

# Audits & Reviews

## Significant Reports

### Financial Statement Audit

The Federal Government has made the improvement of financial management a high priority for many years. The President's Management Agenda identified improved financial management as one of its top five government-wide initiatives. The President's goal is to ensure that Federal financial management systems produce accurate and timely information to support operating, budget, and policy decisions.

The Chief Financial Officer's (CFO) Act of 1990, as amended, requires Federal agencies to prepare annual financial statements and the agency Office of Inspector General (OIG), or an independent public accounting firm selected by the OIG, to audit these statements. During this semiannual period we issued the Fiscal Year (FY) 2003 Independent Auditors' Report on NSF's financial statements and the FY 2003 Management Letter, which noted certain matters involving internal controls and other operational matters identified during the financial statement audit.

#### The FY 2003 Independent Auditors' Report

The FY 2003 Independent Auditors' Report, prepared under the Office of Management and Budget's (OMB) accelerated schedule, was issued for the first time within seven weeks of the end of the fiscal year and over two months earlier than the prior year. NSF received an unqualified opinion on its financial statements in the FY 2003 Independent Auditors Report, but the independent auditors again identified a reportable condition related to NSF's post-award grant monitoring. Although NSF spends nearly 90 percent of its \$5 billion budget on approximately 30,000 ongoing awards, it has not fully implemented a comprehensive and systematic risk-based internal grants management program to administer these awards after they are made. Such a program would ensure that awardees are expending their grant funds in accordance with their award agreements and Federal regulations.

In FY 2003, NSF revised its award-monitoring guide and conducted several on-site monitoring visits. However, the guide needs

### HIGHLIGHTS

<b>Significant Reports</b>	<b>13</b>
<b>Corrective Actions Prompted by Previous Audits</b>	<b>18</b>
<b>A-133 Audit Reports</b>	<b>21</b>

further revision to include more criteria for identifying high-risk grantees, additional review procedures for medium and low risk grantees, and procedures for periodic monitoring of financial expenditure reports. In addition, NSF needs to ensure that its staff consistently follows the guide when conducting monitoring reviews and that the results are documented and tracked to ensure that any weaknesses identified are corrected. Finally, NSF needs to allocate sufficient resources to implement these improvements, or it will not be able to ensure that the grant objectives are met and that its programs and resources are adequately protected from waste, fraud and mismanagement.

NSF has begun to address these issues by increasing the scope of its award monitoring guide, performing additional site visits, and hiring a contractor to assist in analyzing and assessing its post-award monitoring program. In addition, NSF has proposed to establish a separate division within the Office of Budget, Finance,



Dr. Boesz presents award to Dan Kovlak and Jula Jefferson of KPMG for meeting the accelerated schedule for completing NSF's financial statement audit.

and Award Management which will provide for greater focus on post-award management and proactive business assistance to grantees. While these steps are important, NSF senior management needs to ensure that sufficient resources for staffing, training, and travel are made available to implement its plan. Adequately staffing this effort will send a clear message to both its employees and the awardee community that the agency considers award monitoring to be an integral part of its stewardship responsibilities.

### The FY 2003 Management Letter

The FY 2003 Management Letter discussed the need for NSF to implement a process for closing out certain types of grants in a timely way, and to establish an effective cost accounting system. The audit identified over \$5 million of unspent funds associated with expired grants that were not properly closed out from as far back as FY 1984. If they had been found within a specified period of time, these funds could have been reprogrammed to support other NSF programs. But by the time of the audit, \$1.1 million in grant funds had expired and were no longer available. To address this problem, NSF has committed to periodically review expired grants to determine whether unspent funds can be reprogrammed, and made available for other award opportunities.

Also, the management letter reported for the third consecutive year that NSF needs to implement a meaningful cost accounting architecture that will provide accurate and timely information to support management decision-making, including information to assess the full cost and performance of its programs and activities. Without full cost information, NSF stakeholders (i.e. NSF management, the National Science Board, congressional committees, and OMB) are at a disadvantage in determining funding priorities and how best to allocate and manage project or program costs. In addition, NSF needs to be able to track and report the full cost of its programs to meet the objectives set by the government-wide initiative on "Budget and Performance Integration," mandated by the President's Management Agenda. Such information is necessary to establish a clear link between the resources invested in NSF programs and their benefits.

Although NSF has indicated that it has a plan to develop a cost accounting architecture, the plan does not account for costs or provide for monthly reports at the program level. Given the amount of time that has transpired since this deficiency first appeared in the management letter, NSF should make this effort an immediate priority by providing sufficient staffing and funding to support it.

## Western University with \$280 Million in NSF Awards Needs to Improve Internal Controls and Comply with Federal Requirements for Excess Compensation

We have completed a summary of 11 cost-sharing audits and a report on excessive, or "overload" salary compensation at a large western university system that received \$280 million in NSF funding and was required to provide \$85 million in cost sharing over the last 10 years. These audits found that the university could not support as much as \$32 million of the \$51 million of cost sharing it claimed on NSF awards over a nine-year period. In addition, the university claimed \$484,000 in excess salary compensation and related costs during one year, representing funds that NSF could have otherwise awarded to other projects.

### University Needs to Continue to Improve Its Management of Cost Sharing

Prior audits at the western university found that nine of the campuses did not effectively manage their NSF cost-sharing awards, suggesting a university-wide weakness in controls to oversee grants administration, particularly cost sharing. The audits, which covered the period from September 1, 1992 through January 12, 2001, found: a lack of written policies and procedures; inadequate systems to track or maintain supporting documentation for cost sharing; overstatement of in-kind cost sharing; inadequate monitoring, particularly of subrecipient cost sharing; and an absence of cost-sharing certification.

Since the completion of the audits, the university has taken steps to improve its oversight of cost sharing. These actions include the issuance of new guidance on cost sharing to its campuses and the completion of 11 grant and contract audits. However, the university still needs to establish a management structure that provides

overall direction and oversight of the grant administration operations at its various campuses. We also recommended that the university provide more detailed guidance on cost sharing; establish responsibilities for a system-wide structure and framework to direct and oversee sponsored research and cost sharing; enable the University Auditor to assess compliance with Federal requirements for grants management, including cost sharing, on a regular basis; and ensure that campuses with large amounts of Federal awards provide for routine audits of internal controls over award administration.

The university generally agreed with our recommendations, but disagreed that it should establish new positions of responsibility for system-wide management of Federal awards, since ultimate responsibility for award administration rests at the campus level. However, we believe that the pattern of weaknesses in cost-sharing administration identified in our audits indicates the need for more centralized leadership, guidance, and oversight of award administration at the campuses. Given the pervasive nature of the university's cost-sharing control weaknesses, we referred the report to the Department of Health and Human Services, the cognizant agency for a majority of campuses, which has agreed to follow up on the findings and recommendations on behalf of all Federal agencies.

### Five Campuses Charge \$484,000 In Excess Faculty Compensation

In our audit of cost sharing at one of the campuses, we identified payments to faculty members in excess of their regular salary, which is commonly referred to as overload compensation. Federal regulations permit overload compensation when such arrangements are either specified in the award or approved in writing by the sponsoring agency. However, university policy allows faculty to be paid up to 25 percent above their full-time academic yearly salary from Federal funds without Federal approval. We found that five of eight campuses used this university policy to charge \$484,000 in excess compensation.

We recommended that NSF require the university system to specifically request overload compensation in grant proposals and allow extra salary compensation only when NSF had approved the request in writing. The university disagreed because it had received approval for this practice from its cognizant Federal agency. In response, we stated that the Office of Management and Budget agreed with our position that campuses need to get approval from sponsoring agencies before charging overload compensation. We referred this matter to NSF's Division of Acquisition and Cost Support for resolution.

### Memorandum to NSF Management Regarding \$37.7 Million Potential Overload Compensation

While performing the audit on overload compensation we identified an inconsistency between NSF's policy manual and requirements included in its grant agreements. NSF's Grants Policy Manual (GPM) requires that overload compensation for researchers be explicitly provided for in the program solicitation

and approved by NSF. However, NSF award conditions do not include this provision, thereby jeopardizing NSF's ability to enforce this policy. The financial implications of the overload-compensation requirement are significant for NSF. An analysis of all NSF awards made to universities from FY 2000-2002 showed that 7 percent of the awards included budgets totaling an estimated \$37.7 million for academic year salary support for senior personnel, which may have been used to pay overload compensation. overload compensation.

We recommended that NSF include in its award letter the GPM requirements that permit overload compensation only under the following circumstances: 1) the award solicitation explicitly allows it, 2) the awardee specifically requests it, and 3) NSF approves it. More generally, we also recommended that NSF ensure that all significant policies in the GPM are incorporated into the award letters. NSF management agreed to consider the recommendation as it pertains to incorporating GPM provisions about overload compensation in award letters and will present this issue at an upcoming National Science Board meeting. NSF management will address the more general requirements, which will take considerable time to analyze and implement, as resources become available.

## National Science Board Demonstrates Clear Intent to Comply with Sunshine Act

During this semiannual period, we issued our first annual report on the National Science Board's (NSB) compliance with the provisions of the Government in the Sunshine Act, as mandated by the NSF Authorization Act of 2002. We found that the NSB demonstrated a clear intent to provide for greater access to and increased openness in its meetings, and that it properly closed its meetings consistent with the exemptions contained in the Sunshine Act.

However, the audit identified a few areas for improvement. For instance, the NSB did not always provide public notice of its meetings one week in advance, and had difficulty making written copies of its votes and related explanations to close meetings to the public with one day's notice. Also, electronic recordings for some of its closed meetings, though required, were not made due to technical difficulties.

To help ensure that the NSB and its staff improve compliance with the Sunshine Act's many requirements, we recommended that the NSB develop, implement, and provide training on formal policies and procedures that define the various participants' roles and responsibilities for compliance. The NSB agreed with the report's findings, recommendations, and suggestions and is undertaking steps to address them.

## Risk Assessment for Federally Funded Research and Development Center

We conducted a joint review of a large Federally Funded Research and Development Center (FFRDC) with the Department of Commerce OIG to find out whether the FFRDC's self-evaluation known as a "business risk assessment" offers assurance that Federal funds are managed effectively. Although the risk assessment of the FFRDC's business and research operations succeeded in raising awareness of risk management throughout the organization, we found that it did not address the FFRDC's risk of managing Federal awards, which provide \$186.5 million or 89 percent of the FFRDC funding. In addition, FFRDC management did not take effective action to follow up on the results of the risk assessment. Consequently, NSF and the Department of Commerce are unable to rely on the assessments as a primary means to ensure the adequacy of Federal grants management and systems controls.

## Corrective Actions Prompted by Previous Audits

### NSF Strengthens Controls Over Grants To A Foreign Organization

In response to our audit of a foreign grantee, NSF has taken corrective actions to improve its management and monitoring of foreign grants for compliance with applicable Federal grant requirements and NSF award terms and conditions. NSF directed its grant officers to exercise particular care and diligence in its pre-award review of new foreign awardees to ensure both their financial viability and legal standing to receive NSF grant funds. Grant officers were reminded to coordinate with the NSF Office of General Counsel if questions arise during these preaward reviews. Additionally, the foreign grantee reviewed in the audit is working with its host and founding organizations to properly establish its legal status.

Further, NSF has developed new award terms and conditions to clarify the Federal grant requirements applicable to these international organizations. As recommended, NSF amended its grant agreement with the audited foreign organization to provide funding through a fixed amount award rather than the standard NSF research grant agreement. The agency is in the last stages of the process of resolving concerns regarding the foreign awardee's financial responsibility and accountability related to the award in question. We will continue to work with NSF to ensure that an organization with legal status is identified to accept responsibility for the pass-through funds.

## Western University Repays NSF \$1.4 Million In Unallowable Costs

During this reporting period, a western university repaid \$1.3 million to NSF for inappropriately recovering administrative services costs above the maximum allowed under federal regulations. It previously had reimbursed NSF \$148,098 for over-recovering such expenses. The university incurred the costs in carrying out administrative functions such as payroll, purchasing, travel administration, award monitoring, project accounting, and procurement of supplies. Although Federal regulations consider these costs to be indirect costs recoverable by an institution through its facilities and administrative (F&A) rate, the university charged these costs separately as direct costs of Federal awards. We informed the cognizant agency of our resolution of the issue since the recovery may have broader implications for the Federal Government. The university charged 20 Federal agencies a total of \$5.7 million of administrative costs. The university agreed not to charge these types of costs to the Federal Government in the future.

## Resolution of Recommendations for NSF's Committees of Visitors

During this semiannual period, NSF completed actions to respond to one recommendation from our audit of NSF's Committees of Visitors<sup>1</sup> (COVs) and submitted an action plan to implement the second recommendation. In response to the first recommendation, NSF fully disclosed in its FY 2003 performance report the limitations of the data used in its performance assessment process for reporting under the Government and Performance and Results Act of 1993. Decision makers can now make an informed judgment about the reliability, adequacy and quality of the data used to assess NSF's performance.

To address our recommendation that NSF document its response to the recommendations from the COVs, NSF plans to update its procedures and implement a system to formally track its response to COV recommendations. It also plans to make this information available to later COVs through the Internet. During this semiannual period, NSF initiated actions to implement these plans.

## Key Recommendations to Improve NSF's Oversight of Large Facility Projects Remain Open

In prior semiannual reports (March 2001 and September 2002), we reported on the results of our audits of NSF's financial management of its large facility projects. While NSF continues to make progress in implementing corrective actions, five of nine recommendations in the two audit reports remain open.

The major part of NSF's corrective action program is the development of a Facilities Management and Oversight Guide (the Guide) that should enable NSF managers and awardees to better oversee and manage these large projects. Although NSF issued the Guide in July 2003, we noted in comments provided to

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<sup>1</sup> See September 2003 Semiannual Report, p.16

the agency that the Guide needs more practical and detailed guidance for Program Officers doing the day-to-day work. The Guide does not address the recording and tracking of the full cost of large facility projects, which is necessary to ensure that projects remain within authorized funding levels and is needed by decision makers to establish funding priorities.

NSF plans to provide this detailed guidance through as many as 20 supplemental modules. During this semiannual period, the agency provided us



NSB Chairman Dr. Warren Washington tours the Laser Interferometer Gravitational-Wave Observatory (LIGO) site in Louisiana with other Board members and the IG.

with drafts of two of these modules: Risk Management and Roles and Responsibilities. In general, these drafts begin to provide the specific information needed by NSF staff to manage these projects. However, we remain concerned about the amount of time taken to develop the guidance, and believe that NSF is not allocating enough resources to support this important and complex effort. We are concerned that the guidance provided in the modules is of an advisory nature, leaving many activities and decisions to the discretion of the individual program

officers. As such, the guidance does not provide adequate accountability for managing these projects.

### Recommendations Concerning Reporting on Antarctic Infrastructure Remain Unresolved

Although NSF has implemented two of three recommendations from our March 2003 audit of the Occupational Health and Safety and Medical Programs in the United States Antarctic Program (USAP), our recommendation that NSF initiate life-cycle planning and identify the resources associated with its planned upgrades and replacements of USAP facilities remains unresolved. NSF has recently issued an update to its McMurdo Station Long-Range Development Plan, which covers the majority of the USAP facilities. This plan reflects a robust methodology for identifying and prioritizing facilities requirements, and properly recognizes projects with safety and environmental concerns as being the highest priority, "Level 1."

However, additional actions are needed to ensure that adequate funding for the Level 1 projects is included in the request for resources. Resource requests should clearly identify which of the Level 1 facilities projects NSF is requesting funding for in the fiscal year, and a crosswalk should be provided between the total resources requested for these projects and the long-range Plan. Also, to ensure that the information in the Plan remains current and relevant, it should be reviewed and updated on a regular basis to reflect the current priorities, costs, and estimated start dates of the projects.



NSF believes that the planning and prioritization done in preparation for the annual Congressional budget request serves the function of updating the long-range Plan on a regular basis. While we agree that NSF does extensive planning and prioritization preparing for its annual budget request, the formal document provided to Congress and the Office of Management and Budget does not clearly identify the priority projects for which it is requesting funding, nor does it relate the priority projects to specific resources.



Pausing during a recent site visit to McMurdo Station in Antarctica are Steve Toth (Raytheon), Erik Boxhoorn (KPMG), John Lynskey (NSF), Tim Cross (Deputy IG), Don Farineau (KPMG), and Pat Smith (NSF).

Further, it does not contain information such as changes in project start dates, time frames and anticipated associated resources for the Level 1 facilities projects that did not make the current year's budget request. Updating such information on an annual basis provides decision makers with the information needed to understand NSF's decision-making process, and the trade-offs that must be made within that process.

We continue to discuss this recommendation with NSF management.

## A-133 Audit Reports

The Single Audit Act of 1984 (Public Law 98-502) and the Single Audit Act amendments of 1996 (Public Law 104-156) established uniform requirements for audits of non-Federal entities receiving Federal awards. Under the Act, non-Federal entities that expend \$500,000 or more a year in Federal awards are required to have an organization-wide audit that includes the non-Federal entity's financial statements and compliance with Federal award requirements.

**Desk Reviews.** In this reporting period, we reviewed 79 A-133 audit reports with NSF expenditures of \$727 million for fiscal years 2000 through 2003. Of the 79 A-133 reports reviewed, 53 reports contained reportable conditions and non-compliance findings. The most common deficiencies related to non-compliance with Federal cost principles, unallowable costs, equipment management, reporting, and subrecipient monitoring. In total, the auditors questioned \$372,322 of NSF-funded costs claimed by award recipients. A non-profit organization earned \$124,676 in program income and failed to reduce the reimbursement total by this amount, therefore receiving a premature cash outlay. Another entity was unable

to provide time and effort reports supporting \$201,168 in salaries, payroll taxes, and related fringe benefits.

Our office also continued to examine Management Letters, which report internal control weaknesses that are generally less significant than those reported in the A-133 reports, but still require the non-Federal entity management's attention. Our examination of the Management Letters in this reporting period identified 13 entities with internal control problems in the areas of financial management, reporting, and subrecipient monitoring.