

Audits & Reviews

During this period we issued seven reports, of which five contained more than \$4.1 million of questioned costs. Further, our audit work resulted in significant recommendations to improve NSF's grant and contract management; to strengthen controls over labor effort reporting, and to help ensure that federal funds are spent properly. We also continued to provide proactive oversight and timely feedback to NSF regarding use of its American Recovery and Reinvestment (ARRA) funds. To this end, we issued three Alert Memoranda focusing on specific ARRA issues.¹

Specifically, we performed a review of a grant awardee with a history of expenditure control weaknesses, completed four audits in a series of audits of universities' labor effort reporting systems, and audited four large awards at another university. We continued monitoring NSF's competitive selection process for a contractor to manage the United States Antarctic Program for the next 13.5 years and audited costs claimed under a polar program drilling services contract.

Further, we reviewed 199 annual single audits of NSF awardees and noted a substantial improvement in audit quality. Also, together with NSF, we resolved all but six of the 25 recommendations in the Management Letter that accompanied the FY 2008 financial statement audit. Finally, we also worked with NSF management to resolve all of the findings and recommendations in five of our previously issued audits of NSF awardees.

Ensuring Proper Stewardship of ARRA Funds

The American Recovery and Reinvestment Act of 2009 provided \$3 billion to NSF, an approximate 50 percent increase over the agency's \$6 billion FY 2009 annual appropriation. NSF has quickly developed programs to make awards, established a methodology for awarding stimulus funds, and produced policies and procedures that include new award terms and conditions to specific ARRA awards. Spending ARRA funds expeditiously while ensuring proper stewardship of these funds is a government-wide challenge and a challenge for NSF.

Therefore, we are directing significant attention to proactive and preventive activities to give NSF timely feedback on its ARRA

¹ An alert memorandum is a concise, real-time review of a specific NSF activity or operation as it is being developed and/or implemented, to provide input on issues as they arise. An alert memorandum may also be issued during the course of an audit to notify NSF of matters requiring more immediate attention.

HIGHLIGHTS

Ensuring Proper Stewardship of ARRA Funds	7
Significant Grant Audits	9
Labor Effort Reviews	11
Significant Contracts	14
A-133 Audits	15
Audit Resolution	18

endeavors. For example, we monitored NSF's creation of, and provided immediate feedback, on its implementation of key ARRA requirements, including developing agency spending plans and new terms and conditions for awards made under the Act.

In the past six months, we issued three Alert Memoranda on ARRA issues to NSF. The first memorandum identified institutions that may present additional financial and programmatic risks if awarded ARRA funds. This memo included information we had provided to the Recovery Accountability and Transparency Board identifying high risk programs that could potentially receive ARRA funds. We provided this assessment to help NSF ensure the appropriate use of ARRA funds.

The purpose of the second memorandum was to provide NSF with information about stakeholders' expectations with regard to its use of Recovery Act funds to meet the Act's goals. To determine those expectations, we interviewed staff at OMB, OSTP, and in Congress. Based on those interviews, it was clear that although stakeholders expected that NSF's primary contribution would be in the area of reinvestment, it was also clear that they expected that NSF would contribute to the goal of recovery by making awards that created jobs.

The third memorandum analyzed NSF's spending of ARRA funds for "in-house" proposals. These are highly-rated proposals NSF had on hand at the time ARRA was enacted and account for approximately two-thirds of NSF's total ARRA spending. We advised NSF that it needs to document the rationale for its decision to use ARRA funds on an award-by-award basis. Further, we noted that NSF needs to provide guidance for its program officers and grants officials to ensure that they understand how they should monitor the rate at which awardees are spending ARRA funds, as well as how they should respond to awardees' questions relating to their ARRA reporting requirements. Finally, as a follow up to our assessment of potentially risky programs and awardees, we requested that NSF provide us with information on its current and planned actions to mitigate the potential increased risks of particular programs and institutions receiving ARRA funds.

During this period, we also worked with the Inspector General community on two government-wide ARRA reviews. The first was a self-assessment that agencies completed regarding whether they have sufficient qualified grant and contracting staff to adequately handle ARRA work. We provided the results of NSF's assessment to the Recovery Accountability and Transparency Board and are preparing a report to advise NSF of our assessment of the survey responses. In the second Board review, which is ongoing, we are evaluating whether NSF has developed processes and controls to assess data quality of the quarterly recipient reports. The IG community also has new requirements for reporting our activities and how we are spending our ARRA appropriation. We are working with the IG community to fulfill these reporting responsibilities and provide the greatest amount of transparency possible to the American people.

In the next reporting period, we plan to audit selected ARRA awards and evaluate NSF's post-award oversight activities related to the Act. Among other things, we plan to conduct financial capability reviews of selected ARRA recipi-

ents to ensure they have the ability to manage these funds. In addition, we are ready to address any concerns raised by the public under the Act's provision for Inspector General reviews, as well as any complaints we might receive owing to the Act's expanded whistleblower protections.

Significant Grant Audits

Inadequate Internal Controls Remain Despite Institution's History of Grant Management Problems

We conducted an internal control review to determine if Carnegie Institution of Washington (CIW) had strengthened its internal controls after four employees were convicted of embezzling over \$532,222, including approximately \$200,000 from NSF awards between 1994 and 2006. We found that a number of serious internal control weaknesses remained, although in 2004 CIW's independent auditors had recommended that CIW strengthen its financial management process. As a result of continuing internal control weaknesses, the approximately \$31 million in 47 NSF grants that CIW is currently managing could be at risk of being embezzled or misused.

CIW developed a corrective action plan in response to its auditor's 2004 internal control report, but the plan did not fully address all of that report's recommendations. Further, CIW developed institution-wide financial and administrative policies and procedures for federal awards, but they did not provide adequate or sufficient guidance in areas such as grant monitoring practices, segregation of duties, controls over disbursements, journal entries, and proper handling of cash receipts. Moreover, none of the seven CIW departments adequately implemented these new policies and procedures.

For example, four Directors of CIW departments did not effectively monitor their business office activity which should include routinely meeting with the business managers to discuss grant project budgets and expenditures, review monthly credit card statements, and assess overall federal grant activity. In addition, one CIW department did not have a business manager to monitor Principal Investigator grant activity. Continuous monitoring by a business or department manager can help prevent and timely detect embezzlement schemes, such as falsifying time and effort reports, converting property purchased with NSF award funds to personal use, and fabricating invoices and receipts for purchases to make them appear award-related.

CIW departments also either did not have or did not follow adequate written journal entry procedures to ensure that cost transfers to NSF awards for purchases, labor, materials and supplies were appropriate and had adequate supporting documentation, explanation of purpose and evidence of supervisory review and approval. As a result, the review found unapproved, undocumented and inappropriate cost transfers, using journal entries that inappropriately shifted costs from other grants and sources to NSF grants. Moreover, CIW continued to have poor segregation of duties and controls over its disbursement process. A single individual could enter and post invoices, print checks and access the blank-check stock.

Due to the significant nature of the internal control deficiencies identified and to prevent future embezzlements, we recommended that CIW develop and implement the systems, policies, procedures, and plans needed to address all of its internal control weaknesses. In its response, CIW indicated that since our fieldwork was completed, it has made significant improvements to its policies, procedures, and financial practices, including installing a new accounting and administrative system. The actions CIW described, if implemented, should address our concerns.

Significant Compliance and Internal Control Deficiencies at University of Michigan Lead to \$1.6 Million of Questioned Costs

An audit of four awards to the University of Michigan with \$57.7 million in direct costs and \$16.6 million in cost sharing found significant compliance and internal control deficiencies in the University's financial management of its NSF grant funds that resulted in \$1.6 million of questioned direct costs and more than \$136,000 of at-risk cost sharing.² The University of Michigan has 565 active NSF awards totaling more than \$290 million. Our audit encompassed four large center awards³ at Michigan which totaled nearly \$60 million and represented 20 percent of Michigan's funding from NSF.

We found that the University could not provide source documentation to support \$1.4 million in salary, internal charges from University service centers, and other NSF award costs. This occurred because the University's policies did not clearly identify the types of documentation that should be maintained to meet federal requirements and its coding and filing system made locating the documentation difficult.

The audit also found that award costs charged to NSF were not reviewed until the end of the award period which was usually years after costs were incurred and charged to NSF. Due to this significant time lag and the University's ineffective record retention system, the University was often unable to locate the necessary documents to conduct an appropriate review of costs charged to the NSF awards. Our audit questioned more than \$61,000 of improper costs for alcohol, salary for a terminated employee, and unrelated scholarship/fellowship aid and stipends claimed under the NSF awards. In addition, the University lacked procedures for overseeing and enforcing labor certification and effort reporting policies and had certified 37 effort reports totaling more than \$130,000 prior to the time the staff performed the research effort.

To address these compliance and internal control deficiencies, we recommended that the University develop policies and procedures to specify source documentation that should be maintained for each major category of federal grant costs; amend its record retention system to ensure that documentation to support charges to NSF grants can be readily obtained; and ensure that a comprehensive review of NSF award charges is performed at least annually.

² "At risk" cost sharing is the amount of required cost sharing that, at the time of the audit, the awardee had not provided but had time to meet before the award's expiration date.

³ NSF Center awards are generally large, interdisciplinary research awards of a scope, scale and complexity beyond the resources of any individual investigator or small group and involve collaborations among research groups at one or more locations.

Further, we recommended that the University monitor and enforce its labor certification and effort reporting policies.

The University of Michigan disagreed with the audit findings and recommendations and asserted that its policies and procedures were adequate.

Labor Effort Reviews Continuing at Universities

The OIG has been conducting a series of audits to evaluate whether universities' internal controls are adequate to properly manage, account for, and monitor salary and wage costs; and to determine whether these costs are allowable in accordance with federal costs principles. It is critical for these systems to be sound because NSF annually provides more than \$1.2 billion, approximately one-third of all NSF funds to universities for salaries and wages. Further, this figure is expected to grow as the ARRA increases NSF's funding of grants.

We completed four audits of universities with significant NSF and federal funding during this reporting period. These audits identified key weaknesses with time and effort documentation, transfers of labor costs between awards without explanation or approval, and certification and accuracy of labor effort reports supporting approximately \$81 million of research salaries charged to NSF awards.

Georgia Tech Needs to Improve its Labor Effort Reporting

An audit at the Georgia Institute of Technology (Georgia Tech) determined that it had a labor effort reporting system that could track and account for claimed labor-effort costs, but we found material weaknesses in controls for justifying and approving after the fact transfers of labor costs between federal awards. The extensive number and amount of unsupported labor cost transfers raises serious questions about the reliability of the University's entire effort reporting system. Consequently, any improper charges to NSF and other federal awards may not be detected. Since Georgia Tech billed \$16 million in labor charges to NSF and \$49 million to other federal agencies in FY 2007 alone, it is critical for its labor-effort reports to be reliable.

The audit also revealed that Georgia Tech lacked policies and procedures to comply with a federal grant requirement to track and account for labor effort voluntarily provided to the research project as cost sharing. Accounting for voluntarily committed cost sharing is important to ensure the University's indirect cost rate calculation is accurate and does not result in overcharging the NSF award. Further, Georgia Tech's policy did not incorporate NSF's requirement that limits PI summer salary to two months. Without this limitation in its policy, Georgia Tech could charge excess salaries to NSF.

We made several recommendations to address the control weaknesses we identified including that Georgia Tech require written justification and approval of changes to monthly workload allocation reports and labor cost transfers, require follow-up on inadequately justified labor cost transfers between awards and ensuring proper training and oversight of these activities, and develop policies

to limit charges to NSF sponsored projects to two months of faculty members' base pay in any calendar year. The University agreed with the recommendations.

Cornell Not Using a Suitable Means of Validating Labor Charged to NSF Grants

Our audit of Cornell University's labor effort reporting system found that employees did not comply with federal regulations when they certified effort reports without having first-hand knowledge or a suitable means of verifying that the work was performed and the work benefited the NSF awards. Specifically, officials who were not in a position to know whether work was performed, certified eight of the 30 employees' effort reports we sampled, representing \$208,000 (19 percent) of the salaries reviewed. This same weakness had been identified by Cornell's internal audit group two years earlier.

The significant nature of this control weakness, coupled with the University's delay in acting on its internal auditors' recommendations, raises concerns about the reasonableness and allowability of the remaining \$38 million of Cornell's FY 2007 labor charges to NSF grants, as well as the reliability of the labor costs claimed on its other \$262 million of federal awards.

These weaknesses occurred because prior to FY 2008, Cornell did not define in its policies what constituted a suitable means of verifying labor effort or establish adequate internal controls to provide effective management and oversight of its labor effort reporting system.

We recommended that Cornell revise its policies to address the weakness we identified including defining what constitutes *suitable means of verification*, requiring certification by employees with first hand knowledge or certifiers with documented suitable means of verification, periodically training all employees involved in the effort reporting process, and holding certifying officials accountable for following certification policies and procedures.

The University generally concurred with our recommendations and agreed to implement the necessary changes to its policies and procedures by December 31, 2009.

Arizona State Needs to Ensure Reasonableness of NSF Labor Charges

An audit of Arizona State University's (ASU) labor effort reporting system found that ASU did not ensure that salaries and wages charged to NSF awards reasonably reflected actual work performed on the sponsored projects. Specifically, four of the 30 sampled employees charged labor costs to NSF grants for work that did not directly benefit any of the NSF grants, and two other sampled employees' salaries were allocated to NSF awards using annual base salaries that exceeded the amount recorded on appointment letters or employment contracts. As a result, ASU overcharged NSF \$29,700 for six employees.

Further, the audit disclosed late, missing or undated certifications on 50 of 67 (75 percent) effort reports, and certifications without first-hand knowledge or suitable means of verification in six instances. In addition, ASU had not performed a

mandatory comprehensive independent internal evaluation of its effort reporting system to ensure the system complied with federal requirements. Because of these weaknesses, NSF has less assurance that ASU labor costs, which for FY 2007 totaled \$11.7 and \$40.6 million for NSF and other federal agencies respectively, are supportable.

Recommendations to address these weaknesses included developing improved policies and procedures, mandatory training for all responsible research and administrative personnel and independent evaluations of the labor effort reporting system. ASU concurred with the recommendations and agreed to make the necessary changes to policies and procedures. ASU also implemented an electronic effort reporting system, which should further facilitate its ability to monitor effort reporting.

Purdue University Needs to Strengthen Controls over Charging Labor on NSF Grants

Our audit of Purdue University's labor effort reporting found that overall the University had adequate systems to ensure that the time charged to an NSF award represented the actual time spent on that award. However, our sample of 30 employees who charged \$850,711 in labor costs to NSF grants identified over \$12,000 in charges that were not allowable or did not benefit the NSF grant. While the amount of these overcharges was not materially significant relative to the total amount of sampled labor costs, these excess costs indicate that Purdue has an internal control weakness that could result in improper charges on NSF or other federal awards.

Specifically, three Principal Investigators and two graduate students violated both federal and Purdue University policies when they charged proposal writing and teaching activities as direct costs to NSF grants. The internal control weakness occurred because Purdue University did not have a system in place to ensure adequate monitoring and periodic independent internal evaluation of the effort reporting system. Also, Purdue did not ensure that all cognizant personnel received adequate training on their effort reporting requirements and responsibilities. Purdue University limited its formal effort reporting training to its business office staff and did not include the Principal Investigators.

We made several recommendations, including that Purdue improve training for all personnel involved in the effort reporting process and that the university establish an independent internal evaluation process. Purdue generally agreed with the recommendations. While Purdue University plans to continue its established practice of formally training only its business office staff, it will include additional steps to emphasize effort reporting issues related to proposal writing and graduate student teaching.

Significant Contracts

OIG Continues Monitoring NSF's Antarctic Support Contract Competition

NSF is in the process of selecting a contractor to manage the United States Antarctic Program for the next 13.5 years. The current contract is NSF's largest and is valued at approximately \$1.6 billion over ten years. As part of the selection process, NSF requested that the Defense Contract Audit Agency provide cost proposals to conduct audits for each offeror but plans to conduct audits at only the offerors determined to be within the competitive range.

We issued an Alert Memorandum to NSF expressing concerns about what the request covered. There are specific areas of the proposals that the audits should cover, including indirect cost and overhead rates, business and financial systems, and cost accounting practices. Audits of these areas are important to develop a reasonably adequate cost analysis methodology and provide confidence that all major costs are known, disclosed, and considered as part of the award decision, including those that may not be readily apparent at the time of the proposal submission. This is particularly true for proposals from new business entities that do not have existing Cost Accounting Standards disclosure statements that have been determined to be adequate by a government agency. It is also very important that NSF audit the adequacy of offerors' business and financial systems to determine if they are capable of ensuring that government funds under the resulting contract are properly allocated and billed to the benefiting agency contract.

In addition to the Alert Memorandum, given the magnitude and complexity of this procurement, we have monitored NSF's competitive acquisition process, providing periodic comments and suggestions to advise NSF on the process used to select a contractor that can properly account for costs and bill in accordance with federal requirements. We will also continue to provide an independent perspective on NSF's acquisition process and assist NSF in identifying and avoiding possible contract administration challenges and problems.

Polar Program Drilling Services Contract Overrun by \$788,000 and Auditors Question \$2 Million in Costs

In response to an NSF request, our audit of \$19 million in costs claimed by the University of Wisconsin under NSF's Ice Coring and Drilling Services (ICDS) contract found that the university did not follow contractual requirements to notify NSF of potential cost overruns and claimed \$788,255 over the contract ceiling amount through 2007. Specifically, ICDS did not follow contract requirements when it failed to notify NSF of increased costs it began experiencing in 2006 and had reached 75 percent of its contract ceiling. As a result, NSF had less opportunity to manage the increase in costs of the drill or to mitigate the impact of the cost overruns of the drill development and testing.

The audit also noted several internal control weaknesses in UW's contract administration and identified other instances where UW did not fully comply with all terms and conditions of the NSF contract. Specifically, UW requested, but did not obtain NSF approval, for its subcontracts and for equipment purchases

exceeding 5 percent of the total contract value, as required by the contract and *Federal Acquisition Regulation*. As a result, the audit questioned \$2.4 million (13 percent) of the costs claimed for unapproved subcontract, equipment, and associated indirect costs. In addition, the audit noted that equipment inventory reports sent to NSF were not complete and travel records were destroyed prematurely, contrary to UW's record retention policy.

We recommended that NSF consider these findings in its review of UW's request for equitable adjustment for the increased costs. We also recommended that NSF require UW to implement a system to monitor and manage costs under the NSF award; timely notify NSF, as required, when it is reaching its contract ceiling; and obtain NSF Contracting Officer approval and consent to enter into subcontracts. Further, we recommended that NSF require UW to submit complete and accurate inventory reports, to verify the existence and accuracy of inventory, and improve controls over record retention.

The university generally agreed with the recommendations, but submitted documentation to show requests for approval from NSF for at least 26 subcontracts to provide services and equipment. NSF responded just once to UW's requests, approving only four subcontracts. UW stated that it subsequently relied on its quarterly progress and financial reports to meet NSF's subcontract approval requirement since NSF had not responded to its requests. Therefore, we issued an Alert Memorandum to NSF recommending that the agency follow its current policies and procedures for monitoring subcontracting activities that require Contracting Officer approval. Further, the memorandum recommended that NSF monitor contract costs, by comparing budgeted costs in the annual program plans to actual costs in invoices, to better manage potential cost overruns

A-133 Audits

Single Audits Continue to Identify Lack of Controls over Federal Funds and Noncompliance with Federal Requirements

For the 199 audit reports reviewed and referred to NSF's Cost Analysis and Audit Resolution (CAAR) Branch this period,⁴ covering NSF expenditures of more than \$4 billion during audit years 2005 through 2008, the auditors identified 120 findings at 72 NSF awardees. Five awardees received qualified opinions on their financial statements and eight had adverse or qualified opinions on their compliance with federal grant requirements.

The auditors identified material weaknesses and/or significant deficiencies in 43 reports (60 percent of reports with findings), indicating substantial concerns about the awardees' ability to manage NSF funds. Awardees' lack of internal controls and noncompliance with federal requirements included: untimely and/or incorrect reporting of time and effort; inadequate support for salary/wages,

⁴ We reviewed four additional reports but rejected them due to audit quality issues. Once we receive the revised reports, we will review them, and if acceptable, refer them to NSF for resolution.

OMB Circular A-133 provides audit requirements for state and local governments, colleges and universities, and non-profit organizations receiving federal awards. Under this Circular, covered entities that expend \$500,000 or more a year in federal awards are required to obtain an annual organization-wide audit that includes the entity's financial statements and compliance with federal award requirements. Non-federal auditors, such as public accounting firms and state auditors, conduct these single audits. The OIG reviews the resulting audit reports for findings and questioned costs related to NSF awards, and to ensure that the reports comply with the requirements of OMB Circular A-133.

equipment, travel, and indirect costs charged to awards; inadequate monitoring of subrecipients; inability to prepare the financial statements; and late financial and/or progress reports.

The auditors identified 60 instances where awardees failed to comply with federal requirements. Nine of these resulted in more than \$587,000 in questioned costs for NSF awards. Auditors also identified 60 instances where inadequate internal controls could lead to future instances of noncompliance.

We also examined 97 management letters accompanying the A-133 audit reports and found 56 deficiencies that affected NSF. Auditors issue these letters to identify internal control deficiencies that are not significant enough to include in the audit report, but which could become more serious over time if not addressed. The deficiencies included inadequate tracking, managing, and accounting for NSF costs, and ineffective segregation of duties. These deficiencies affected control processes that are essential to ensuring stewardship of NSF funds and preventing fraud and abuse.

We provided the results of each audit report to NSF and, where appropriate, highlighted our concerns related to opinions or findings. In certain instances, such as reports which contained significant deficiencies or material weaknesses repeated for three or more consecutive years and/or reports which identified \$100,000 or more in questioned costs to NSF awards, we requested that NSF coordinate with us during the audit resolution process. Although A-133 does not specifically require NSF to coordinate management decisions on systemic findings when another agency is the cognizant or oversight agency for audit, it does require NSF to issue management decisions on findings which impact its funding. As such, we believe it prudent to bring these issues to the attention of NSF officials and to monitor the actions taken by NSF to improve controls in place at the awardee level. We expect that part of the actions taken by NSF during resolution of these audits would include discussions with the cognizant/oversight agencies for audit to determine what, if any, additional actions NSF should take regarding its awards.

NSF coordinated with us as requested prior to completing resolution of eight reports, but completed resolution of two reports without coordinating with us. NSF contacted the cognizant agency during resolution for one of the ten audits. In addition, in two reports, NSF considered the findings resolved even though

the subsequent year's audits identified repeat findings. We plan to work with NSF officials to formalize an agreement on the process for resolving recommendations for A-133 reports for which we have requested coordination.

Timeliness and Quality of Single Audits Improves, But Deficiencies Remain

The audit findings in A-133 reports are useful to NSF in planning site visits and other post-award monitoring. Because of the importance of A-133 reports to this oversight process, the OIG reviews all reports for which NSF is the cognizant or oversight agency for audit, and provides guidance to awardees and auditors for the improvement of audit quality in future reports. In addition, OIG returns reports that are deemed inadequate to the awardees to work with the audit firms to take corrective action.

We reviewed 108 audit reports for which NSF was the cognizant or oversight agency for audit,⁵ and found that 53 (49 percent) fully met federal reporting requirements. This is a substantial improvement in quality over prior semiannual periods. For example, in March 2007 only 9 reports fully met the requirements.

Key factors which contributed to the improvements include actions taken by the auditor community as a whole in response to the National Single Audit Quality Project issued in June 2007⁶ and actions taken by individual auditors and auditees in response to our increased monitoring of audit quality and outreach efforts over the past 3 years.

Although improvements in timeliness and quality were significant, 55 reports (51 percent) reviewed had timeliness and quality issues. Audit quality issues identified included 37 reports (34 percent), in which the Schedule of Expenditures of Federal Awards did not provide sufficient information to allow for identification of awards received from non-federal "pass-through" entities or did not adequately describe the significant accounting policies used to prepare the schedule. In addition, there were 24 reviews (22 percent) which contained quality issues that had been previously identified for the same awardees and auditors.

We contacted the auditors and awardees, as appropriate, for explanations of each of the potential errors. In most cases, the auditors and awardees either provided adequate explanations and/or additional information to demonstrate compliance with federal reporting requirements, or the error did not materially affect the results of the audit. However, we rejected four reports due to substantial non-compliance with federal reporting requirements. We issued a letter to each auditor and awardee informing them of the results of our review and the specific issues on which to work during future audits to improve the quality and reliability of the report.

We previously reported on our special review of reports under NSF oversight without any identified audit findings (the "Oversight Project").⁷ The review continued to demonstrate that monitoring of reports without audit findings is

⁵ The "cognizant or oversight agency for audit" is defined as the federal agency which provided the largest amount of direct funding to an awardee.

⁶ Previously reported in September 2007 Semiannual Report, p. 17.

⁷ March 2009 Semiannual Report, pp. 22-23.

as necessary as monitoring of reports with audit findings. Of the 55 reports we reviewed with quality issues, 33 (including 3 of the 4 rejected reports) were identified through the Oversight Project. Starting with the audits of fiscal years ending in 2008, the Federal Audit Clearinghouse will automatically provide us with all reports under NSF cognizance or oversight.

Continued Efforts in Response to National Single Audit Sampling Project and Recovery Act

We previously reported on ongoing efforts to improve the quality and oversight of single audits in response to the recommendations of the National Single Audit Sampling Project and on our participation in OMB workgroups to address some of the findings.⁸ We continue to work with OMB to revise the Council of Inspectors General on Integrity and Efficiency standards for conducting quality control reviews and desk reviews. We are also working with OMB to address the impact of ARRA on single audits. This group is developing a pilot program for early reporting of internal control deficiencies identified during single audits at the state level.

Audit Resolution

Some FY 2008 Management Letter Recommendations Remain Unresolved

In the March 2009 Semiannual Report,⁹ we reported that the Management Letter resulting from the audit of NSF's FY 2008 financial statements included findings in grants processing and documentation, contract monitoring, and reporting of property, plant, and equipment. Management's initial corrective action plan, dated April 2009, included plans to resolve 17 of the 25 recommendations. Management's revised corrective action plan, dated August 2009, resolves an additional two recommendations. Four of the six remaining unresolved recommendations relate to grants monitoring. They include a recommendation to review supporting source documentation before approving payments to problem institutions placed on special payments, and a repeated recommendation from the prior year for NSF to require staff to document review steps and results of its assessments of institutions with high risk awards. A contract monitoring recommendation that is unresolved is to expand the scope of the quarterly expenditure review (QER) procedures of NSF's high risk contractors to include verifying that the amounts recorded in the contractor's general ledger represent costs that are allowable and benefited the NSF contract. NSF management stated that it plans to consult with the Defense Contract Audit Agency to determine the exact scope of the current QERs and what additional procedures are needed. Until NSF determines the detailed procedures, this recommendation remains unresolved.

⁸ September 2008 Semiannual Report, pp. 21-22; March 2009 Semiannual Report, p. 23.

⁹ March 2009 Semiannual Report, p. 14.

¹⁰ March 2009 Semiannual Report, p. 20.

We are continuing to work with NSF to develop acceptable corrective action plans for the unresolved recommendations. During the ongoing audit of the FY 2009 financial statements, the auditors are also evaluating the effectiveness of NSF's implementation of corrective action plans for previously resolved recommendations.

NSF Will Continue to Monitor Bermuda Institute of Ocean Sciences

In response to our March 2009¹⁰ report on the financial capability of the Bermuda Institute of Ocean Sciences (BIOS), NSF has stated that it will continue to monitor the institute's financial position by reviewing the financial statements that BIOS submits to the agency. We conducted the audit to report on the effect of BIOS' major expansion in its research programs.

University of Arizona Corrects Internal Control Weaknesses

The University of Arizona has corrected all the internal control weaknesses we identified in the audit we reported in the March 2009 Semiannual Report. Arizona took a number of actions including updating its policies and procedures to better document its review and approval of labor cost charges by personnel having a "suitable means of verification," and requiring all officials involved in the effort reporting process to receive periodic training. In addition, the University aligned its supplemental compensation guidelines with NSF's summer salary limitations.

Further, the University hired a Financial Compliance Coordinator to monitor the effort report certification process and requested its internal audit department to conduct periodic independent evaluations. The University plans to update its financial management system so that it can track commitments for direct and cost shared labor time to ensure that proposed labor effort commitments are met. Arizona also updated its Handbook for Principal Investigators to ensure that some faculty effort is committed to all sponsored projects. The audit questioned and NSF subsequently sustained \$16,584, which the University removed from the NSF grants before the audit was finalized.

NSF Sustains \$346,733 in Questioned Costs at American Institute of Physics

In the March 2009 Semiannual Report,¹¹ we reported that an audit of the American Institute of Physics (AIP) found significant internal control deficiencies and non-compliance with federal requirements in its subcontract procurement and management practices. The audit also identified \$77,658 in questioned costs that include \$25,000 related to invoices paid to a subcontractor for products that were not completed.

During audit resolution, AIP provided NSF with additional program income information. As a result, NSF identified an additional \$294,075 of program income owed on an NSF-funded project, resulting in a total sustained questioned cost of

¹¹ March 2009 Semiannual Report, p. 18.

\$346,733. NSF confirmed that AIP received the products that were questioned for \$25,000 and required AIP to improve its policies and procedures for subaward monitoring and proper handling of program income.

Education Development Center Agrees to Improve Subaward Monitoring and Revise Travel Policies

In March 2009,¹² we reported that an audit of \$14.2 million of costs claimed by Education Development Center, Inc. (EDC), an international non-profit educational research organization, identified compliance and internal control deficiencies in EDC's financial management that resulted in inadequate monitoring of \$1.3 million of subaward costs. During audit resolution, EDC agreed to improve its subaward monitoring and revise its travel policies to better ensure that the costs claimed on its NSF awards are allowable and that meal costs are reasonable and well documented.

NSF Sustains Questioned Cost and Exploratorium Agrees to Correct Control Weaknesses

In March 2009,¹³ we reported that an audit of awards made to Exploratorium, a non-profit educational organization and science museum, identified limited subaward monitoring, undocumented expenses, and unreported program income resulting in \$340,204 in questioned costs. NSF sought recovery of all of the questioned costs in audit resolution. In addition, Exploratorium agreed to adhere to its policy to maintain adequate documentation and revise its policies and procedures to improve its subawardee monitoring process and ensure program income is properly reported.

¹² March 2009 Semiannual Report, p. 17.

¹³ March 2009 Semiannual Report, p. 17.