934 provides that Federal agencies making grants to nonprofit institutions for scientific research may vest title to equipment acquired with grant funds in the institutions. Section 3 specified that Federal agencies exercising this authority shall make an annual report to the Congress, listing the number and amount of grants awarded pursuant to the act and the names of the institutions acquiring title to equipment purchased with grant funds.

Chapter 1-410 of HEW's Grants Administration Manual, dated April 2, 1969, states that Public Law 85-934 authorizes agencies to waive accountability to equipment under research grants. The manual also states that the authority of Public Law 85-934 to waive accountability requirements for equipment purchased with grant funds will be used in all instances except where the equipment is of such a nature that the awarding agency sees a need to reclaim it after the project has been completed. The manual states that each HEW operating agency exercising the waiver authority shall prepare an annual report for submission to the Congress.

In a June 26, 1969, memorandum, HEW advised all members of the Executive Committee on Grants Administration Policy--a departmental committee established to improve the quality of grants administration by HEW agencies--that it required no reporting under section 3. An HEW official advised us that reporting under section 3 is only required when grants are made under that act. NIH advised us that it makes research grants to institutions under the provisions of the Public Health Service Act, which preceded enactment of the law.

Therefore, even though NIH under Public Law 85-934, waives accountability to property acquired with grant funds, the reports required by that act are not being prepared. In light of the June 26, 1969, memorandum, it appears that other HEW agencies may be waiving accountability to property, under the provisions of Public Law 85-934, without reporting under section 3.

If NIH or any other HEW agency waives accountability under the authority provided in Public Law 85-934 to equipment purchased with grant funds, the agency is bound to the congressional reporting requirements.

RECOMMENDATION TO THE SECRETARY OF HEW

We recommend that HEW provide the information to the Congress that is required by section 3 of Public Law 85-934.

NIH officials advised us that they would have no problem developing the information required by section 3.

PRINCIPAL OFFICIALS OF THE
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
RESPONSIBLE FOR THE ADMINISTRATION OF
ACTIVITIES DISCUSSED IN THIS REPORT

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
SECRETARY OF HEALTH, EDUCATION, AND WELFARE:		
Casper W. Weinberger	Feb. 1973	Present
Frank C. Carlucci (acting)	Jan. 1973	Feb. 1973
Elliot L. Richardson	June 1970	Jan. 1973
ASSISTANT SECRETARY FOR HEALTH:		
Charles C. Edwards	March 1973	Present
Richard L. Seggel (acting)	Dec. 1972	March 1973
Merlin K. DuVal	July 1971	Dec. 1972
Roger O. Egeberg	July 1969	July 1971
DIRECTOR, NATIONAL INSTITUTES OF HEALTH:		
Robert S. Stone	May 1973	Present
John F. Sherman (acting)	Jan. 1973	May 1973
Robert Q. Marston	Sept. 1968	Jan. 1973

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