

Audits & Reviews

Significant Reports

Financial Statement Audit and Review of Information Systems

Improving financial management and information security has been an important priority of the federal government for many years. *The President's Management Agenda* identified improved financial management as one of its 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.

Since 1990, Congress has enacted several laws intended to improve federal financial management and information systems security. The Chief Financial Officer's (CFO) Act of 1990, as amended, requires that federal agencies prepare financial statements and that each agency's OIG, or an independent public accounting firm selected by the OIG, audit these statements annually. The Federal Information Security Management Act of 2002 (FISMA) requires agencies to perform annual reviews and report to the Office of Management and Budget on their information systems' security programs. In addition, Inspectors General are to provide independent evaluations of the information security programs and practices of their agencies.

During this semiannual period we issued three reports on work performed for NSF in accordance with the CFO Act and FISMA: the *FY 2002 Management Letter Report*, the *FY 2003 Federal Information Security Management Act (FISMA) Independent Evaluation Report*, and the *FY 2003 FISMA Evaluation Summary Report*.

The FY 2002 Management Letter Report

The *FY 2002 Management Letter Report* provides details on internal control findings identified during the FY 2002 financial statement audit (see discussion of audit in the March 2003 Semiannual Report, p. 17). The *Report* again identifies two areas of significant concern: post-award management, and cost accounting.

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Post-Award Management: Although NSF has a robust system of award management over its pre-award and award phases, NSF does not have a comprehensive and systematic risk-based grants management program for monitoring grants once they are issued. As a result, awardees' use of federal funds may not be consistent with the objectives of the grant; programs and resources may not be protected from waste, fraud and mismanagement; laws and regulations may not be followed; and reliable and timely information needed for decision makers may not be obtained.

In FY 2002, NSF initiated steps to improve post-award monitoring including the development of a Risk Assessment and Award Monitoring Guide that includes post-award monitoring policies and procedures, a process for identifying high-risk awardees, and various techniques for analyzing the risks associated with grantees. However, the audit found that the procedures in the Guide needed to be improved and implemented before effective monitoring can take place. For example, the Guide needed more comprehensive criteria for identifying high-risk grantees including additional factors such as poor financial award management or poor program performance on previous grants.

Also, NSF's procedures for conducting on-site reviews lacked sufficient detail describing how they are to be conducted and documented, how key financial risk areas will be analyzed, and how the grantee internal control systems will be evaluated. The guidance does not include follow-up procedures for addressing concerns raised as a result of the on-site reviews. Finally, in implementing the guidance NSF did not use a consistent methodology for conducting on-site reviews. NSF management concurred with substantially all of our recommendations concerning post-award monitoring.

Because NSF funding at many institutions does not meet the threshold to require audit coverage under OMB's Circular A-133, *Audits of States, Local Governments and Nonprofit Organizations*, effective post-award monitoring is imperative to ensure the integrity and accuracy of grantee expenditures reported in the NSF financial statements. Currently, grantee expenditures represent approximately 90 percent of total NSF expenditures in any year. In addition, the recent enactment of the Improper Payments Act of 2002 requires federal agencies to assess risk and estimate potential erroneous payments at awardee organizations, responsibilities that require a stronger award oversight role on the part of NSF.

Accordingly, while NSF is taking action to improve its post-award management, a strong commitment by NSF senior management to provide the leadership and the appropriate resources for this task is needed to address this significant and continuing issue.

Cost Accounting: The *FY 2002 Management Letter* also identified an internal control finding related to cost accounting. NSF needs to develop 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. We have reported this issue in the Management Letter Reports for the past three years and the Inspector General has included cost accounting in her management challenges letter since FY 2001.

The President's Management Agenda (PMA) has also identified "Budget and Performance Integration" as one of its five initiatives for improving government performance. The goal of this initiative is to provide greater focus on performance results and accountability, and to facilitate allocation of budget resources. It requires agencies to track and report the full cost of their programs and associated performance outcomes. Currently however, NSF's financial and award systems do not aggregate full cost data for its programs and projects. This makes monitoring the full cost of a program or project difficult.

Over the past year, NSF has been working with OMB to begin to address this issue. On September 30, 2003, NSF submitted its revised strategic plan to Congress as required under the Government Performance and Results Act of 1993. The plan, which was previously approved by OMB, defines a program framework for performance reporting purposes. The framework establishes investment categories that tie to NSF's strategic goals of People, Ideas, Tools and Organizational Excellence. NSF has stated that its next step is to develop a full cost allocation process that will link the costs of its programs to their performance.

We will monitor NSF's progress in implementing its post-award grant-monitoring program and in developing a methodology for identifying the full cost of its programs and their associated performance outcomes. OIG will report on the status of the agency's efforts to address these findings in the FY 2003 Financial Statement Auditors' Report and Management Letter Report to be issued in the upcoming semiannual period.

FY 2003 FISMA Information Systems Reports

During this semiannual period we also issued the FY 2003 Federal Information Security Management Act (FISMA) Independent Evaluation Report and the FY 2003 FISMA Evaluation Summary Report, which reported three findings that we identified as significant deficiencies: 1) not all major information systems have been certified and accredited; 2) the U.S. Antarctic Program information system security program needs to be strengthened to meet federal requirements such as those related to patch management and configuration standards; and 3) additional security policies and procedures need to be implemented and enforced in all NSF directorates and offices. These weaknesses in NSF's security program could result in unauthorized access to and modification of financial, programmatic, and other sensitive information; loss of assets; and disruption of critical operations.

Despite these deficiencies, the *FY 2003 Independent Evaluation Report* also indicated that NSF had made significant progress in developing, refining, and implementing its information security program. Since the issuance of the *FISMA Independent Evaluation Report*, NSF has informed the OIG that as of September 30, 2003, 18 of the 19 of its major systems have been certified and accredited. Management generally agreed with the findings and recommendations in these reports. However, NSF does not agree that the findings rise to the level of a significant deficiency designation because they do not believe that they represent a weakness in a policy, procedure, or practice that materially impacts the effectiveness of the entity-wide security program.

Committees of Visitors Provide Useful Information to NSF Managers

In September we issued our report on the results of our audit of NSF's Committees of Visitors (COVs). NSF relies on these committees of external experts from academia, industry, and the public sector to evaluate the quality of NSF's management of its research and education portfolio of awards, and to assess the performance of its grant programs. The COVs also provide NSF with expert judgments about the extent to which agency programs contribute to NSF attaining its strategic goals under the Government Performance and Results Act of 1993 (GPRA).

The audit found that COVs provide a valuable service to NSF by performing independent assessments of the quality and management of its award portfolio, as well as the programs' contributions to the overall accomplishment of NSF's mission. The COV reports provide NSF with important feedback on its programs and make constructive suggestions and recommendations for improvement. For example, program managers have used COV recommendations to improve how the agency documents the accomplishments of principal investigators. However, NSF does not have a process to document how it has responded to recommendations in the COV reports. As a result, the benefits of the COV process, particularly given NSF's transient workforce, could be lost and the recommended improvements could be overlooked.

Additionally, in its GPRA performance reports provided to Congress and the Office of Management and Budget, NSF does not clearly disclose the limitations of data upon which the reports rely. For example, NSF relies on COV's ratings of its strategic goals and indicators in measuring its performance. However, the COV's ratings were incomplete in that not all strategic goals and indicators were rated. Yet NSF did not adequately discuss this data limitation in its FY 2001 performance report.

Further, changes made to NSF's performance data and collection process in

FY 2002 raise new concerns about the objectivity of its performance reports. NSF established a new external advisory committee to assess its success in achieving strategic goals and indicators. To conduct the assessment, the committee relied primarily on the COV reports and “nuggets,” i.e., examples of noteworthy or significant research, engineering and education outcomes, judgmentally selected for the committee by NSF. NSF did not adequately disclose this limitation in its FY 2002 performance report. As a result, decision makers and other users of NSF’s performance reports may be unaware of the data limitations and may not be able to adequately judge the methodology and reliability of the data used to assess NSF’s performance.

To address these issues, we recommended that NSF require its directorates to document whether or not they implemented the COV recommendations with their rationale, and that NSF provide the next COV with the written record of actions taken regarding the previous COV recommendations. Furthermore, to ensure that decision makers are fully able to judge the reliability of the data used to assess NSF’s performance, we recommended that NSF disclose in its GPRA performance reports all limitations in the data collection and reporting process. Although NSF does not agree with our characterization of judgmental sampling as a limitation of its GPRA reporting process, the agency has agreed to implement the report’s recommendations.

NSF Awards for International Programs

NSF estimates that five to ten percent of its annual budget (between \$240 to \$480 million in fiscal year 2003) is invested in activities with significant international scope. The vast majority of these funds go to U. S. institutions to support international activities and collaboration, but approximately \$60 million was awarded directly to foreign institutions during fiscal years 1998-2002. NSF believes that by bringing together people from different countries and diverse backgrounds with a wide variety of information, expertise, and resources, there is the potential to foster creative solutions to important global research problems. Also, many scientific tools, such as large instrumentation and facilities, are affordable only through international partnerships. Thus, NSF anticipates that the funding allocated to international scientific activities will increase.



Auditors Jeff Salisbury and Joyce Werking visit an international science organization that receives NSF funding.

Notwithstanding the many benefits of international research programs, NSF awards made directly to foreign institutions are at increased risk for financial problems and lack of compliance with award requirements. Foreign organizations are less likely to understand U. S. grant requirements and are accustomed to different accounting practices and standards in their countries. Furthermore, NSF processes that are typically applied to awarding and administering domestic grants may not be appropriate for the unique nature of most foreign funding arrangements.

Therefore, we plan to audit four foreign organizations that directly received \$46 million (76 percent of total awards made directly to foreign institutions) during fiscal years 1998-2002. The audit objectives are to evaluate the adequacy of NSF processes and controls for awarding and monitoring foreign institutions and to determine whether foreign grantees are administering their awards in accordance with NSF terms and conditions. During this reporting period, we completed one of the audits, as discussed below, and are continuing audit work at two other recipient organizations.

NSF Management of Grants To Foreign Organization Needs Improvement

In September, we issued our report on an audit of a foreign organization that since 1993 has received \$6.5 million in NSF awards. The NSF funds represent the United States contribution to the operating costs of the organization. Fifty other countries also support the organization, which coordinates global change research.

While the audit did not disclose any misspending, it did identify weaknesses in NSF's procedures for managing and monitoring foreign grants. NSF grant award letters were unclear as to what organization was the grantee institution, and whether or not NSF had verified the legal status of the foreign organization. Further, NSF's grant agreements inappropriately allowed the foreign organization to commingle its NSF funds with other revenue sources rather than requiring separate accounting for NSF's awards.

Additionally, the agreements did not establish financial accountability for \$1.3 million the awardee was directed to pass through to two other foreign organizations. As a result, NSF had little assurance that subrecipient expenditures were properly spent for authorized grant purposes and limited recourse if grant funds were misspent. NSF was effectively precluded from fulfilling its oversight responsibilities for monitoring grant expenditures to ensure funds were spent in compliance with federal and NSF policies and procedures.

The report identified several reasons for NSF's weak grant administration procedures. In particular, NSF staff did not adapt their normal procedures and practices to allow for the unusual nature of the awards. NSF was not able to demonstrate what documentation it requested or reviewed to make a determination

of the legal status of these foreign institutions. Furthermore NSF's grant agreements did not address the unique circumstances of the award, as a contribution in support of the overall infrastructure of a foreign organization rather than for specific research projects. Instead, NSF modified its standard cost reimbursable grant agreement, typically used for domestic research awards, without addressing the implications for financial compliance that flowed from these modifications.

We recommended that NSF: 1) ensure that its grant officers follow existing procedures to verify and document the legal status of new foreign awardees; 2) notify its intended foreign awardee institution of federal grant requirements and assess its understanding of these requirements; 3) use a fixed amount award instrument for foreign contribution type awards and perform a rigorous preaward analysis of proposed grant costs; and 4) identify an organization, having legal status, that will accept the pass-through grant funding to the foreign subrecipient organization and establish an award agreement that will contractually obligate that subrecipient to comply with NSF award terms and conditions.

NSF disagreed with our finding that its awards were to a foreign organization with no legal standing, but did not take a position with respect to the other audit findings and recommendations. Nevertheless, pursuant to recommendations included in our draft audit report, NSF has taken some corrective actions, including developing new foreign grant terms and conditions and changing the name of the awardee institution cited in its grant award letters. We have revised the final audit report and recommendations to reflect these corrective actions. NSF is currently considering our final audit report and we will continue to work with them in resolving the recommendations.

A Western University Inappropriately Claims \$1.4 Million For Reimbursement

A western state university inappropriately recovered \$1.43 million in routine administrative and indirect type costs greater than the maximum allowed under federal regulations. We reviewed these research management services (RMS) costs claimed by the university from July 1994 to April 2001 to determine whether these costs were allowable as direct grant charges. The university incurred RMS costs in carrying out administrative functions such as payroll, purchasing, travel-forms processing, award-expenditure monitoring, project accounting, and the receiving and inventorying of supplies. Although federal regulations consider RMS costs to be indirect administrative support services costs recoverable through an institution's facilities and administrative (F&A) rate, the University charged these costs separately as direct costs to federal awards.

NSF first questioned the appropriateness of the university adding RMS charges as direct costs to its award proposals in July 1994. In July 1995, NSF directed the

university to obtain written approval from the Department of Health and Human Services (HHS), its cognizant federal agency for audit, before including RMS charges on future proposals. In January 1997, HHS concluded that the university's RMS costing methodology did not comply with federal grant regulations for direct-charging of administrative and clerical costs to federal awards. However, the university continued to direct-charge RMS to NSF awards while simultaneously recovering the full amount of administrative support service costs allowed through its approved F&A cost rate.

Since the issuance of our May 2003 audit report, NSF has been working with the university to resolve the \$1.43 million of questioned RMS costs. To date, the university has agreed to return \$1.17 million to NSF, but believes that \$262,339 is allowable under federal regulations. We will continue to work with NSF in resolving the audit finding.

A Management Framework for Effective Award Monitoring

We reported on the results of our study of practices used by eight federal, state, and private grant-making organizations to administer and monitor their awards, during this period. Given the increasing size and complexity of its award portfolio and its limited staffing, NSF is challenged to adequately monitor its awards. This study was intended to assist NSF in meeting this challenge by reporting on the award administration activities that other grant-making organizations have found effective.

The study used the basic management control framework developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), a voluntary private sector organization dedicated to improving the quality of financial reporting through business ethics, effective internal controls, and corporate governance. In this internal control framework, we identified a set of 6 management principles for effective award monitoring, and within each principle, identified 15 policies and practices of the grant-making organizations that best exemplified those principles.

The management framework notes that fundamental to an effective award monitoring program is senior management's recognition of the importance of this activity, as well as its willingness to commit time and resources to support monitoring. Accordingly, the first two principles, establishing senior management commitment and vision and establishing an effective organizational structure, are the basic building blocks for a successful award-monitoring program. Within those fundamental principles, objectives for award administration and monitoring are specified, and award monitoring roles and responsibilities are defined for both financial and programmatic oversight personnel.

The next three principles call for: implementing award monitoring policies and procedures; training personnel on their roles, responsibilities, and procedures for monitoring awards; and using information systems to facilitate and automate award monitoring. Within these principles, practices such as establishing risk-based award monitoring policies and procedures, and developing policies for managing known high-risk awardees are noted.

Finally, the framework states that management should periodically evaluate its own processes to ensure that the objectives of the monitoring program are being carried out effectively and efficiently. Collectively, the practices and methods used by these organizations provide a strategic management framework for effectively monitoring awards. We are hopeful that our report will assist NSF in improving its award monitoring procedures.

Indirect Cost Rate Audits Projected To Save Government \$5.3 Million

Approximately one-third, or \$1.6 billion of the more than \$5 billion of costs incurred annually on NSF awards, are indirect costs. Based on both our own risk assessments and NSF recommendations, OIG has selected twelve indirect cost proposals submitted by NSF awardees for audit. In total, these awardees received \$41.4 million of federal funding in FY 2001, which included approximately \$14 million for indirect costs. Of the eight audits that have been completed to date, we have found that awardees have overstated their indirect cost rates by as much as 45 percentage points. We estimate that NSF could save about \$2.2 million and the federal government more than \$5.3 million over five years, when NSF negotiates future indirect cost rates with these awardees based on the unallowable indirect costs and other issues identified during our audits.

During this reporting period, we completed three of these audits. We found that one scientific organization included \$450,202 of unallowable costs in its indirect costs pools. The unallowable costs included such items as the salary for an investment manager, charitable contributions, gifts, artwork, alcohol, fines, and penalties. The awardee did not offset \$948,794 of revenues against associated costs included in the indirect cost pools, thus simultaneously recovering the same costs from revenue and through the indirect cost rates. The awardee also incorrectly excluded \$1.7 million of stipends for postdoctoral associates and fellows from the direct cost base. These errors resulted in the awardee overstating its proposed indirect costs rates by an average of 12 percentage points.

Another audit of a botanical garden that received an NSF award overstated its proposed indirect cost rates by 45 percentage points by incorrectly including the costs to maintain its botanical gardens in the indirect cost pool. Although plant preservation and maintenance (i.e., curatorial costs) support research at the botanical

garden, this curatorial activity is part of the garden's core mission and should not be allocated to federal awards through indirect cost rates in accordance with federal guidelines. The botanical garden included over \$4.0 million or 51 percent of these mission related costs in its indirect cost pools over two years, resulting in the overstated indirect costs rates.

A third audit found that a natural and cultural history museum overstated its indirect cost rate by 5 percentage points because it included \$534,929 of unallowable costs such as depreciation on government-funded assets, advertising, fundraising, and entertainment in its indirect cost pool. The museum also excluded \$271,839 of costs for advertising, rental, and entertainment costs that should have been included in the direct cost base. Although these costs were for unallowable activities, they nevertheless should have been treated as allocated indirect costs by including them in the indirect cost base. The costs were incurred to generate revenue and benefited from the museum's indirect activities.

In general, these errors occurred because the organizations did not understand the federal requirements for preparing indirect cost proposals, had inadequate accounting systems to segregate direct and indirect costs, and lack the necessary documentation to support the classification of costs as either indirect or direct activities. We made a number of recommendations to address the internal control weaknesses and compliance deficiencies. Although the awardees generally agreed with our recommendations to strengthen the internal controls over the process for developing the indirect cost rates, they mostly disagreed with recommendations that would result in reducing their indirect cost rates. We referred the audit reports to NSF's Division of Acquisition and Cost Support for audit resolution.

Audits of Community Colleges

Community colleges historically have received approximately \$30 to \$40 million in annual NSF funding. Our prior audits of community colleges have identified questioned costs and grant accounting control weaknesses. To assess the extent of these problems, we initiated audits over the past two years at 14 community colleges that had received 78 NSF awards totaling about \$46 million.

In our September 2002 Semiannual Report (pp. 24-26), we reported on the results of four community college audits. We identified significant weaknesses in some of the colleges' systems of accounting for and administering a total of \$9.8 million in NSF awards. Since then we have completed an additional four audits of community colleges. Similar to our prior audits, we found that the colleges had weaknesses in the areas of cost sharing, subawardee monitoring, and labor activity reporting.

In particular, the colleges did not have either the primary documentation for, or an adequate system to track, \$14.1 million or 71 percent of their claimed costs

and cost sharing. Two colleges did not track or record any of their \$11.5 million of required cost sharing. Two colleges did not have adequate subawardee monitoring procedures to ensure the accuracy and validity of \$1.7 million or 46 percent of the total in expenditures that their subawardees claimed on the NSF awards. In addition, one college did not maintain labor activity reports to support its over \$900,000 in salary and wage and related fringe benefit costs, representing 32 percent of the total claimed costs.

Without adequate primary documentation, we had to perform significant and costly additional audit procedures in order to determine the allowability of the costs claimed by these community colleges. These additional procedures involved interviews and extensive crosschecking of alternative records and information. While the audits were able to eventually substantiate all but \$300,000 of the NSF funded costs and \$1.2 million of the cost sharing claimed under the NSF awards, neither the colleges nor NSF have assurance that the existing grants management accounting and control systems at these colleges ensure the propriety of costs claimed under NSF awards. Currently, the four colleges have 14 active awards valued at over \$10.7 million. Overall the colleges agreed to take actions to correct the weaknesses identified in these reports, as part of the audit resolution process.

Corrective Action Prompted by Previous Audits

Recommendations to Improve NSF's Oversight of Large Facility Projects Remain Unresolved

In prior semiannual reports, we have reported on two audits of NSF's financial management of its large facility projects. While NSF continues to make progress towards implementation, many of the recommendations associated with these two audits remain unresolved. The recommendations in our initial report on NSF's financial management of large facility projects focused on enhancing NSF's oversight of these projects by updating and expanding existing policies and procedures to improve project management. Our subsequent audit recommended that NSF ensure that its projects remain within authorized funding levels, and that the means be developed to make accurate and complete information on the total costs of major research equipment and facilities available to decision makers.

NSF has made progress toward implementing the original recommendations. Most notably, it appointed a Deputy Director for Large Facilities Projects Management and Oversight during this semiannual period. However, while a corrective action plan is in place and progress is being made, key actions from both audit reports remain unresolved. A major feature of NSF's corrective action plan is the development of a Facilities Management and Oversight Guide. Earlier this year, we provided NSF with our comments on a draft version of the Guide, noting that

the Guide needs to contain more practical and detailed guidance for Program Officers doing the day-to-day work. Moreover, we noted that the Guide does not address recording and tracking the full cost of large facility projects.

In July 2003, NSF issued the Guide in final form, and informed us that it plans to provide the detailed guidance we suggested through the development of on-line *modules* that will supplement the Guide. The modules will contain in-depth discussions of topics such as financial management, risk management, and the roles and responsibilities of NSF management and the awardee. According to the Guide, these detailed modules will not be available for use until Fall 2003. Once these supplemental modules are completed and published, we will reassess whether the Guide and the modules together adequately address the audits' recommendations.

Resolution of Recommendations for Antarctic Infrastructure Planning

In March 2003, we issued our report on the audit of the Occupational Health and Safety and Medical Programs in the United States Antarctic Program (USAP). Although our primary finding was that the programs generally protect the overall health and safety of USAP participants, we noted several opportunities for improvement. We recommended that NSF initiate life cycle planning for the aging USAP facilities and infrastructure. By performing periodic planning for needed maintenance, improvement, and replacement, NSF would be able to maintain the structural integrity and soundness of the physical facilities and infrastructure supporting the Antarctic researchers and contractors, thereby enhancing their personal safety.

To ensure that the replenishment of these assets do not have to compete for funding with day-to-day USAP operations or scientific research activities, we also recommended that NSF fund this plan through a separate budget line item. NSF disagreed with this recommendation, preferring instead to retain the flexibility of its current practice of using its funds, as circumstances require. We continue to discuss this recommendation with NSF management.

Finally we recommended that NSF: 1) develop and implement a formal work center assessment program to identify hazards and conditions that contribute to musculoskeletal injuries at specific work centers; 2) develop procedures for overseeing the shipboard medical programs on the R/V Nathaniel B. Palmer and the R/V Laurence M. Gould; and 3) ensure Raytheon's compliance with its contractual responsibility to provide emergency medical technicians (EMT) on board these ships. NSF generally agreed with these recommendations and will complete their implementation this fall.

Indirect Cost Audits Resolved

During this reporting period, NSF successfully resolved 25 recommendations in four indirect cost audits issued last semiannual period by ensuring that the awardee organizations strengthened internal controls and developed procedures to help ensure compliance with federal guidelines in developing indirect cost rates. For one awardee, our recommendations will help save the federal government \$86,200 of indirect costs on future awards. For two other awardees, NSF sustained \$49,271 of questioned indirect costs, and the awardees have agreed to offset the questioned amount against current costs or return the funds to NSF.

NSF found that awardees had complied with our recommendations to develop and implement policies and procedures for indirect cost proposal preparation and to train their staffs on the federal requirements for preparing indirect proposals. These corrective actions should help ensure that awardees: (1) correctly classify direct and indirect costs to prevent future overcharges on indirect costs; (2) use revenue related to indirect activities to reduce indirect costs; (3) properly allocate indirect costs by excluding from the direct cost base certain unallowable items such as participant support, equipment costs and subcontract costs; (4) record and retain adequate records to support claimed indirect costs; and, (5) improve controls over labor effort reporting. Each of these actions will help ensure that the federal government is charged for only allowable indirect costs associated with each awardee.

Community Colleges Agree to Strengthen Internal Controls

In this Semiannual (pp. 22-23) and our September 2002 Reports (pp. 24-26), we reported on eight community college audits. In general, the colleges did not consistently monitor subawardee expenditures, failed to comply with activity reporting to indicate effort expended on NSF awards, and underspent participant support without obtaining NSF prior approval. In addition, they did not consistently document how consultants were selected, observe the statutory consultant maximum daily rate of pay limitation, and record and report cost sharing on NSF awards as required. Costs questioned as a result of these audits would have been greater, but for the additional audit work performed at the government's expense, to ensure that the costs in question are allowable. During the resolution of the findings, the colleges generally agreed to take corrective actions to address the issues raised during the audits.

Work in Progress

Audit of NSF's Math and Science Partnership Program

We recently initiated an audit of NSF's Math and Science Partnership Program (MSP). NSF has been designated the lead agency on MSP, a key element of the President's initiative *No Child Left Behind*, aimed at strengthening and reforming K-12 education. Through MSP, NSF plans to invest \$240 million over 5 years for partnerships between school districts and colleges and universities dedicated to improving math and science education at the pre K-12 level. The program provided approximately \$160 million in FYs 2002 and 2003 to implement MSP projects. This audit will examine how NSF plans to measure and evaluate the projects funded by MSP, as well as how NSF oversees the programmatic and fiscal operations of the projects after they receive their NSF awards. We expect to issue the audit report in the next semiannual reporting period.

Quality Control Reviews of A-133 Audits

Non-federal entities expending more than \$25 million a year in federal awards (*\$50 million for fiscal years ending after December 31, 2003*) have a cognizant agency for audit, that is responsible for conducting quality control reviews (QCRs) of A-133 audits performed by non-federal auditors. As a cognizant agency, NSF is currently responsible for 18 non-federal entities¹. During this reporting period, we reviewed auditors' work for A-133 audits at two NSF awardees and expect to issue reports on our reviews in the next semiannual report. In fiscal year 2004, we plan to complete two more QCRs of A-133 audits. These reviews are part of a longer-term OIG effort to assess the extent to which NSF can rely on the A-133 audits to provide assurance that NSF awardees are properly accounting for and managing NSF funds.

Urban School District Reviews

In our September 2002 Semiannual Report (p. 22), we reported on four audits of urban school district awardees under NSF's Urban Systemic Program and Urban Systemic Initiative (USP/USI). USP/USI Programs were established to strengthen the science, mathematics, and technology education infrastructure of the nation's urban centers and represent a significant investment of NSF's resources. Two audits of these awardees identified financial management deficiencies, particularly in internal controls over systems for cost sharing, payroll, and participant support costs. Therefore, we have continued audits of the USP/USI awardees to determine the

¹ The number will decrease to 11 with the change in threshold for 2004.

extent of these and other problems. Currently, we are conducting seven audits of USP/USI awardees, three of which we plan to finish during this semiannual period. The seven audits in process cover eleven awards, with a total value of more than \$83 million, and committed cost sharing of more than \$231 million.

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 \$300,000 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. OMB is increasing the threshold from \$300,000 to \$500,000 effective for audits having fiscal years ending after December 31, 2003. The non-federal entities are responsible for procuring these audits and submitting the report through the Federal Audit Clearinghouse (FAC) within nine months after the end of their fiscal year. Single audits are usually performed by an independent public accountant or State auditor, and must be conducted according to Government Auditing Standards. OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations" (the Circular) is the implementing guidance for the Act and sets forth standards for obtaining consistency and uniformity among federal agencies for these audits.

Audit Quality. NSF, like other federal agencies, relies on the results of the single audit to monitor the more than \$5 billion of awards it funds annually. Thus, the quality of these audits is important to enabling NSF to carryout its stewardship responsibilities. However, as reported in our previous semiannual reports, recent Quality Control Reviews (QCR)



During a quality control review, auditor Jennifer Agee inspects samples of the earth's core collected by the NSF funded Ocean Drilling Program.

conducted by other federal agencies has raised concerns about the overall quality of these audits and the pervasiveness of the problem. Of particular concern is the amount and quality of A-133 audit coverage NSF awards received, since these awards tend to be small relative to the awardee's other federal awards.

To address audit quality concerns, a government-wide project commenced in FY 2003 to assess the quality of Single Audits and to provide a baseline for measuring Single Audit quality in the future. The project will perform QCRs of a statistically representative sample of A-133 audits and project the results to the universe of single audits. Development of a sampling methodology and an evaluation instrument are currently underway and the reviews are expected to begin in the spring of 2004. OMB has requested funding for this project in the President's FY 2004 budget. Given the importance of the A-133 audits to NSF's post award administration, the OIG is participating in both the planning of the approach for this project and the performance of the QCRs.

We also continue to participate in various federal A-133 audit groups including the PCIE National Single Audit Coordinators and the AICPA Single Audit Roundtable. These groups provide an opportunity for government single audit coordinators and the private sector auditors to discuss current developments and future directions for audits of federal awards.

Desk Reviews. In this reporting period, we reviewed 90 A-133 audit reports with NSF expenditures of \$1.1 billion for fiscal years 1998 through 2002. In total, the auditors questioned \$40,666 of NSF-funded costs and cost sharing claimed by award recipients. Of the 90 A-133 reports reviewed, 57 contained reportable conditions and non-compliance findings. The most common deficiencies related to non-compliance with federal cost principles, unallowable costs, cash management, equipment management, reporting, and subrecipient monitoring.

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 management's attention. Our examination of Management Letters in this reporting period identified 16 awardees with internal control problems in the areas of financial management and information systems related to NSF awards. Awardees cited for internal control problems may be at higher risk for fraud, waste, and abuse.