GAO

Report to the Chairman, Committee on Science, House of Representatives

March 1999

FEDERAL RESEARCH

Guidance for Equipment Acquired Under Grants and Cooperative Agreements





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

Resources, Community, and Economic Development Division

B-281935

March 24, 1999

The Honorable F. James Sensenbrenner, Jr. Chairman, Committee on Science House of Representatives

Dear Mr. Chairman:

During fiscal year 1997, three agencies--the National Science Foundation (NSF), National Institutes of Health (NIH), and the National Oceanic and Atmospheric Administration (NOAA)--awarded over \$12 billion in grants and cooperative agreements to nonprofit scientific organizations or nonprofit institutions of higher education to conduct basic or applied scientific research. These funds included several hundred million dollars for equipment.

As requested, we

- identified the guidance NSF, NIH, and NOAA used to ensure that the recipients of grants and cooperative agreements for scientific research provide management controls over the equipment they acquire with federal funds: and
- determined if four NSF recipients from the Washington, D. C., area had acquired equipment under 14 awards of varying dollar amounts.

Results in Brief

Each of the three agencies generally allows the recipients of grants and cooperative agreements to have title to the purchased equipment, but they also provide some guidance on how recipients are to account for this equipment. After the grants and cooperative agreements are awarded, these agencies do not maintain records showing which equipment was actually purchased. However, the agencies have some assurance that the equipment was in fact purchased because these organizations have audits to ensure compliance with the award agreements, and these audits, together with the recipients' proposals, identify the equipment that the recipients proposed acquiring.

We reviewed documents showing that the recipients we visited had acquired the equipment specified in their proposals, and we saw the equipment either being used or awaiting installation.

Background

Under the Federal Grant and Cooperative Agreement Act of 1977, as amended, executive agencies have the authority to give title to tangible personal property--including equipment--to nonprofit institutions of higher education or nonprofit organizations whose primary purpose is scientific research, if this property is acquired with federal funds under a grant or cooperative agreement for scientific research. The legislative history indicates that this authority is provided, in part, to eliminate the costs to the government associated with maintaining the property records for this equipment.

Using this authority, executive agencies can give title to such a recipient institution when (1) the recipient acquires the equipment using federal funds and (2) the agency decides giving title furthers its objectives. The agency head has discretion to give title without further obligation to the federal government or under the conditions that the head of the agency considers appropriate.

Oversight of Equipment Acquired Under Grants and Cooperative Agreements

The Office of Management and Budget (OMB) has issued guidance to agencies on requiring recipients to maintain records for equipment acquired with federal funds. However, the Federal Grant and Cooperative Agreement Act of 1977, as amended, allows agencies to differ from this guidance in setting their own requirements for research equipment acquired under an award to conduct basic or applied scientific research by a nonprofit institution of higher education or a nonprofit organization whose primary purpose is conducting scientific research. For this type of equipment, the three agencies use their own guidance, which adopt different parts of the OMB guidance. While the agencies do not maintain records of the equipment after it is acquired, required annual audits help ensure that the equipment was purchased.

OMB Has Issued Guidance for Managing Property

OMB has issued guidance, in the form of property standards, for equipment that is acquired under grants and cooperative agreements with federal funds by institutions of higher education, hospitals, and other nonprofit organizations. Although such a recipient holds title to the equipment, the recipient is required to follow OMB's guidance if the equipment has a useful life of more than 1 year and cost \$5,000 or more. As part of this guidance, recipients are to maintain property management records that include a description of the equipment, the identification numbers, the source, the

acquisition date, and the cost. The institution must inventory the equipment at least once every 2 years.

The OMB guidance also includes procedures for the disposition of the equipment. When this type of recipient no longer needs the equipment for the original purpose for which it was acquired, the recipient may use it for other federally sponsored activities. However, if the recipient does so, and the equipment has a current fair market value of \$5,000 or more, the recipient must compensate the government for the percentage of the current fair market value attributable to the government's share of the original project or program. If the recipient has no need for the equipment, it is to request disposition instructions from the federal government. These instructions may require the recipient to return the equipment to the government. Alternatively, the recipient can sell, transfer, or dispose of the equipment and reimburse the government for its fair share.

Although OMB has issued guidance, the Federal Grant and Cooperative Agreement Act of 1977, as amended, gives the heads of executive agencies the discretion to give title to equipment acquired through grants or cooperative agreements for scientific research to certain types of recipients without further obligation to the federal government. The act also allows agencies to set general property standards for this equipment at their discretion. When the heads of executive agencies exercise this authority, the equipment is exempt from OMB guidance.

NIH, NOAA, and NSF Adopt Different Guidance for Exempt Equipment

The three agencies have different guidance for exempt equipment. NIH—an agency within the Department of Health and Human Services—follows its Department's guidance, which adopts parts of the OMB guidance. NOAA—an agency within the Department of Commerce—follows that Department's guidance. Commerce fully adopted OMB's guidance. NSF uses guidance that it developed. Table 1 compares the agencies' property management standards and disposition guidance for exempt equipment.

Agency	Title kept by	Property management standards	Disposition of property
National Institutes of Health	Recipient	None	NIH may require the transfer of title to equipment to the government or a third party if equipment has an acquisition cost of \$5,000 or more. If NIH exercises its rights to transfer property, guidance similar to OMB's is followed.
National Oceanic and Atmospheric Administration	Recipient	OMB's guidance	OMB's guidance
National Science Foundation	Recipient in normal situations and the government in special situations	OMB's guidance	NSF may identify items of \$5,000 or more in which it retains the right to transfer title to the government or a third party.

Source: GAO's analysis of NSF, NIH, and NOAA's guidance.

Annual Audits Provide Some Assurance That Proposed Equipment Was Acquired After they award grants and cooperative agreements, NIH, NOAA, and NSF do not maintain records showing which equipment was actually purchased. The agencies have some assurance that the equipment was acquired because institutions of higher education or other nonprofit organizations are subject to the audit requirements contained in the Single Audit Act Amendments of 1996. Under this act and OMB Circular A-133, nonprofit institutions of higher education and other nonprofit organizations that spend \$300,000 or more in a year in federal awards must have an audit conducted for that year. Among other things, the audit is to assess the recipient's compliance with the provisions of the award agreements identifying the equipment proposed for acquisition.

 $^{^1}$ OMB's audit guidance implementing the 1996 amendments is included in OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

Four Recipients Acquired the Property They Proposed

We reviewed 14 NSF research awards of varying dollar amounts that were awarded to three universities and one nonprofit organization in the Washington, D. C., area. We found that each recipient had documents showing that it had acquired the equipment specified in its proposals, and we saw the equipment either being used or awaiting installation.

For 11 of the 14 awards, the NSF funds for equipment were supplemented by the recipients' funds. Table 2 shows the equipment that we observed and the amounts that NSF and the recipients had proposed for the cost-sharing arrangements in the award documents.

Table 2: Equipment Observed at the Four Institutions						
Equipment	Total proposed cost	Government's share of costs	Recipient's share of costs			
Laser system	\$174,785	\$94,785	\$80,000			
Workstations	\$63,978	\$49,648	\$14,330			
Shaking table	\$485,186	\$300,000	\$185,186			
Very high speed Backbone Network System	\$700,000	\$350,000	\$350,000			
Electron microscope	\$617,000	\$617,000	0			
Laser system	\$85,000	\$85,000	0			
Electron microscope	\$603,176	\$422,223	\$180,953			
High-resolution electron microscopy facilities	\$1,360,000 ^a	\$680,000	\$680,000			
High performance computer system and X-ray detector	\$602,128	\$402,128	\$200,000			
Very high speed backbone network system	\$196,200	\$46,200	\$150,000			
Spectrophotometer	\$46,000	\$46,000	0			
Workstations	\$90,000	\$45,000	\$45,000			
Supercomputer	548,480	\$383,936	\$164,544			
Mass spectrometer	\$1,043,950	\$574,172	\$469,778			

^aIncludes funds for installing the equipment.

Source: GAO's analysis of NSF's data.

We found that the four recipients had acquired either the equipment they had proposed purchasing in their applications or similar equipment. Generally, the recipients explained that differences between the proposed and acquired equipment were due to manufacturers' improvements or lower market prices between the time the equipment was proposed and acquired.

All the recipients provided us with records showing that the equipment that they had proposed was acquired and listed in their records, and they explained that their equipment records were audited in accordance with the Single Audit Act Amendments of 1996 and OMB Circular A-133. We saw the equipment, but in some cases it had not been completely installed because more time was needed to build it or to modify buildings to house it. For example, one recipient had acquired a large electron microscope system, but modifications to the building that will house the equipment had not been finished. In these cases, we observed the equipment that had been acquired and stored at the recipients' facility.

Agency Comments

NSF, NIH, and NOAA commented on the information in the report pertaining to their respective agency. They provided some technical clarifications concerning their guidance. We made the suggested revisions, and the agencies agreed that our report is factually correct. Additionally, the George Washington University, the Johns Hopkins University, the University of Maryland, and the Carnegie Institution of Washington agreed that the information concerning their awards was correct.

Scope and Methodology

To identify the guidance NSF, NIH, and NOAA use to ensure that recipients of grants and cooperative agreements provide management controls over the property they acquire, we reviewed OMB's and the three agencies' guidance. Additionally, we discussed this guidance with representatives of the three agencies.

To review the equipment acquired by recipients of grants and cooperative agreements awarded by NSF, we selected 13 grants and 1 cooperative agreement awarded to three universities and one nonprofit organization in the Washington, D. C., area: the George Washington University, Washington, D.C.; the Johns Hopkins University, Baltimore, Maryland; the University of Maryland, College Park, Maryland; and the Carnegie Institution of Washington, Washington, D.C. We selected the educational

institutions because they were three of the largest recipients of NSF funds in the Washington, D.C., area. We selected the Carnegie Institution of Washington to include a nonprofit research organization in our review. At the recipients' facilities, we reviewed documentation to show that the equipment was accounted for in the recipients' records, observed the equipment, and spoke with either the principal investigators or with a person familiar with the operations of the equipment.

We selected equipment for review by using NSF award data for fiscal year 1992 through fiscal year 1997. These award data identify the award and the dollar amount that NSF budgeted for acquiring equipment under the award. After we selected the awards for our review, we obtained the individual award files from NSF and identified the equipment that the recipients had proposed acquiring. We selected equipment valued at different amounts for our review.

We conducted our work from June 1998 through February 1999 in accordance with generally accepted government auditing standards.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report for 7 days after the date of this letter. At that time, we will send copies to Senator John McCain, Chairman, and Senator Ernest Hollings, Ranking Member, Senate Committee on Commerce, Science, and Transportation; Senator Ted Stevens, Chairman, and Senator Robert Byrd, Ranking Member, Senate Committee on Appropriations; Representative George E. Brown, Jr., Ranking Member, House Committee on Science; Representative C. W. Bill Young, Chairman, and Representative David R. Obey, Ranking Member, House Committee on Appropriations; We are also sending copies of the report to the Honorable Jacob J. Lew, Director, Office of Management and Budget; the Honorable Dr. Rita R. Colwell, Director, National Science Foundation; the Honorable Dr. Harold Varmus, Director, National Institutes of Health; and the Honorable D. James Baker, Administrator, National Oceanic and Atmospheric Administration. Additionally, we are sending copies of this report to the Honorable Clayton D. Mote, President, University of Maryland; the Honorable William R. Brody, President, Johns Hopkins University; the Honorable Stephen Joel Trachtenberg, President, George Washington University; and the Honorable Dr. Maxine Singer, President, Carnegie Institution of Washington. We will also make copies available to others on request.

If you or your staff have any questions about this report, please call me at (202) 512-3841.

Sincerely yours,

Susan D. Kladiva

Associate Director, Energy,

Susan DK Cadies

Resources, and Science

Comments From the National Science Foundation

NATIONAL SCIENCE FOUNDATION 4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230

FEB 1 9 1999

Ms. Susan D. Kladiva Associate Director Energy, Resources and Science Issues United States General Accounting Office Washington, DC 20548

Subject: Comments on Draft Report Federal Research: Guidance For Equipment Acquired Under Cooperative Agreements (GAO/RCED 99-73)

Dear Ms. Kladiva:

After reviewing the draft of the GAO report entitled, Federal Research: Guidance For Equipment Acquired Under Cooperative Agreements (GAO/RCED 99-73), I offer only a single suggestion for change to the report. The descriptive language used in Table 1: Guidance for Exempt Equipment Used by NIH, NOAA, and NSF on page 5 may leave the reader with a misimpression about the Foundation's policy. The report language indicates that, "However, NSF's policy does not follow OMB's guidance." We believe that the Foundation's policy conforms with Office of Management and Budget (OMB) Circular A-110.

On page 2 of the report, GAO correctly points out that agency heads have discretion to give title to equipment to grantees when, in the words of the report, "... the agency decides that giving title furthers its objectives." Section 33(b) of Circular A-110, provides that the awarding agency may vest title to exempt property in the recipient without further obligation under conditions that the awarding agency considers appropriate. In developing the Foundation's policy, provisions were implemented that leave discretionary authority with the agency to transfer title to grantees or otherwise direct grantees to dispose of equipment at the conclusion of a project.

The Foundation's policies conform to OMB guidance through the use of discretionary authority. I would suggest, therefore, that the language in the table be modified either to be silent on the issues of OMB compliance or, preferably, to indicate that, "NSF's policy conforms with OMB guidance."

Other than these comments, the text that we were provided for review accurately describes the Foundation's equipment policy. The report could be published as presented with the suggested modification to Table 1. Please contact Ms. Jean I. Feldman, Head, Policy Office at (703) 306-1243 or by e-mail at: <jfeldman@nsf.gov> if we can provide additional information.

Sincerely

Albert A. Muhlbauer

Acting Chief Financial Officer

Alto G mahlla

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary, VISA and MasterCard credit cards are accepted, also.

Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office P.O. Box 37050 Washington, DC 20013

or visit:

Room 1100 700 4th St. NW (corner of 4th and G Sts. NW) U.S. General Accounting Office Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (202) 512-6061, or TDD (202) 512-2537.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

http://www.gao.gov

United States General Accounting Office Washington, D.C. 20548-0001

Official Business Penalty for Private Use \$300

Address Correction Requested

Bulk Rate Postage & Fees Paid GAO Permit No. GI00

