

Audits & Reviews

In this semiannual period the Office of Audit successfully passed its triennial external peer review, completed the required audit of NSF's fiscal year 2008 financial statements, and addressed anonymous concerns about a Directorate's supplemental funding research awards. In addition, we completed seven audits of awardee institutions, in which the need for better subaward monitoring was a common finding. We also reviewed 205 annual single audits of NSF awardees that reported a total of 249 findings. Finally, we worked with NSF to resolve findings and recommendations on 8 audits completed in prior periods, including one in which NSF sustained \$3.3 million of questioned costs.

Office of Audit Quality Control System Passes External Peer Review

During this semiannual period, the Office of Audit successfully passed external peer review for the year ended September 30, 2008. The review was conducted by the National Credit Union Administration (NCUA) Inspector General, who found that the Office's quality control system provided reasonable assurance of conformance with auditing standards promulgated by the U.S. Comptroller General, and issued a "clean" opinion.

Audit organizations performing audits and attestation engagements in accordance with Government Auditing Standards (GAS) must undergo triennial external peer review by reviewers independent of the audit organization. The reviews are conducted in accordance with guidelines established by a Council of Inspectors General and focus on the audit organization's quality control system. A quality control system includes the office's organizational structure and its policies and procedures that help ensure it complies with GAS.

The review team examined six audit reports, including reviewing the supporting workpaper documents to assess the quality of the audit planning, execution, reporting and supervision. The review team also evaluated the adequacy of the Office of Audit's established policies and procedures and interviewed a random sample of staff to determine their level of knowledge of the requirements. A copy of the final peer review report is posted on the OIG website.

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Significant Internal Reports

FY 2008 Independent Auditors Issue Unqualified Opinion; Management Letter Cites Need for Improved Contract Oversight, Grant Processing, and Accounting for Property

An audit of NSF's Fiscal Year (FY) 2008 financial statements resulted in the agency again receiving an unqualified opinion. Clifton Gunderson LLP conducted this audit under a contract with OIG.

However, the FY 2008 Management Letter identified seven findings, some of which included elements of prior years' findings related to NSF's operations and financial reporting controls. The Management Letter reported continuing weaknesses in NSF's grants processing and documentation. For example, the auditors repeated their prior recommendation that NSF revise its Site Visit Review Guide for assessing institutions with high risk awards to provide specific guidance for reviewers to document their review steps and the results. The auditors also recommended that NSF: 1) prevent future awards to grantees that have not provided final cost sharing certifications; 2) review supporting source documentation before approving payments to problem institutions placed on special payments; and 3) specify deadlines for NSF staff to complete the draft and final reports on its reviews of NSF's large facilities and obtain corrective action plans.

Regarding contract monitoring, the auditors recommended that NSF expand the scope of its quarterly expenditure reviews 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 benefitted the NSF contract. The auditors also recommended that NSF: 1) develop policies and procedures for contract close-out and for requiring contracting officers to ensure that contractors submit incurred cost reports (which are essential to ensuring that NSF's contracts are administered properly) and; 2) obtain cost incurred audits of its largest contractor to verify and validate costs charged to the contract.

Finally, the auditors reported a finding related to NSF's reporting of property, plant, and equipment (PP&E), involving late transfers from the Construction in Progress account resulting in understating the capitalized real property account. Auditors also expressed concern about the lack of an integrated PP&E system and annual reconciliations of physical inventory to the general ledger that could result in errors in the agency's property accounts. The auditors recommended that NSF: more closely monitor transfers to the real property account; ensure that NSF's planned new property system is integrated with the financial accounting system; and enforce the requirement for a complete annual physical inventory of real property, including reconciling the property inventory listing to the general ledger.

NSF management generally concurred with the Management Letter and, in some instances, NSF is developing alternative approaches to resolve the findings. The FY 2009 financial statement audit will evaluate NSF's actions in response to the findings and recommendations to determine whether these issues have been corrected.

Approval Needed To Deviate from Merit Review Process

An OIG audit found that while NSF's Computer and Information Science and Engineering (CISE) Directorate appeared to have had a proper basis to request a deviation from NSF's standard merit review process to make supplemental awards for the Measurement and Signatures Intelligence (MASINT) Program, it did not obtain the required Director's approval for the deviation. The audit was conducted in response to concerns raised by an anonymous source. CISE also did not adequately document and communicate the reasons for the deviation from standard policies and procedures to the NSF grant staff responsible for making the awards. Consequently, concerns on the part of grant officials about the lack of merit review led to funding delays and additional investigations and reviews. Further, the lack of approval and documentation created the appearance that one of NSF's most important and fundamental quality control processes was being undermined and circumvented.

OIG recommended that CISE request, on a program-wide basis, the required authorization from the NSF Director to waive the merit review of all MASINT proposals for supplemental awards for out-year funding and document the waiver in NSF's electronic grants file, in accordance with NSF's policy, as well as ensure that each existing affected MASINT electronic file contain all of the required documentation. Additionally, we recommended that NSF issue a memorandum to all NSF staff reminding them of the requirement for merit review of supplemental award proposals and provide cross-references in the agency's Proposal and Award Manual to link these requirements for supplemental awards to its general merit review policies. NSF concurred with our findings and has completed corrective actions implementing all of the report's recommendations.

Significant Grant and Contract Audits

Among audits of NSF awardees completed this semiannual period we found that four grantees had significant internal control weaknesses related to monitoring subawards, including in one case, foreign subawardees who charged \$6.7 million of costs in one year. OIG auditors also found that a major research university lacked controls to verify the propriety of \$12.8 million of labor effort charged to NSF awards, and an NSF contractor audited for the third time continued to violate Cost Accounting Standards and may have to reimburse NSF for an undetermined amount of additional questioned costs. Each of these audits is discussed separately below.

Audits of Four Non-Profit Grantees Find Lack of Oversight of Subrecipients

Awardees that pass through federal funds to subrecipients are required to monitor them by methods such as reviewing financial and performance reports, performing site visits, or otherwise ensuring they have adequate financial systems to manage federal funds. However in four audits of non-profit organizations with more than \$14 million of subawards, we found a consistent pattern of inadequate subrecipient oversight. Without adequate controls over subrecipient monitoring, NSF risks paying substantial subaward costs in the future without adequate assurance that these payments are permissible.

Civilian Research & Development Foundation. At NSF's request, the OIG audited \$14.8 million of FY 2006 costs claimed by the Civilian Research & Development Foundation (CRDF) and found that CRDF lacked adequate administrative and financial controls for monitoring its foreign subrecipients and managing its indirect cost allocation practices to ensure proper use of federal funds. CRDF is a nonprofit organization authorized by the U.S. Congress under the Freedom Support Act (Public Law 102-511) and was established in 1995 to provide cooperative research and development opportunities to scientists and engineers in the independent states of the former Soviet Union.

The audit disclosed significant internal control weaknesses in CRDF processes to oversee hundreds of foreign subrecipients that could increase the risk for fraud and unallowable costs being charged to the NSF award. CRDF payments to foreign subrecipients accounted for approximately \$6.7 million in direct costs, representing 71 percent of CRDF's total direct costs charged to NSF award in FY 2006.

Specifically, CRDF failed to consistently follow its policies related to Individual Financial Support payments to its foreign principal investigators involved in CRDF research programs. Our review disclosed that about 40 percent of the almost \$3 million in FY 2006 support payments were not adequately supported by labor effort reports as required by CRDF procedures. Also, CRDF: (a) did not adequately ensure that required annual audits of its four subrecipient grant-making organizations established in the former Soviet Union were consistently conducted; (b) made payments to these organizations without proper verification and review of necessary supporting documentation; and (c) improperly allocated administrative service contract costs for these four organizations to the NSF award on a subjective basis. These weaknesses create substantial risk for potential fraudulent and unallowable costs to be charged to the NSF grant.

In addition, we determined that CRDF did not establish guidance to ensure that its employees properly identified and excluded unallowable and unallocable costs from its indirect costs pool. As a result, CRDF charged \$376,199 of questioned costs to the indirect cost account, including over \$297,000 to engage in unallowable fundraising, public relations, and promotional activities. This resulted in CRDF's FY 2006 indirect cost rate being overstated by 2.04 percent and \$191,696 of indirect costs being overcharged to the NSF award. Through FY 2009, we estimate that \$1,153,497 of federal funds could be put to better use by applying the lower indirect rate to all CRDF federal awards.

In response to our recommendations, CRDF indicated that it has or is in the process of taking corrective actions to improve its oversight of its foreign subrecipients. But CRDF disagreed with the questioned costs because it believed such costs were allowable because of either longstanding CRDF practice or inclusion of the costs in its Business Plan submitted to NSF. However, the legal binding Funding Arrangement between NSF and CRDF clearly states that grant costs allowability will be based on the Federal cost principles. Therefore, we continue to disagree with CRDF on the allowability of these costs and reaffirm our audit conclusions and recommendations. NSF stated that without first coordinating with CRDF, it lacked sufficient information on which to take a position on the report findings and recommendations. Therefore, we requested that NSF provide its management decision and planned corrective actions to address the report recommendations within 120 days of the report's issuance.

Exploratorium. An OIG audit of Exploratorium, a non-profit educational organization and science museum, identified three significant compliance and internal control deficiencies resulting in \$340,204 in questioned costs. Two of the three deficiencies were repeat findings that Exploratorium's external auditors had cited in its 2003 Single audit report and management letter.

The auditors found that Exploratorium performed limited subaward monitoring on \$6 million of subaward costs (54 percent of the total costs claimed on the awards), a condition noted previously in its 2003 and 2007 OMB Circular A-133 audit report management letters. This occurred because Exploratorium relies exclusively on the representations made by its subawardees to ensure costs are reasonable, allowable, and allocable rather than performing its own independent verification of those assertions using a risk-based approach to determine the level of monitoring necessary.

In the case of one subawardee, the auditors questioned \$227,109 (representing 25 percent of the sample tested) because it used *estimated* rather than *actual* costs for a variety of expenses including salaries and wages, consultants, travel, and indirect costs. They also questioned \$7,676 in unsupported subaward costs for consultant, material, travel and other expenses; and \$82,919 because Exploratorium did not provide adequate support for other direct costs. Finally, Exploratorium overstated project costs by \$22,500 because program income it received during the term of the award was not used to offset NSF-funded costs or added to the project in furtherance of its objectives, as required.

The auditors recommended that Exploratorium revise its subaward monitoring procedures to include a proactive review of its subawardee's OMB Circular A-133 report findings and a formal risk assessment process for determining the level of monitoring necessary. Recommendations were also made to revise its procedures to properly account for program income, and comply with existing procedures to support costs claimed with sufficient supporting documentation. Exploratorium concurred with all of the report findings and indicated that it was taking corrective action.

Education Development Corporation. OIG audited four awards with \$14.2 million in costs claimed by Education Development Center, Inc. (EDC), an international non-profit educational research organization, and identified three compliance and internal control deficiencies in EDC's financial management that resulted in \$3,346 in questioned costs.

EDC did not perform adequate fiscal monitoring on \$1.3 million, or 9 percent, of the subaward costs it charged to the NSF awards, to ensure that subawardee expenditures were allowable, allocable, and reasonable. This occurred because EDC does not have a formal plan for monitoring subawardees, nor does it attempt to verify the adequacy of the subawardees' controls to ensure the costs they report are valid. EDC manages 335 projects in 50 countries, including 35 other NSF awards. Without adequate routine subaward monitoring EDC cannot ensure that the \$1.3 million of subaward costs charged to the four audited NSF



A child inspects the Wall of Lights exhibit at the San Francisco Exploratorium.

awards or to any other NSF awards are valid and allowable. In addition, EDC did not provide support for \$3,346 in NSF funded meal costs and did not evaluate the reasonableness of meal costs associated with participant events.

We recommended that EDC develop and implement a formal subaward monitoring plan that includes performing a risk assessment to determine the level of monitoring needed for each subaward; ensure that claimed costs for meals are supported with itemized receipts; and revise its policies and procedures to document how reasonableness of meal costs is determined. EDC concurred with all of the report findings and indicated that it was taking corrective action.

American Institute of Physics. An audit of a \$2.3 million award made to the American Institute of Physics (AIP) for scientific media production services found significant internal control deficiencies in its subcontract management. The audit found that AIP's procurement practices were not in accordance with federal requirements because it did not always: 1) obtain adequate cost and pricing data prior to awarding its subcontracts; 2) identify the total price and type of award (fixed-price or cost reimbursable); or 3) include clauses with provisions for termination, access to records or record retention in its subcontracts. In addition, AIP did not adequately monitor its subcontracts in a timely manner. Consequently, there is no assurance that AIP's and NSF's interests were adequately protected under the subcontract agreements or that the subcontractors' invoiced amounts were accurate, reasonable and in support of the NSF award.

AIP awarded three subcontracts for production, marketing, and distribution services and for scientific news stories which represented thirty-nine percent of the total costs claimed on the award. In total, the audit questioned \$77,658 subcontract costs representing 9.7 percent of the total \$798,528 claimed in subcontract costs. Of the questioned costs, \$52,658 related to income due from a subcontractor that AIP had terminated due to poor performance. The remaining \$25,000 of the questioned costs related to invoices paid to another subcontractor for products that were not completed in accordance with the contract. Finally, AIP did not meet either its original or revised television subscription sales milestones of \$317,500 and \$255,700 respectively for 2006. Actual subscription sales for 2006 were \$81,000, thereby increasing the possibility that the project would not become self-sustaining as originally proposed by the end of the NSF award period.

We recommended that, for all future subcontracts under NSF awards, AIP develop and implement policies and procedures to obtain adequate cost and pricing data; specify the type of subcontracts awarded; and include all federally-required clauses in subcontracts. We also recommended that AIP establish adequate subcontractor monitoring procedures and work with its subcontractors to obtain additional television subscriptions. AIP generally disagreed with the recommendations and many of the findings presented by the auditors. The report was provided to the Division of Institution and Award Support for resolution.

University of Arizona Not Using Suitable Means of Validating Labor Charged to NSF Grants

Officials at the University of Arizona approved labor charges to federal awards without having knowledge of the work performed by its employees, as required by federal regulations, according to an OIG audit of Arizona's effort reporting system. The report states that department administrative officials approved 770 of 780 effort reports amounting to \$709,520 in labor costs for a sample of 30 employees without having a basis to know whether the work was actually performed as shown on the effort reports. The significant nature of this control weakness raises concerns about the reasonableness and reliability of the \$12.8 million of FY 2007 labor charged to NSF grants or the \$94.4 million in labor charges to other federal awards.

Administrative officials relied on employee time sheets as a means to validate labor effort charged to NSF awards despite the fact that in most cases the time cards did not assign the employee's hours to specific projects or activities. Furthermore, the officials using these timesheets approved labor effort every two weeks for as many as 400 employees in their individual departments. Federal regulations require that university labor activities charged to federal awards must be confirmed by either the employee conducting the work or by an official that is in a position to know whether the work was performed. In addition, the audit identified internal control weaknesses that allowed faculty to exceed NSF summer salary limitations, resulting in \$16,584 in overcharges;² and cited Arizona for failing to conduct independent evaluations of its labor reporting system as required by federal regulations.

These weaknesses occurred because prior to FY 2008, Arizona did not place sufficient emphasis on effort reporting. Specifically, Arizona had not: 1) established sufficient written guidance for all effort reporting processes to ensure full compliance with Federal requirements, 2) performed adequate monitoring to ensure all Arizona departments complied with established effort reporting policies and procedures, and 3) ensured cognizant personnel received adequate training on their effort reporting responsibilities. Arizona concurred with the findings and recommendations and implemented an interim system to address many of the issues in our report. A new electronic financial management system is scheduled to be operational in calendar year 2010 at which time Arizona will implement final corrective actions.

CAS Violations Found Again in Third Audit of NSF Contractor

An audit of four contracts with \$2.9 million in costs billed to NSF in 2004 revealed that Abt Associates, a for-profit research and consulting firm, may be incorrectly recording \$2.5 million in employee pension costs, resulting in overcharging indirect costs to its government contracts. In addition, Abt changed its method of accounting for indirect costs without prior government approval. In both of these instances Abt did not comply with its disclosed accounting practices, which is a violation of federal Cost Accounting Standards (CAS). Both of these accounting issues will be resolved by Abt's federal cognizant contracting agency, U.S. Agency for International Development (AID).

² NSF limits faculty summer pay to no more than two-ninths of academic salary.

The audit was the last in a series of three audits that the OIG contracted with the Defense Contract Audit Agency (DCAA) to perform on costs that Abt claimed on NSF contracts for 2002 through 2004.³ DCAA issued a qualified opinion on Abt's FY 2004 costs claimed because the CAS violations may result in questioned indirect costs that cannot be determined until the accounting change and employee pension cost issues are resolved.

The report recommends that NSF coordinate with AID to resolve Abt's CAS noncompliance issues and determine the amount of unallowable costs charged to NSF contracts. We forwarded the audit report to NSF's Division of Acquisition and Cooperative Support to resolve any questioned costs and ensure corrective actions are taken.

Bermuda Institute of Ocean Sciences Found Financially Capable for Performing Government Grants

An audit of the financial capability of the Bermuda Institute of Ocean Sciences (BIOS), a non-profit organization providing ship operations for research vessels and Atlantic Ocean current studies, found that the grantee's financial condition is acceptable for performing on government grants in the current and near term through October 31, 2009. The audit evaluated BIOS' audited financial statements and current cash flow forecasts, net worth, assets, liabilities and key financial ratios.

BIOS recently underwent a major expansion with the purchase of a new research vessel, *The Atlantic Explorer*, and a building program to enhance its research capabilities and establish a platform for oceanographic research in the Mid-Atlantic. BIOS' expansion resulted in increased debt, however long-term liabilities are decreasing and most key financial ratios indicate positive trends. We forwarded a copy of the audit report to NSF's Division of Institution and Award Support and suggested NSF monitor BIOS' future annual financial statements and financial condition.

A-133 Audits

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

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.

³ We reported on costs claimed in 2002 by Abt Associates in the September 2007 Semiannual Report, p. 16 and reported on 2003 costs in the September 2008 Semiannual Report, p. 18.

For the 205 audit reports reviewed this period, covering NSF expenditures of more than \$5 billion during audit years 2005 through 2007, the auditors issued seven qualified or disclaimers of opinion on the financial statements and 20 adverse or qualified opinions on the awardees' compliance with federal grant requirements. NSF is the cognizant or oversight agency for audit⁴ for six of the awardees which received less than unqualified opinions, and therefore has responsibility to coordinate resolution of the audit findings on behalf of the affected federal agencies.

Of the 205 reports, 96 reports disclosed findings for the year under audit at a variety of NSF awardees, including major universities, school districts, and non-profit organizations. Auditors identified 160 instances where awardees failed to comply with federal requirements, 33 of which resulted in more than \$1.8 million in questioned award costs and nearly \$350,000 in cost-sharing shortfalls for NSF awards. Auditors also identified 87 instances where inadequate internal controls could lead to future instances of noncompliance.

The auditors identified material weaknesses and/or significant deficiencies in 68 reports, indicating substantial concerns about the awardees' ability to manage NSF funds. The auditors reported the following examples of awardees' lack of internal controls and noncompliance with federal requirements:

- untimely and/or incorrect reporting of time and effort;
- inadequate support for salary/wages, equipment, travel, and indirect costs charged to awards;
- inadequate monitoring of subrecipients;
- inability to prepare the financial statements;
- inadequate support for participant support costs and/or unauthorized movement of funds out of the participant support budget category;
- procurement systems that fail to properly ensure competition and/or monitor to prevent procurement from suspended or debarred parties;
- failure to submit financial and/or progress reports on time; and
- inability to meet cost sharing commitments.

We also examined 103 management letters accompanying the A-133 audit reports. 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 letters disclosed a total of 97 deficiencies that could affect NSF awards in areas such as tracking, managing, and accounting for NSF costs and segregation of duties – control processes that are essential to ensuring stewardship of NSF funds and to prevent 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 findings repeated for three or more consecutive years and/or reports which identified \$100,000 or more in questioned costs

⁴ The "cognizant or oversight agency for audit" is defined as the federal agency which provided the largest amount of direct funding to an awardee. On a 5-year cycle, OMB assigns a cognizant agency for audit to awardees who expend \$50 million or more in federal funds in a year. On an annual basis, OMB assigns an oversight agency for audit to awardees who expend less than \$50 million in federal funds in a year.

to NSF awards, we requested that NSF coordinate with us during the audit resolution process. Although A-133 does not require NSF to take action on systemic findings when another agency is the cognizant or oversight agency for audit, we believed 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. During this reporting period, NSF completed resolution of nine reports, and in each case opted not to contact the responsible agency during resolution to coordinate efforts, but instead decided to rely on the awardees' corrective action plans and future monitoring of subsequent reports to see whether the findings are repeated.

While A-133 audits are, by design, "big picture" audits and are helpful to identify systemic issues, they may not always include in-depth testing of NSF awards. As part of our annual audit planning process, we use the results of the single audits to identify awardees whose lack of controls pose a higher risk to NSF funds and therefore may warrant OIG audits of specific NSF awards.

OIG Oversight Continues to Identify Timeliness and Quality Problems with Single Audits

The audit findings contained in A-133 reports help to identify potential risks to NSF awards and are useful to both NSF and the OIG in planning site visits, post-award monitoring, and future audits. Because of the importance of A-133 reports to the process of overseeing awardees, the OIG reviews all reports for which NSF was 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.

The Federal Audit Clearinghouse routinely makes available reports for audit years 2007 and prior when the audit covers \$50 million or more of expenditures and/or the Data Collection Form⁵ identifies current or prior year findings. However, due to resource limitations at the Clearinghouse, audit reports which do not meet these criteria have not been provided to federal officials unless requested. As part of our ongoing efforts to improve the quality of single audits, we undertook a special review of reports under NSF oversight without any identified audit findings. This "Oversight Project" review demonstrated that reports *without* audit findings had similar timeliness and quality issues as reports *with* audit findings.

Of the 108 audit reports⁶ we reviewed (including 79 reports in the "Oversight Project"), 70 (65 percent) did not fully meet federal reporting requirements. For example, we found that 26 reports (24 percent) were submitted late or the initial audit reporting package was incomplete. Other findings include:

- For 34 reports (31 percent), 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;
- Twenty-seven reports (25 percent) contained findings which did not adequately identify the federal award(s) to which the findings applied, the

⁵ Also known as Form SF-SAC, this form summarizes the results of the audit and is used by Federal agencies to quickly identify expenditures and findings which affect their awards.

⁶ The 108 reports were prepared by 65 different audit firms.

criteria or regulatory requirement upon which the findings were based, and/or the cause and effect of the findings;

- Seventeen reports (16 percent) either did not include a corrective action plan or the plan was incomplete to address the audit findings;
- The Data Collection Forms included with 13 reporting packages (12 percent) failed to accurately reflect the results of the audit, including 1 instance where the form failed to identify the existence of audit findings;
- For 11 reviews (10 percent), we identified quality issues which we had previously identified in reviews for the same awardees and auditors.

The OIG identified each of the potential errors and contacted the auditors and awardees, as appropriate, for explanations. 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 affect the results of the audit. However, we rejected three reports due to substantial non-compliance with federal reporting requirements, including one report which was reviewed under the “Oversight Project.” 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.

The uneven quality and potential problems raised by the reports sampled in the Oversight Project suggests that more of these reports should have been routed to federal officials for review. As a result of recent technological upgrades, single audit reports for audit years 2008 and beyond will routinely be made available to federal officials through the Federal Audit Clearinghouse. We will continue to monitor the quality of all audits under NSF cognizance or oversight.

Improvements Continue in Response to National Single Audit Sampling Project

We previously reported⁷ on the establishment of eight OMB workgroups to improve the quality and oversight of single audits. OIG staff continues to participate in the workgroup to revise the Council of the Inspectors General on Integrity and Efficiency (CIGIE) standards for conducting quality control reviews and desk reviews. During this period, several of the workgroups issued drafts to the National Single Audit Coordinators (NSAC) of proposed changes to Circular A-133 and related guidance. The proposed changes included the creation of new training requirements for auditors who perform single audits, clarification of definitions in OMB Circular A-133, and expansion of the guidance provided to auditors in the Compliance Supplement. NSF OIG staff provided comments in response to the drafts. The workgroup staff are currently consolidating NSAC comments and expect to issue exposure drafts of the proposed changes for public comment in the Federal Register during the next semiannual period.

⁷ September 2008 Semiannual report, pp. 21-22.

Audit Resolution

NSF Sustains \$3.3 Million of Questioned Costs from the Disclaimer of Opinion on the School District of Philadelphia

In September 2008,⁸ we reported that OIG auditors found the records supporting two NSF awards to the School District of Philadelphia (SDP) to be unauditible and therefore could not determine whether approximately \$13 million of direct and associated indirect costs and \$3.2 million of claimed cost sharing were allowable, allocable, and reasonable. Because of SDP's lack of documentation and its failure to take adequate corrective action on the internal control issues cited in a prior January 2000 OIG audit, NSF sustained \$3.3 million of the \$4.2 million in questioned costs. In its audit resolution, NSF indicated that correction of the cited internal control deficiencies was vital to an awardee successfully managing and overseeing its NSF funding. NSF further indicated it would not make awards to SDP until it could perform on-site verification to determine that it has adequate systems, policies and procedures in place.

WGBH Audit Results in \$775,939 Returned to Treasury and Correction of Prior NSF Error

In the March 2008 Semiannual Report,⁹ we reported on an audit of WGBH Foundation, a non-profit television production organization, which questioned \$808,383 of the approximately \$9.4 million in total costs claimed on five NSF awards. WGBH did not comply with either NSF or its own policies when it claimed and obtained reimbursement for \$775,939 for NSF project employment and rental contract costs before they were incurred. With the NSF appropriation supporting the grant set to expire, WGBH claimed these costs in advance to prevent losing access to the NSF Funds. WGBH believed that it had NSF's consent in claiming the \$775,939 of future costs and therefore disagreed with the questioned costs. The auditors also questioned \$32,444 of costs that either did not relate to the NSF awards or for which WGBH did not have adequate supporting documentation.

During audit resolution, NSF sustained \$801,646 of the total \$808,383 of questioned costs. However NSF rather than WGBH funded the majority of the recovered costs, because NSF's Office of General Counsel determined that the agency should have replaced the expiring funds at the time the award expired with a no-cost extension. NSF returned the \$775,939 from the expired appropriation to the U.S. Treasury Department and replaced the funds in the WGBH award with funds from an unexpired appropriation account. WGBH provided NSF with documentation for \$6,737 of questioned costs, but was requested to return \$25,707 of the remaining questioned costs for the unrelated and unsupported costs it had claimed.

To address the internal control weaknesses identified in the report, NSF required WGBH to provide for its review copies of WGBH policies and procedures for recording costs on its NSF awards and for maintaining documentation. NSF also required WGBH to develop, implement, and submit detailed policies and

⁸ September 2008 Semiannual Report, p. 17.

⁹ March 2008 Semiannual Report, p.17.

procedures for handling payments to foreign entities under NSF awards. Finally, NSF verified that WGBH developed an adequate policy for documenting service center rates.

Universities Required to Implement Changes to their Effort Reporting Systems

During this semiannual period, resolution was achieved on labor effort reviews of four universities that were previously reported: University of California, San Diego,¹⁰ University of Utah,¹¹ University of Illinois,¹² Urbana-Champaign, and Vanderbilt.¹³ In response to our audit findings, the universities have worked on implementing new time and effort systems to better meet federal effort reporting requirements, added internal control policies and structure to improve the timeliness of their labor effort certification processes, and provided training on charging effort to NSF sponsored awards. These actions should correct the deficiencies cited. NSF sustained \$87,820 of \$122,782 in questioned costs.

\$50,166 in Questioned Costs Sustained and Internal Control Weaknesses Corrected at the University of California, San Diego. In 2008, we reported that University of California, San Diego (UCSD) labor effort certifications, affecting approximately \$28 million of salary costs charged to NSF annually, were not timely and did not always ensure that salary and wages charged to NSF awards reasonably reflected actual work performed on sponsored projects.

As a result, the University instituted an automated effort reporting system (ECERT) to improve timeliness and accuracy of effort reports. UCSD also added new procedures to address the timeliness issue by notifying university officials about late certifications at progressively higher levels of supervision. In addition, UCSD has taken steps to strengthen its training program and ensure effort charged to NSF sponsored awards is accurately reported. These actions by UCSD should correct the deficiencies cited in the report. NSF sustained \$50,166 of the \$85,128 questioned costs and has verified that the sustained costs were repaid to NSF.

University of Utah Agrees to Implement Changes to its Effort Reporting System. The University of Utah has implemented a number of policy and internal control changes that should correct most of the deficiencies cited in the 2007 audit report. It agreed to establish a faculty and administrative committee to enhance its Personal Activity Report (PAR) submission guidelines to improve the timeliness of its effort reports. The University also clarified its guidance related to what constitutes “suitable means of verification”, to help ensure that individuals approving effort reports have a basis to know whether the work was actually performed. Finally, the University established mandatory effort report training for all employees involved in the PAR process.

¹⁰ September 2008 Semiannual Report, p. 17.

¹¹ March 2008 Semiannual Report, p.17.

¹² March 2008 Semiannual Report, p.16.

¹³ September 2008 Semiannual Report, pp 16-17.

\$6,329 in Questioned Costs Sustained, Internal Control Weaknesses Corrected at the University of Illinois. A 2008 audit report stated that the University of Illinois, Urbana-Champaign (Illinois) needed to improve the reliability of after-the-fact confirmation of actual salary charges to federal awards, which amount to \$86.3 million annually. Illinois reports that it has since developed and piloted a new web-based time and effort system that will make information on total labor charges available to certifying officials during their semi-annual certification period. In addition, formal written procedures have been implemented to improve the timeliness of Illinois's review and approval of labor effort reports. Finally, Illinois has agreed that as part of an annual risk assessment conducted by its internal auditors, the University's payroll distribution and labor effort report system will continue to be subject to periodic reviews, particularly to ensure compliance with federal laws and regulations. NSF sustained all \$6,329 in questioned costs.

\$31,325 in Questioned Costs Sustained and Internal Control Weaknesses Corrected at Vanderbilt University. In 2008, OIG auditors reported that Vanderbilt University did not approve effort reports timely and/or document certification dates in a majority of the records sampled. Vanderbilt states that it has since developed and implemented a web-based effort reporting system called Electronic Personnel Action Change system (ePAC), providing a more effective and timely labor effort certification system. In addition, the University has agreed to update its policies to reflect the changes brought about by ePAC. Vanderbilt's Provost Office issued written guidance to: improve the accuracy of labor effort charges, establish tolerance ranges when actual labor effort varies from amounts claimed, and provide for proper tracking and reporting of cost share commitments on sponsored projects. NSF sustained all of the \$31,325 in questioned costs.

NSF Removes Unallowable Profits from Arctic Contract

In our September 2007 Semiannual Report,¹⁴ we reported on two audits of a revised Disclosure Statement and an associated Cost Impact Proposal that VECO USA Inc. (presently CH2M HILL) submitted in regard to a proposed accounting change. The contracted auditors, Defense Contract Audit Agency (DCAA), took no exception to either the Disclosure Statement revision or the proposed increase in contract cost, but did not express an opinion on the \$45,240 of increased profit that VECO proposed to charge NSF as a result of its accounting change.

Shortly after DCAA issued its audit reports, NSF modified its contract with VECO to pay both the increase in contract cost due to the accounting change and the associated increase in profit. OIG followed up with a separate audit to review the allowability of paying the increase in profit under the arrangement entered into between VECO and NSF, and found that it was not allowable under the Federal Acquisition Regulations, which prohibit a cost-plus-a-percentage-of-cost system of contracting. NSF resolved this audit by reversing the entire \$45,240 increase in profit. As a result of this audit, NSF also discovered and reversed a similar \$10,283 increase in profit awarded earlier to VECO, recouping a total of \$55,523 of funds which can be put to better use.

¹⁴ September 2007 Semiannual Report, p. 15.

NSF Sustains \$22,796 of Questioned Costs Due to Internal Control Weaknesses at WestEd

In September 2008, we reported that OIG audited \$11 million of costs claimed by WestEd, a non-profit educational research organization, and identified four significant internal control weaknesses in WestEd's financial management that resulted in approximately \$1 million in questioned costs. During audit resolution WestEd provided documentation to support the portion of questioned costs that were cost shared. However, NSF requested that WestEd revise its cost share policy to ensure that in the future its supporting documentation provides the basis for determining the value of third party in-kind contributions, in accordance with federal guidelines. NSF also sustained \$15,130 in questioned subaward costs but urged WestEd to adhere to its subaward monitoring policy. In addition, NSF sustained \$7,666 in overstated indirect costs claimed as a result of misclassifying participant support costs and claiming sales taxes on alcoholic beverages. To prevent recurrences, WestEd is providing additional training to its program and accounting personnel and amending its accounts payable policy to exclude reimbursement of sales tax on alcoholic beverages. NSF will review the revised policies once they are completed and submitted by WestEd.

Work in Progress

OIG Monitoring NSF's Antarctic Support Contract Competition

NSF is currently deciding which contractor will manage the United States Antarctic Program (USAP) for the next 13.5 years. The new contract, NSF's largest, is expected to be valued at over \$2.3 billion and provides for Antarctic research logistics, support, and operations and facilities maintenance. The acquisition is one of NSF's self-identified significant management challenges because the process has inherent risks and represents a significant investment of NSF dollars.

In an effort to prevent the types of problems identified through audits of the current USAP contract, and share "lessons learned," we are monitoring NSF activities regarding this procurement. Specifically, we are requesting information on NSF processes for evaluating the reasonableness of the offerors' costs as required by Federal Acquisition Regulations. We also are asking how NSF plans to address issues such as the adequacy of the offerors' accounting systems and controls for complying with disclosed accounting practices. In providing independent advice during this pre-award phase of the procurement, we hope to assist NSF in identifying and managing the many risks involved in this large procurement at an early stage and thereby minimize future contract administration challenges and problems.

NSF's Audit Resolution Process

An audit of the process NSF follows to resolve the findings and recommendations of OIG and A-133 single audits conducted of NSF award recipients is proceeding. The objectives are to determine: 1) whether NSF has adequate policies and procedures for resolving and closing out the audit recommenda-



Deputy AIGA Jim Noeth receives a PCIE/ECIE Award for Individual Accomplishment.

tions, and 2) whether NSF implements the policies and procedures effectively and timely. To address the objectives, we are evaluating NSF's resolution actions for a statistically representative sample of audits issued during the period FY 2003 through FY 2007. We anticipate issuing two reports; one in the next semiannual period focused on resolution of OIG audits of grantees, and a second report in the following semiannual period addressing resolution of A-133 single audits.

Sufficiency of NSF's Cooperative Agreements for Large Facility Projects

The OIG is conducting a series of audits to determine whether the terms and conditions included in NSF's cooperative agreements for the management and operation of its large facilities projects are sufficient for NSF to provide stewardship over its programs and assets. Using a representative sample of six currently operating facilities, we are assessing the sufficiency of NSF's cooperative agreements to ensure: 1) accomplishment of programmatic goals; 2) financial and administrative account-ability; 3) protection of NSF assets; and 4) compliance with laws and regulations. We issued our first report on terms and conditions ensuring the accomplishment of programmatic goals in September 2008.

Labor Effort Reviews Continue at Universities

Since September 2005, the OIG has been conducting a series of audits to assess the adequacy of accounting and reporting processes for labor costs at NSF's top-funded universities. Approximately one-third of all NSF funds provided to universities are for salaries and wages, amounting to more than \$1.2 billion annually. Since The American Recovery and Reinvestment Act will significantly increase NSF's funding of grants over the next 18 months, NSF's payments for salaries and wages to universities are also likely to increase, thereby enhancing the timeliness and impact of the labor effort reviews already performed.

To date, we have completed seven audits and another nine are in progress. Five of those will be completed by the end of the calendar year. The objectives of these audits are to evaluate whether the 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 cost principles. Once these 16 audits are completed, we plan to assess all audit findings and recommendations to determine their relevance to the broader population of NSF grants.