

National
Science
Foundation



Office of
Inspector
General



Semiannual Report to Congress

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About The National Science Foundation...

The National Science Foundation (NSF) is charged with supporting and strengthening all research disciplines, and providing leadership across the broad and expanding frontiers of science and engineering knowledge. It is governed by the National Science Board which sets agency policies and provides oversight of its activities.

NSF invests approximately \$7 billion per year in a portfolio of more than 35,000 research and education projects in science and engineering, and is responsible for the establishment of an information base for science and engineering appropriate for development of national and international policy. Over time other responsibilities have been added including fostering and supporting the development and use of computers and other scientific methods and technologies; providing Antarctic research, facilities and logistic support; and addressing issues of equal opportunity in science and engineering.

And The Office of the Inspector General...

NSF's Office of the Inspector General promotes economy, efficiency, and effectiveness in administering the Foundation's programs; detects and prevents fraud, waste, and abuse within the NSF or by individuals that receive NSF funding; and identifies and helps to resolve cases of misconduct in science. The OIG was established in 1989, in compliance with the Inspector General Act of 1978, as amended. Because the Inspector General reports directly to the National Science Board and Congress, the Office is organizationally independent from the agency.

About the Cover...

Original photograph by Mary Pully, OIG.



This Semiannual Report to Congress highlights the activities of the National Science Foundation (NSF), Office of Inspector General for the six month period ending September 30, 2012. During this reporting period, 12 audit reports and reviews were issued, four of which questioned \$6.6 million, and one of which found more than \$154 million of unallowable costs in a proposal for a major construction project. Our investigative staff closed 63 administrative and criminal/civil investigations, had 11 research misconduct cases result in findings by NSF, and recovered \$1,188,265 for the government.

Our work reflects our robust and sustained commitment to helping NSF strengthen its stewardship and accountability over the millions in taxpayer dollars dedicated to advancing scientific research. To attain the level of accountability necessary to safeguard these funds and to ensure that they are spent appropriately, NSF cannot limit its attention solely to scientific efforts—it must also focus on enabling sound financial management of the taxpayer money entrusted to the Foundation. In some instances, achievement of this second goal can require changes in long-held processes and business approaches. We recognize that change of this magnitude presents formidable challenges and we appreciate NSF's ongoing efforts to address our recommendations.

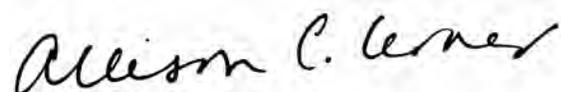
In the past six months, we issued an Alert Memo that underscored serious weaknesses in NSF's cost surveillance measures for awarding and managing cooperative agreements for high-risk, high-dollar large facility projects. Given the critical importance of these projects and the billions of dollars at stake, it is vital that NSF strengthen its end-to-end cost monitoring processes over high-risk cooperative agreements.

Through the use of computer assisted auditing techniques and data analytics, our audit at the University of California, Santa Barbara, questioned more than \$6 million in claimed costs including nearly \$2 million of overcharged summer salaries and approximately \$500,000 of inappropriate costs transfers into NSF awards, among other things. Also, during this reporting period an audit involving a non-profit managing three awards valued at approximately \$3.2 million questioned more than \$527,000, including costs for fringe benefit rates that exceeded the rate approved by NSF and payroll costs that lacked adequate supporting documentation.

Our investigative work recovered over \$1 million for the government from individuals and entities that attempted to fraudulently obtain funds intended for scientific research. We also referred nine cases of research misconduct to NSF, including an assistant professor who exhibited a pattern of plagiarism, a small business official who plagiarized in numerous NSF proposals, and a PI who plagiarized in two NSF proposals.

This report also contains the top management challenges we have identified for NSF in FY 2013. In the wake of the Blue Ribbon Panel Report on Antarctic logistical support and the awarding of the new contract for such support, we have added NSF's management of the U.S. Antarctic Program (USAP) to that list. The panel found that the USAP logistics system is badly in need of repair and that failure to upgrade the system will increase the cost of logistics until these costs squeeze out funding for science. NSF faces the challenge of ensuring that logistical improvements are made and that the systems necessary to support scientific research are sound.

My office is focused on making recommendations to help ensure that NSF spends its research funds in the most effective and efficient manner while maintaining the highest level of accountability, and we are committed to working with the Foundation to strengthen its processes to reach this goal. We look forward to our continued partnership with NSF and with Congress toward the mutual goal of safeguarding taxpayer dollars and advancing vital scientific research.

A handwritten signature in black ink that reads "Allison C. Lerner". The signature is written in a cursive style with a prominent loop at the end of the last name.

- We issued an Alert Memo to NSF to bring attention to serious weaknesses in the Foundation's cost surveillance measures for awarding and managing its nearly 700 open Cooperative Agreements (CAs), totaling nearly \$11 billion. Among other things, NSF uses Cooperative Agreements to construct and fund operations and maintenance of its large facility projects. Since NSF has chosen to use CAs for these high-dollar, high-risk projects, it is imperative that it exercise strong cost surveillance controls over the lifecycle of such ventures. We found that NSF was not conducting audits of awardees' proposed budgets and accounting systems at the pre-award stage, nor was it routinely requiring incurred cost audits post-award. While none of these actions is required by law or regulation, they are essential tools for ensuring accountability in high-risk, high-dollar projects. In their absence, unallowable costs may go undetected. Given the critical importance of the projects NSF funds through Cooperative Agreements and the billions of taxpayer dollars at stake, it is vital that NSF strengthen end-to-end cost monitoring over high-risk Cooperative Agreements.
- An audit of the National Ecological Observatories Network's \$433.7 million proposed construction budget disclosed more than \$154 million in questioned and unsupported costs. Based on the severity of these deficiencies, an adverse opinion was issued stating that the proposal was not prepared in accordance with OMB requirements and did not form an acceptable basis for the negotiation of a fair and reasonable price.
- An audit of NSF awards at the University of California, Santa Barbara, (UCSB) questioned more than \$6.3 million of the costs claimed by the University to NSF because UCSB did not comply with Federal and NSF award requirements. The questioned costs included nearly \$2 million of overcharged summer salaries; over \$2.8 million because UCSB did not fulfill its grant cost share requirements; and approximately \$500,000 of inappropriate cost transfers into NSF awards for costs such as salary incurred after the awards had expired.
- Our investigation involving fraud related to NSF and Department of Education grants led to a former school superintendent in California being ordered to pay more than \$325,000 and being sentenced to prison.
- Our investigative work has identified several areas where the Small Business Innovation Research program is vulnerable to fraud, waste, and abuse, and we have provided a Management Implication Report to NSF based on this work. NSF has acted on a number of the report's recommendations to reduce the risk of fraud in the program



During this reporting period, we issued an Alert Memo and seven audit reports that included \$6.6 million of questioned costs and more than \$154 million of unallowable costs in a proposal for a major construction project. As we worked with NSF to resolve audits that had disclosed millions in unallowable contingency costs, we identified serious weaknesses in NSF's cost surveillance measures for awarding and managing cooperative agreements that the Foundation uses to construct and fund the operations and maintenance of its large facility projects.

NSF currently has nearly 700 open cooperative agreements, totaling nearly \$11 billion. To bring the serious weaknesses in NSF's processes for these high-risk high dollar awards to its immediate attention, we issued the Alert Memo. Without improving end-to-end processes over cooperative agreement monitoring, NSF cannot ensure that it receives reasonable value for taxpayer dollars and that those dollars are not misused.

NSF Needs to Establish Greater Accountability over Cooperative Agreements for its Large Facility Projects

A federal agency can use a Cooperative Agreement (CA) when entering into a relationship with a recipient when the primary purpose of the relationship is to transfer a thing of value to carry out a public purpose of support or stimulation, and substantial involvement between the federal agency and the recipient when carrying out the agreement is expected. NSF currently has 685 open cooperative agreements, totaling nearly \$11 billion; thirty-eight of these CAs are for over \$50 million each. Among other things, NSF uses CAs to construct large facility research projects and to fund their operations and maintenance. Since NSF has chosen to use CAs for the construction, operation, and maintenance of high-risk, high-dollar large facility research projects, it is imperative that it exercise strong cost surveillance controls over the lifecycle of such projects.

Over the last two years, audits of the proposed construction budgets for three large facility research projects valued at \$1.1 billion questioned approximately \$305 million (almost 28 percent) in unallowable or unsupported costs. The audits found that all three of the awardees' proposals had significant unallowable contingency costs, and two proposals were initially found unacceptable for audit. After much work, one of these proposals was audited, and the auditors issued an adverse opinion, finding that the proposal did not form an acceptable basis for the negotiation of a fair and reasonable price. The third proposal, which was submitted by an awardee found to have an inadequate accounting system, remains unaudited.

As we worked with NSF to resolve these audits, we identified serious weaknesses in NSF's post-award monitoring processes for high dollar, high-risk projects that compounded our concern that unallowable costs could be charged to awards, thereby placing federal funds awarded under CAs at further risk. NSF does not routinely obtain incurred cost submissions or audits of costs claimed on its largest CAs to determine the allowability of direct and indirect costs claimed on federal awards. While not required by law or regulation,

such submissions and audits are important tools for ensuring accountability in high-risk, high-dollar projects. In the absence of such submissions and audits, unallowable costs charged to these awards may go undetected because NSF lacks sufficient visibility over incurred costs.

Given the critical importance of the projects funded through cooperative agreements and the billions of dollars at stake, it is vital that NSF strengthen its end-to-end cost monitoring processes over high-risk CAs from the proposal stage to close out. Thus, we issued an Alert Memo to bring these weaknesses and our recommendations for improving the processes to NSF's attention.

Pre-Award

NSF's pre-award process includes a limited review of awardees' cost estimates and budgets by a panel, comprised of scientific and technical experts as well as individuals with administrative, cost, and project management experience. Based on these reviews, panels provide reports to NSF that assess whether, in the panel's view, the project can be completed within the estimated cost and contingency, in light of NSF's no cost overrun policy. The panel reviews do not reference or apply the OMB cost principles in their evaluations. Consequently, panels do not review cost proposals for overstated costs with the same level of scrutiny required in an audit. In fact, the final report from the panel reviewing one of NSF's largest CAs, noted that NSF policy does not require detailed, independent cost reviews and recommended that NSF consider having such a review performed. Despite this recommendation, NSF approved the cost estimates and made the award without an audit.

At the pre-award stage, our main concern is ensuring that, in high-risk, high-dollar projects, the agency is taking proper steps to ensure that proposals provide an adequate basis for the negotiation of project costs, and that potential recipients are capable of appropriately managing federal funds. Such steps should include (1) obtaining proposal audits for large CAs prior to award to ensure that cost estimates are reasonable; (2) obtaining audits of prospective awardees' accounting systems and estimating practices to determine whether these systems are capable of properly managing federal funds, and (3) using Form 424C or an equivalent form or process which displays allowable and unallowable costs for each budget item.

Post-Award

NSF receives certain financial reports on its large facility CAs, but these reports do not contain the level of detail needed to perform adequate cost surveillance. NSF only receives sufficient cost details from a few awardees that also have large contracts and are therefore required to provide annual incurred cost submissions. Large CA awardees that do not also have contracts are not required to provide NSF with annual incurred cost submissions.

Incurred cost submissions, or their equivalent, are important for proper cost monitoring because they provide visibility over awardees' claimed costs since they include certified schedules of direct costs by award (identified by cost

element), and applied indirect expenses. Absent incurred cost submissions or their equivalent, NSF cannot adequately monitor awardees' expenditure of government funds during the post-award stage, compounding our concern that unallowable costs could be charged to awards and go undetected.

In addition, because NSF does not have incurred cost submissions, the OIG must work with NSF and awardees to obtain submissions before an audit starts, thus excessively prolonging our audit process. For example, it took us ten months (end of June through end of April 2012) to receive one awardee's (Associated Universities Inc.) incurred cost submissions for three years. This was despite NSF's cooperation in requesting its awardee to provide the submissions.

Audits of incurred cost submissions are also critical for proper monitoring, and would reveal instances of noncompliance with federal regulations as well as costs claimed that are unallowable, unallocable, or unreasonable. The audits will provide vital information and also prevent recurrence of any infractions in future periods of the awards. NSF does not routinely require such audits for high-dollar, high-risk CAs.

Without improving end-to-end processes over CA monitoring from the proposal stage to award close-out, NSF cannot affirm that it has received reasonable value for taxpayer dollars and that those dollars are not misused. NSF needs to institute a strengthened control environment together with additional pre-and post-award cost surveillance measures to properly administer high-risk, high-dollar CAs in a manner that protects federal funds.

We recommended that NSF strengthen cost surveillance policies and procedures to ensure adequate stewardship over federal funds and that it implement increased monitoring for its largest CAs valued over \$50 million.

More than \$154 Million in Questioned and Unsupported Costs in NEON's Proposed Budget

An audit of the National Ecological Observatories Network's (NEON) \$433.7 million proposed construction budget disclosed more than \$154 million in questioned and unsupported costs. Based on the severity of these deficiencies, the auditors issued an adverse opinion stating that the proposal was not prepared in accordance with OMB requirements and did not form an acceptable basis for negotiation of a fair and reasonable price.

The audit disclosed that NEON could not provide adequate supporting documentation for \$52.3 million of proposed cost categories including labor, materials, and equipment. Other significant deficiencies included escalation based on unreasonable and inappropriate factors; consultant costs that violated OMB cost principles; unallowable food and alcohol costs; and questioned travel costs. In addition, the entire \$72.6 million in proposed contingency costs was questioned because there was a lack of evidence to support that the amounts budgeted were for events that could be "foretold with certainty as to time, intensity or an assurance of their happening" as required by OMB. The audit

also found that NEON did not provide adequate supporting documentation for the values and factors that were used as the basis for proposed contingency costs.

NEON stated that NSF's technical panels reviewed the proposal in accordance with NSF procedures. The fact that the panels accepted the proposed costs in light of the significant deficiencies cited in the audit raises serious concerns about the adequacy of NSF's process. If the review process worked as it should and was providing accountability over federal tax dollars, awardees could readily produce the necessary supporting documentation to auditors and that documentation would be sufficient to withstand independent scrutiny.

It is noteworthy that prior to this report, auditors issued three inadequacy memos over a four-month period between June and September 2011. The inadequacy memos were issued because of significant deficiencies in the cost proposal, and the inclusion of approximately \$76 million in unallowable contingency and honoraria costs. In February 2012, NEON submitted its revised proposal for audit. Completion of this audit resulted in finding an additional \$78 million of questioned and unsupported proposed costs.

We recommended that NSF require NEON to submit a revised proposed budget with adequate supporting documentation for *all* costs and that it have that proposal audited before additional funds are provided to NEON.

NSF's Management of Contingency in EarthScope Award Did Not Safeguard Federal Funds

In recent years, NSF instituted a policy of ensuring large facility construction projects do not exceed their planned budgets by requiring that "contingency" costs be included in the initial proposed budget. Previous audits of three of NSF's large facility construction projects have questioned over \$223 million in unallowable contingency costs out of total proposed costs of over \$1.1 billion.

Because of the large dollar amounts associated with contingencies in NSF awards, the risk posed by NSF's current process of funding these costs, and the complexity of the issue, we conducted an audit of the construction portion of EarthScope, a closed award, to examine NSF's management and use of contingencies. This project was awarded in 2003 for approximately \$197.4 million, including an estimated \$10.5 million for contingency.

Consistent with the three proposal audits discussed, we found that the proposed contingencies for the EarthScope projects were not supported by cost data and did not comply with the OMB cost principles. NSF and the awardees used flat percentages to determine the contingency amounts for EarthScope. We were unable to find, and project officials were unable to provide, any supporting evidence to show how these estimates were calculated, therefore, there was no evidence that they met the cost principle's "with certainty" requirement.

Without that evidence, we concluded that the budgeted contingencies were unallowable based on OMB Circulars, which state that “contributions to a contingency reserve or any similar provision made for events the occurrence of which cannot be foretold with certainty as to time, intensity, or with an assurance of their happening are unallowable.”

Further, NSF’s policies and procedures did not reflect the OMB cost principles. Some defined contingency differently and none of the contingency definitions distinguished between foreseeable and unforeseeable events as the cost principles do. NSF’s definition of contingency should be consistent with the OMB cost principles to ensure NSF’s compliance with OMB requirements, and should be consistently articulated in NSF guidance. A lack of clarity as to what constitutes contingency could undermine the agency’s ability to oversee contingency funds.

In 2011, NSF revised its contingency guidance document. The revised guidance stated that NSF expects awardees to apply estimates of the likelihood of risk factors occurring and their impact on the project budget, which should prevent awardees from using flat percentages to estimate contingency. However, verifiable support sufficient to meet OMB requirements is still necessary in order for the contingency to be allowable.

In addition, we found that a weak management control environment undermined NSF’s ability to manage contingencies. Most importantly, two of the EarthScope awardees expended nearly \$7.9 million, or 75 percent, of awarded contingency funds, but did not separately track these expenditures in their accounting systems. Thus, neither we nor NSF could confirm that the awardees spent the contingency funds for items requested in the change control board actions. This lack of clarity makes it very difficult, if not impossible, for us to determine if contingency amounts were used appropriately.

Also, NSF initially lacked visibility over EarthScope’s expenditure of contingency funds because its process, prior to centrally managing contingencies in FY 2006, permitted the awardees to execute most change control board actions without NSF’s review or approval. We found that the awardees had executed all of the existing change orders (which totaled over \$1 million), thereby limiting NSF’s ability to ensure that requests for and approval of the use of contingency, were appropriate.

Finally, in some instances NSF approved the use of contingency funds for matters that did not appear to represent the materialization of contingent events. For example, one project used \$728,875 to fund an increase in the general and administrative rate, a large portion of which was due to the awardee retaining space NSF told them it would not support. Using contingency funds for such expenses increases the risk that sufficient funds will not be available if true contingent events occur, and that project cost overruns will be obscured.

We recommended that the NSF improve its award, management, and oversight of contingency funds by strengthening its guidance, processes and internal controls. Among other things, the agency should require awardees to support

contingency estimates in budget proposals with adequate cost data and release contingency funds for unforeseeable events only when the awardee demonstrates a bona fide need supported by verifiable cost data.

NSF agreed with our recommendation to require awardees to use OMB's Form 424C. However, NSF asserted that it was already in compliance with the recommendations that contingency estimates in budget proposals be adequately supported and with OMB cost principles pertaining to contingencies. We look forward to receiving NSF's Corrective Action Plan and working with NSF officials to resolve the recommendations.

More than \$6.3 Million of Questioned Costs at the University of California, Santa Barbara

The University of California, Santa Barbara (UCSB) is among the top 30 largest NSF award recipients with 603 active awards. Through the use of computer assisted auditing techniques and data analytics, the audit questioned more than \$6.3 million of the costs claimed by the University to NSF because UCSB did not comply with Federal and NSF award requirements.

Nearly \$2 million of overcharged summer salaries resulted from UCSB's use of a complex series of mathematical calculations to maximize salary budgeted for those awards regardless of the labor effort worked by employees; we also found over \$2.8 million of excess Federal Cash disbursements because UCSB did not fulfill its grant cost share requirements. Additionally, we found approximately \$500,000 of inappropriate cost transfers into NSF awards for costs such as salary incurred after NSF awards expired, unrelated equipment purchases, and budget overruns from other awards transferred into awards with available funds.

We determined that UCSB overcharged NSF for over \$473,000 of indirect costs that were not in compliance with the negotiated indirect cost rate agreement or with NSF policy. We also found that the UCSB charged approximately \$440,000 in unallowable costs to NSF grants for items such as equipment not related to the award and equipment purchased after the grant expired.

Our audit concluded that the University had a practice of charging untimely and unrelated costs into its NSF awards. This practice continued at the University throughout our audit period and resulted in these significant amounts of questioned costs.

We recommended that NSF direct UCSB to repay the \$6.3 million of questioned costs and strengthen controls and processes over its federal awards. UCSB disagreed with the audit findings.

More than \$527,000 in Questioned Costs identified at DOSECC, Inc.

An audit of three awards valued at approximately \$3.2 million made to the Drilling, Observation and Sampling of the Earth's Continental Crust, Inc. (DOSECC) identified \$527,504¹ of questioned costs. The questioned costs

¹ Included in the \$527,504 of questioned costs are \$263,754 of costs reported in OMB A-133 reports that are being resolved by NSF.

consisted of indirect and fringe benefit costs that exceeded the rates approved by NSF; payroll costs based on documentation that was not adequate to support the charges to the NSF awards; and purchases for items that were unsupported by adequate documentation and were not allowable under federal cost principles, or were not related to the award.

We recommended that NSF resolve the questioned costs and ensure that DOSECC implements procedures to correct the problems that led to the questioned costs. DOSECC stated that it has taken corrective action to address the audit's findings.

Nearly \$30,000 in Questioned Costs for Awards to University Corporation for Atmospheric Research

As of September 30, 2011, the University Corporation for Atmospheric Research (UCAR) reported expenditures for 121 NSF awards, totaling \$949 million. An audit at UCAR questioned nearly \$30,000 of costs claimed on awards for items such as food and beverages for staff meetings and parties, and expenses for retirement parties. The audit included a review of 13 American Recovery and Reinvestment Act (ARRA) awards and concluded that ARRA funds had been properly accounted for and segregated, as required.

Recommendations included that UCAR return the questioned costs and closely monitor conference-related expenditures. UCAR agreed to repay over half of the questioned costs.

Concerns about Use of Climate Change Education Program Grants for Public Policy Advocacy

In response to a request from Senator Enzi, we begin an audit to evaluate the sufficiency of NSF's controls for ensuring that funds are not used for advocacy in grants under the Climate Change Education Program (CCEP). We first attempted to identify any requirements that prohibit advocacy in CCEP. We found that while there are government-wide requirements prohibiting the use of federal funds for lobbying, there are no such restrictions pertaining to the use of federal funds for public policy advocacy that fall short of affirmative efforts aimed at influencing legislation. Further, NSF does not have any Foundation-wide restrictions pertaining to public policy advocacy. While we closed the audit due to a lack of policy and criteria on public advocacy, we provided findings and suggestions to NSF.

We found that grant solicitations for the Climate Change Education Program contained language intended to address the issue of advocacy such as statements that projects should not "delve into advocacy" or "prescribe a specific policy position." We did not find statements pertaining to advocacy in award solicitations for any other NSF program. The statements for CCEP solicitations were vague and unclear and make it difficult for proposers to appropriately respond, for merit reviewers to accurately evaluate, and for NSF to properly enforce them.

We made several suggestions to NSF including that if it decides to retain this language in award solicitations, it should clearly articulate what the language means and provide examples of the types of activities it considers inappropriate. We further suggested that if NSF's intent is to prohibit such activity in all its programs, it should clearly and formally articulate that position and communicate it to stakeholders.

OID Participates in Recovery Accountability and Transparency Board Project

We participated in a Recovery Accountability and Transparency Board review with 15 other OIGs to identify which actions and processes have been either beneficial or posed challenges to agencies or their respective OIGs in meeting the requirements of the American Recovery and Reinvestment Act (ARRA). NSF plans to continue with some aspects of new practices implemented as a result of ARRA including monitoring awardee expenditure rates and developing interim performance measures. Likewise, the OIG will continue to utilize new auditing and outreach techniques we implemented during ARRA implementation such as data analytics.

The NSF's approach to meeting its requirements for ARRA included funding highly-rated proposals that were previously declined due to lack of available funding. This was one of the tools that enabled NSF to award most of its ARRA funds by September 30, 2009. In addition, according to NSF's Office of Budget, Finance, and Award Management staff, increased monitoring and oversight of ARRA awards, agency cross collaboration, and outreach to the scientific community led to a high rate of awardee compliance with recipient reporting requirements, program staff's increased awareness of stewardship, and improved relations between the OIG and NSF.

A-133 Audits

One third of Single Audit Findings are Repeated from Previous Audits

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 must 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.

The 163 audit reports reviewed and referred² to NSF's Cost Analysis and Audit Resolution (CAAR) Branch this period covered NSF expenditures of \$6.8 billion during audit years 2008 through 2012, and resulted in 154 findings

² We also reviewed and rejected one report based on audit quality deficiencies. We will report on the opinions and findings for this audit upon receipt of the revised report.

at 67 NSF awardees. Seven awardees received qualified opinions on their compliance with federal grant requirements. Fifty-one of the 154 findings (33 percent), including 15 material weaknesses, were repeated from previous audits, calling into question the awardees' ability to adequately improve their management of NSF awards. Twenty findings identified by the auditors, including 6 material weaknesses, resulted in \$4.1 million in questioned costs to NSF awards, of which nearly \$1 million was caused by lack of adequate supporting documentation of the amounts charged to NSF awards. 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, equipment, travel, and indirect costs charged to awards; inadequate monitoring of subrecipients; inability to prepare the financial statements; and late submission of financial and/or progress reports.

We also examined 58 management letters accompanying the A-133 audit reports and found 38 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, ineffective segregation of duties, and inadequate subrecipient monitoring. These deficiencies affected control processes that are essential to ensuring stewardship of NSF funds and preventing fraud and abuse.

Desk Reviews Find Audit Quality and Timeliness Issues in More Than Half of Single Audits

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 72 audit reports³ for which NSF was identified as the cognizant or oversight agency for audit, and found that 34 fully met federal reporting requirements. Thirty-eight reports (53 percent), including 9 of the 19 reports with ARRA expenditures, contained audit quality and timeliness issues. The quality issues we identified included 18 reports 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. Twelve reports were submitted after the due date required by OMB Circular A-133. Of the 13 reports which included audit findings related to compliance with federal requirements, 6 reports (46 percent) failed to adequately present the required elements of the finding to assist auditee management in correcting the reported deficiency, and 7 reports failed to adequately present the required elements of the auditees' management's plan to correct the deficiencies reported. In addition, 7 reporting packages

³ The audits were conducted by 53 different independent accounting firms.

contained Data Collection Forms (Form SF-SAC) that failed to accurately reflect the results of the audit. Finally, 9 of the reports repeated errors which we had identified to the awardees and auditors during reviews of prior years' reports.

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 one report 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.

OIG Quality Control Review Finds Unacceptable Single Audit by Public Accounting Firm

Quality Control Reviews consist of on-site reviews of auditor documentation in support of Single Audits. Quality control reviews are an important tool for determining whether Single Audits meet government auditing and reporting requirements, and for helping to improve future audit quality.

During this period, we issued a report of our quality control review of the Single Audit of an NSF awardee. We found material audit quality deficiencies in the audit which in total resulted in an unacceptable audit, and instructed the auditors to conduct additional work. Further, due to the serious nature of the deficiencies we referred the audit firm to the Professional Ethics Division of the American Institute of Certified Public Accountants.

The audit quality deficiencies in the single audit performed at Chabot Space and Science Center resulted in a failure to appropriately identify the separate nature of the two major programs. The auditors also failed to adequately identify and test for compliance with the requirements applicable to Activities Allowed or Unallowed, Allowable Costs / Cost Principles, Period of Availability, Procurement and Suspension and Debarment, and Reporting for both major programs, as well as the requirements applicable to Davis-Bacon Act and Equipment and Real Property Management for one of the major programs. Further, the auditors failed to properly test the Schedule of Expenditures of Federal Awards. The auditors generally concurred with our recommendation to conduct additional test work in these areas, and anticipate completion of the additional work during the next period. We will review the additional work within 3 months of notification that the additional work has been completed.

OIG Follow-up Actions on Quality Control Review

Our follow-up review of the audit of WNET.ORG and Subsidiaries⁴ found that the additional work performed by the auditors generally met applicable federal requirements. As a direct result of the additional work performed in response to our QCR, the auditors identified \$525,655 in questioned costs on NSF awards, determined that the two original instances of noncompliance were in

⁴ March 2012 Semiannual Report, p.15.

fact material weaknesses in internal control over federal awards, identified two new material weaknesses in internal control over federal awards, and qualified their opinion on compliance with requirements applicable to all major programs.

Audit Resolution

University of Wisconsin Required to Fund \$405,587 in Overruns on NSF Ice Coring and Drilling Services Contract

In response to audit findings, the University of Wisconsin was required to pay \$405,587 for cost overruns on NSF's Ice Coring and Drilling Services contract for 2006-2008. The cost overruns resulted from a lack of proper internal controls.

NSF Sustains more \$166,130 in Questioned Sub-awardee Costs under the Trustees of Boston University Audit Report

In response to audit recommendations, NSF sustained \$166,130 in questioned costs for two sub-awards under an award to the Trustees of Boston University, and the University agreed to strengthen its sub-awardee monitoring. The sustained questioned costs included management and consultant fees.

Non-Profit Improves Travel Policies and Strengthens Internal Controls

In response to audit recommendations, the Institute for Defense Analyses, a non-profit corporation which operates a Federally Funded Research and Development Center, improved its travel policies and internal controls to help ensure that claimed costs are reasonable and adequately supported.

NSF Issues Guidance for Large Facilities, which Closes Final Recommendations of Gemini Audit

In response to outstanding audit recommendations from 2001, NSF has issued policies for large facility projects that include financial, risk, and cash management guidance for project managers overseeing those facilities currently under construction. During this reporting period, NSF conducted training for its project managers and other interested staff, which resulted in closing the final remaining recommendation from the Gemini Audit.

NSF Addresses Concerns Identified in Evaluation of its Facebook Site

In response to our recommendations, NSF has acted to implement suggestions with regard to content control, disclaimers, and potential conflicts of interest on its Facebook site.

Civil and Criminal Investigations

Former NSF Program Officer Convicted of Submitting False Statements on Financial Disclosure Forms

A former NSF program officer was ordered to pay a \$5,000 fine and \$1,601 in restitution after he pled guilty to making false statements on his annual financial disclosure reports submitted to NSF from 2006 through 2010. He retired while under investigation after 36 years of employment at NSF. The program officer failed to disclose that he received gifts and travel-related reimbursements, such as lodging, transportation, and food, from a restricted source, a professor at a university who received NSF grants. He disguised some of the gifts and reimbursements as false invoices submitted to the university from a company owned by a second professor at a different university. Both of these professors regularly traveled with the program officer to international scientific conferences. The program officer also concealed that he received money for international travel from a university while receiving reimbursements from NSF for that same travel.

Former School Superintendent Sentenced to Prison and Ordered to Pay More than \$325,000 in Restitution

We previously reported the indictment of a former school superintendent and two former university professors in California for fraud related to NSF and Department of Education grants to support elementary school science and math education.⁵ The former superintendent pled guilty to mail fraud charges,⁶ and the two former university professors pled guilty to submitting false statements. The former superintendent was ordered to pay \$325,282 in restitution and was sentenced to five months in prison followed by five months in a residential reentry center. Upon release, he will be on supervised release for three years. Both former professors were sentenced to five years of probation.

Florida Businessman Sentenced to Prison for Misuse of NSF Logo

We previously reported on a Florida business owner's guilty plea to falsely making, forging, and using the NSF seal.⁷ During this reporting period, he was sentenced to a year and a day in prison, followed by two years of supervised release, and ordered to pay a \$25,000 fine.

Nonprofit Organization Debarred For Ten Years

We previously reported on a former NSF Senior Executive Service employee who pled guilty to filing a false financial disclosure to NSF and a false tax return,⁸ and was sentenced to six months home detention, \$15,393 restitution

5 March 2011 Semiannual Report, pp.20-21.

6 March 2012 Semiannual Report, p.25.

7 March 2012 Semiannual Report, p.27.

8 March 2012 Semiannual Report, p.20.

and a \$100,000 fine.⁹ Based on our recommendation, NSF previously debarred the former employee for ten years,¹⁰ and in this reporting period debarred the Maryland non-profit organization that facilitated his crime for ten years.

Proposed Debarment of a Former PI at a Georgia College

We previously reported on a PI at a Georgia college who charged an NSF grant for travel costs, personal purchases, and other expenses unrelated to the grant.¹¹ In this reporting period, we recommended that the PI be debarred for five years; NSF's decision is pending.

PI and his Company Suspended Government-Wide

A PI for a Maryland company that received a Small Business Technology Transfer (STTR) award from NSF falsely certified to NSF that he was primarily employed by the company when he was employed full-time at a university. The PI also falsely asserted that he had a mandatory outside investment to support a Phase IB application for supplemental funding, and he failed to issue a required subaward to the company's partnering research institution in the Phase IB STTR award. Based on our recommendation, NSF suspended the PI and his company government-wide pending the conclusion of our investigation.

University Returns \$330,460 After Professor Falsely Certified Effort

An Indiana university put \$160,529 back into two active NSF awards and returned \$169,930 to NSF for a third closed award after the university's internal audit and our investigation confirmed that a tenured professor at the university held an undisclosed paid teaching position at a foreign university while simultaneously serving as PI for the three NSF awards. The PI charged travel and summer salary to the NSF awards, certifying 100% effort on his NSF awards for time during which he was teaching at the foreign institution. Our investigation is ongoing.

NSF Terminates Remaining \$230,000 of a Small Business Innovation Research (SBIR) Phase II Award

During an ongoing investigation, we determined that a company used award funds on expenses unrelated to NSF work and overcharged indirect costs to the NSF award. Based upon our recommendation, NSF terminated the award, resulting in \$230,144 of funds put to better use.

Awardee Violates Grant Terms and Returns \$98,500 to NSF

As a result of our investigation, a New York university returned \$98,500 to NSF after making scholarship payments to ineligible students under an NSF award. The university also instituted new processes to confirm student eligibility and to track scholarship payments.

⁹ September 2011 Semiannual Report, p.10.

¹⁰ March 2012 Semiannual Report, p.26.

¹¹ September 2011 Semiannual Report, p. 8.

Attorney General Grants Statutory Law Enforcement Authority to Office of Investigations Special Agents

On 11 September 2012, the Attorney General approved statutory law enforcement authority for the NSF OIG Office of Investigations. This authority relieves OIG from the administrative burden of repeated requests for special deputation from the U.S. Marshals Service and broadens the law enforcement powers of our Special Agents. For example, it allows them to work with other law enforcement agencies without establishing concurrent jurisdiction in an investigation, and permits them to independently apply for and execute search and arrest warrants. It also enhances agent safety by providing authority to carry weapons on a 24/7 basis throughout the United States. We welcome approval of statutory law enforcement authority and are confident this authority will enhance our ability to investigate wrongdoing that puts federal funds at risk.

Research Misconduct Investigations

Research misconduct damages the scientific enterprise, is a misuse of public funds, and undermines the trust of citizens in government-funded research. It is imperative to the integrity of research funded with taxpayer dollars that NSF-funded researchers carry out their projects with the highest ethical standards. For these reasons, pursuing allegations of research misconduct by NSF-funded researchers continues to be a focus of our investigative work. In recent years, we have seen a significant rise in the number of substantive allegations of research misconduct associated with NSF proposals and awards. The NSF definition of research misconduct encompasses fabrication, falsification, and plagiarism.

NSF takes research misconduct seriously, as do NSF's awardee institutions. During this reporting period, institutions took actions against individuals found to have committed research misconduct, ranging from letters of reprimand to termination of employment. During this period, NSF's actions in research misconduct cases ranged from letters of reprimand to one year of debarment.

We referred nine cases of research misconduct to NSF, which are summarized below. In every case, we recommended that NSF make a finding of research misconduct, send the subject a letter of reprimand, require the subject to complete a Responsible Conduct of Research training program, and other actions as described below. NSF's decisions are pending in eight of the nine cases.

NSF-Supported Graduate Student Plagiarizes from Lab Partner's Dissertation

A former doctoral student at a Texas university copied over 1,200 lines of text as well as numerous embedded objects and supporting data into his dissertation from the dissertation of a lab partner who graduated a few years earlier. The university conducted an investigation during which the student attempted to explain the common materials as a natural consequence of working closely with the graduating lab partner in order to keep the long-

term project going. The university investigation committee rejected this explanation and found that the student committed intentional plagiarism. The committee noted in its report that the student “faced difficult circumstances when completing his dissertation” given that his original advisor departed the university and the department failed to provide a new formal advisor until one year later. However, the committee concluded these conditions were “conducive to plagiarism, but did not excuse” the student’s actions and the university rescinded the student’s doctoral degree.

We concurred with the university’s findings and recommended that NSF debar the former student for three years. After the debarment period, we recommended that for five years NSF bar the student from serving NSF as a reviewer, advisor, or consultant; and require certifications and assurances for all proposals or reports submitted to NSF.

Faculty Member Claims Copied Text was Public Knowledge

A faculty member at an Ohio university plagiarized approximately 500 lines of text into four proposals submitted to NSF. He admitted that he copied most of the material, which he said he did because English was not his native language. He also asserted that citations and quotation marks were unnecessary because the text was copied from a public source, or was public knowledge. The university investigation concluded that the faculty member’s actions were reckless and he should have known of the need for citation.

The university placed a formal letter of reprimand in the faculty member’s permanent record, with an admonition that further plagiarism may result in termination of his employment. It further required, for two years, the faculty member and the Sponsored Research Office to certify that any proposals submitted contain no plagiarism, and required that the faculty member enroll in a course on research ethics. We recommended that NSF require certifications and assurances for three years and bar the faculty member from participating as a peer reviewer, advisor, or consultant for NSF for three years.

Two Professors Resign Due to Plagiarism

A PI and co-PI at a university in Georgia who plagiarized in three NSF proposals, acknowledged they copied, but asserted that they gave full credit to the authors from whom they copied. The university investigation concluded the PI’s and co-PI’s plagiarism constituted research misconduct and recommended their dismissal. The co-PI resigned, but the PI appealed the decision. After a faculty hearing, the university allowed the PI to resign in lieu of removal.

We concurred with the university that the PI and co-PI committed research misconduct and recommended NSF require certifications and assurances for three years, and bar both from serving NSF as a reviewer, advisor, or consultant for three years.

Assistant Professor at New Jersey University Exhibits a Pattern of Plagiarism

A New Jersey university investigation concluded that an assistant professor knowingly committed plagiarism in eleven unfunded NSF proposals. It took no further action because the assistant professor was no longer a university employee.

The assistant professor admitted to us that he copied material into his proposals, but asserted that the university had made procedural mistakes. We concluded that the university followed reasonable procedures during its investigation, and that four of the eleven proposals contained significant plagiarism. He plagiarized the majority of the copied text in one proposal from other proposals previously submitted to the same NSF program by other PIs, who had posted them online.

We recommended that NSF require certifications and assurances from him for three years and bar him from serving NSF as a reviewer for three years.

PI Plagiarized in Papers and Proposals

A PI at a university in Florida plagiarized in two funded NSF proposals, one unfunded NSF proposal, and a manuscript submitted for publication. During our inquiry, the PI was hired by a North Carolina university. The Florida university investigated and concluded that the PI's copying in the manuscript was plagiarism and made a finding of research misconduct. However, its investigation addressed only two of the PI's four NSF proposals.

Following our own investigation, we concluded the PI's copying in two of the NSF proposals was plagiarism, and his plagiarism in a third, declined NSF proposal and the manuscript was evidence of a pattern of plagiarism. NSF concurred, required the PI to provide certifications and assurances for two years, and barred the PI from serving NSF as a reviewer, advisor, or consultant for two years.

New Assistant Professor Plagiarizes in NSF Proposal

A faculty member at a Maryland university plagiarized large amounts of text into an NSF proposal. He claimed that he did not realize that citations alone were not sufficient. While his education occurred outside the U.S., he has held various research and teaching positions in the U.S. over a fourteen-year period. We agreed with the university's finding that he knowingly plagiarized the text and recommended that NSF require certifications and assurances for two years.

Small Business Official Plagiarizes in Numerous NSF Proposals

A PI plagiarized in numerous SBIR proposals and final project reports between June 2004 and June 2010. The PI said she "did not intentionally use any other person's words without giving appropriate credit," and argued the sources were either properly cited, contributions from collaborators, or common or technical

language. She added that “all the innovations, ideas, research, processes and results are mine and of people I worked with for the proposals submitted to NSF.”

Our investigation focused on three awarded proposals and on one declined proposal that contained significant plagiarism. We found that the copied material either was not cited at all or was cited inadequately. We concluded that the PI knowingly committed plagiarism, and recommended that NSF require certifications from her for two years.

Plagiarism Uncovered in Two NSF SBIR Proposals

Our office concluded that a PI from a company in Virginia plagiarized a modest amount of text in an NSF SBIR proposal, which was later funded. The PI subsequently submitted a second proposal that also contained a modest amount of plagiarized text. The PI acknowledged he did not properly cite references and took responsibility for his actions. We concluded that the PI knowingly committed plagiarism, and we recommended that NSF: make a finding of research misconduct; send a letter of reprimand; require certifications and assurances for two years and bar the PI from serving NSF as a reviewer, advisor or consultant for two years.

Assistant Professor at Texas University Accepts Responsibility for Plagiarism

An assistant professor at a Texas university plagiarized in two NSF proposals. He admitted copying the text and said that he was “professionally embarrassed and grateful that NSF identified the mistakes so that [he] could immediately withdraw” a similar proposal submitted to another agency.

The university’s investigation concluded that the assistant professor recklessly committed plagiarism, but took no action against him because he was no longer an employee of the university. We determined that the university did not address whether the subject’s actions were a significant departure from accepted practices and the university never interviewed the subject regarding the allegation.

Our investigation concluded that the assistant professor knowingly plagiarized material into two NSF proposals as well as a non-NSF proposal. We recommended that NSF require that he provide certifications and assurances for one year.

Actions by NSF Management on Previously Reported Research Misconduct Investigations

NSF has taken administrative action to address our recommendations on eight research misconduct cases reported in previous semiannual reports. In each case, NSF made a finding of research misconduct, issued a letter of reprimand, and required the subject to complete a Responsible Conduct of Research training program. NSF also took additional significant actions in response to our recommendations as summarized below.

- In the case of a pattern of plagiarism by a California PI,¹² NSF debarred the PI for one year, required the PI to provide certifications for three years after the debarment, and barred the PI from serving NSF as a reviewer, advisor, or consultant for three years.
- In the case of a New Jersey associate professor who knowingly committed plagiarism by copying from a previously awarded NSF proposal,¹³ NSF debarred the PI for one year, required that he provide certifications and assurances for three years following the debarment period, and barred him from participating as an NSF reviewer for four years.
- In the case of an Illinois faculty member who plagiarized text into six NSF proposals submitted over a three-year period,¹⁴ NSF required the PI to provide certifications and assurances for four years, and barred service as an NSF reviewer for four years. The faculty member appealed all of these actions to the NSF Director, who denied the appeal.
- In the case of an Indiana assistant professor who plagiarized in three proposals to NSF, one of which was awarded,¹⁵ NSF required the PI provide certifications and assurances for three years, and terminated the professor's NSF award, resulting in \$13,832 available for NSF to put to better use.
- In the case of an assistant professor at a Mississippi university who knowingly plagiarized text and a figure into two NSF proposals,¹⁶ NSF required certifications and assurances for three years, and barred him from serving NSF as a reviewer, advisor, or consultant for three years.
- In the case of a co-PI at a Puerto Rico university who plagiarized from multiple documents,¹⁷ NSF required certifications and assurances for two years, and barred the co-PI from serving NSF as a reviewer, advisor, or consultant for two years.
- In the case of an assistant professor PI at an Illinois institution who plagiarized material within a collaborative NSF proposal,¹⁸ NSF required that he provide certifications and assurances for two years, and barred him from participating as an NSF reviewer, advisor, or consultant for two years. The PI appealed the finding to NSF's Director, and his decision is pending.
- In the case of a PI at an Ohio university who plagiarized text and figures into multiple NSF proposals,¹⁹ NSF required the PI to provide certifications and assurances for two years, and barred the PI from serving NSF as a reviewer, advisor, or consultant for two years.

12 March 2012 Semiannual Report, pp.17-18.

13 March 2012 Semiannual Report, pp.7-18.

14 March 2012 Semiannual Report, p.18.

15 September 2011 Semiannual Report, p.12 and March 2012 Semiannual Report, p.21.

16 March 2012 Semiannual Report, pp.18-19.

17 March 2012 Semiannual Report, p.19.

18 March 2012 Semiannual Report, pp.20-21.

19 March 2012 Semiannual Report, p.20.

- In the case of a faculty member at a New York university who plagiarized from an awarded proposal he received from a PI at another university,²⁰ NSF required certifications and assurances for two years, and barred him from serving NSF as a reviewer, advisor, or consultant for two years.

Administrative Investigations

PI and Co-PI Falsify Education and Experience Credentials

While assessing an allegation of extensive plagiarism in multiple proposals submitted to NSF by a Missouri company, we discovered that neither the PI nor the co-PI had any of the claimed academic credentials — including bachelor's, master's, and doctoral degrees — and the PI's claim of relevant employment experience overlapped periods of time when he was incarcerated. We referred the case to a U.S. Attorney's Office, which declined the case for criminal prosecution. Based on the false statements regarding academic and employment experience and the extensive plagiarism, we recommended that NSF debar the PI, the co-PI, and the organization for five years. NSF's decision is pending.

NSF Panelist Breaches Confidentiality by Revealing Another Panelist's Identity

Our investigation determined that an NSF merit review panelist from Michigan revealed a fellow panelist's identity to the PI of a declined proposal in violation of his written agreement "not to divulge or use any confidential information," including the identity of the other panelists. In an email to the PI, the panelist offered to provide the PI with information about the "inner workings" of the panel. The panelist disclosed the identity of the panelist who had given the proposal the lowest rating. Based on our recommendation, NSF prohibited the panelist who violated the confidentiality agreement from serving NSF as a reviewer, advisor, or consultant for 11 months.

NSF Reviewer Posts Confidential Proposals on the Web

An NSF reviewer from Massachusetts had twenty-two NSF proposals posted on his personal webpage within his company's public website. The Google search engine discovered and cached copies of the proposals, making these confidential proposals accessible to the general public via internet search. NSF staff subsequently worked with Google to remove the confidential material from the cache and search index. The reviewer claimed that he believed that the webpage was private and not discoverable; however, at least one of the PIs became aware that his/her proposal was accessible online when contacted by an unrelated third party to discuss the confidential research. We recommended that NSF bar the reviewer from participating as a peer reviewer, advisor, or consultant for NSF for two years, and NSF's decision is pending.

²⁰ March 2012 Semiannual Report, p.22.

Human Subjects Research Concerns Due to Protocol Noncompliance

Based on our recommendation, NSF suspended the award for a PI at a Texas university due to serious and continuing noncompliance with an Institutional Review Board (IRB) protocol, including an unapproved expansion of participants. Following suspension of the award, the PI implemented several corrective actions and the IRB lifted its suspension of the PI's research activities. NSF also rescinded the suspension of the PI's NSF award.

NSF Rotator Fails to Address the Appearance of a Conflict of Interests

We raised concerns about a new NSF rotator's participation in handling a proposal submitted by a PI with whom she was engaged in ongoing proposal preparations. This participation included the rotator contacting program officers at NSF and NIH to determine whether the proposed work fit within their programs, drafting an abstract for the collaborative work, and expressing a commitment to carry on the collaboration with the PI after a third member of the team withdrew.

Federal employees have an obligation to "avoid any actions creating the appearance that they are violating" applicable ethical standards, and the existence of such an appearance is evaluated from "the perspective of a reasonable person with knowledge of the relevant facts."²¹ In our view, even though the collaboration had not yet proceeded to substantive work before the program officer handled the PI's proposal, a reasonable person with knowledge of the relevant facts would perceive the appearance of an ethical violation.

Although the rotator returned to her home institution before NSF received our report, we made several recommendations to NSF to help prevent such issues in the future, including that NSF require new staff to complete a full ethics briefing prior to conducting proposal review activities. NSF responded that it will consider whether to implement merit review basics training within three months of arrival.

Employee Who Abused NSF's Electronic Systems Resigns

Our investigation found that an employee misused NSF's time and attendance and email systems, and committed other acts of misconduct.²² NSF conducted its own review and the employee resigned.

NSF Employee Referred for Administrative Action for Falsifying Application for Federal Health Benefits

An NSF employee falsified information on his federal employee health benefits application to obtain benefits for his ineligible girlfriend and her child. There was no financial loss to the government because the employee paid the same rate to obtain benefits for his son; however, the employee's fraud resulted in

²¹ 5 C.F.R. § 2635.101(b)(14).

²² September 2011 Semiannual Report, p.16.

a loss totaling over \$11,000 from the insurance company. We referred this matter to the U.S. Attorney's Office, which declined prosecution in lieu of administrative action. We referred the matter to the employee's supervisor for action, which is pending.

Management Implication Reports

Recommended Changes to the SBIR / STTR Program

NSF's SBIR and STTR programs provide funding for small businesses to conduct research and development. Our investigative work has identified several areas where the SBIR/STTR programs are vulnerable to fraud, waste, and abuse, and based on this work we provided a Management Implication Report to NSF. To reduce the risk of fraud, we recommend that NSF:

- Provide clarification of the requirement that the "primary employment" of the PI must be with the company at the time of the award, by defining a fulltime workweek.
- Require awardees to notify NSF when any significant changes to the budget or research are planned.
- Require companies to affirm that they will comply with the rules of the SBIR and STTR programs when submitting proposals for supplemental funding.
- Require Phase II awardees to certify to the accuracy of the information provided in their financial management systems questionnaire and supporting financial documentation prior to receiving the Phase II award, and to include actual expenditures in their project reports.
- Require Phase I awardees to provide a summary of actual expenses with their final report, and require companies to report any unspent funds over a set threshold prior to approval of the final report and release of the final payment, reduced by the unspent amount.

NSF has agreed to all but the last of these recommendations, and implementation is pending. Rather than require a summary of expenses for Phase I awards, NSF will require the company to state that all of the funds were fully expended as designated in the grant budget, or provide an explanation if not. The program will review the information that will be provided by grantees going forward on actual expenditures under Phase I and Phase II awards, and if it finds significant disparities it will reevaluate implementing the last recommendation. These are reasonable responses to our recommendations.

NSF Addresses Employee Misuse of Transit Subsidy Program

We previously reported²³ that our review of NSF's Transit Subsidy Benefit Program disclosed significant misuse by a sample of participants using it to pay for parking or apparent personal trips. We also found that some NSF employees in our sample misused the Pre-Tax Parking Benefit program. We referred the employees who appeared to be misusing the Transit Subsidy Program and/or Pre-Tax Parking Benefit program to NSF and recommended appropriate action (including recovery of the misused funds), and encouraged NSF to evaluate other employee participants' usage as well.

While the subsidy program has been modified in a manner that limits such misuse, we recommended that NSF require annual certifications of participants in both programs that they will use the programs properly and not for personal gain, and NSF agreed.

NSF determined that it was not practical or cost-efficient to evaluate all usage for all employee participants to take action against misuse involving personal trips, and given the number involved and the complexity of the review process, we agree. However, NSF will seek recovery from employees who were found in our review to have repeatedly used transit subsidy funds for parking. If all forty employees repay the transit subsidy funds they misused for parking, NSF will recover approximately \$10,000.

NSF addresses Contractor Employee Background Investigation Process

We previously reported²⁴ that our review of NSF's contractor employee background process determined numerous vulnerabilities in physical security policies and procedures.

In response to our recommendations, NSF will take the following steps:

- Update its on-boarding guidance and procedures to ensure that the policies and procedures were current, employee and contractor responsibilities were clearly defined, and background investigations are completed in a timely manner.
- Enhance its training for Contracting Officer Technical Representatives (COTRs) regarding the on-boarding and exit clearance of contractors, and implement a Contractor Security Clause in all new solicitations and contracts to enhance contractors' education and accountability regarding the security responsibilities and requirements of their staff.
- Review the processes around designation of positions requiring security clearances, initiation of the clearance, and timely renewal where warranted to be completed by November 2012.

²³ March 2012 Semiannual Report, pp.28-29.

²⁴ September 2011 Semiannual Report, p.16.

Congressional Testimony

In May 2012, the Inspector General testified before the House Science Research and Science Education Subcommittee at a hearing titled, “Ensuring the Best Stewardship of American Taxpayer Dollars at the National Science Foundation.” The Inspector General’s testimony focused on the key issues facing effective stewardship of taxpayer dollars at NSF and the areas the OIG has identified as being at most risk for fraud, waste, abuse and mismanagement.

Since NSF’s primary mission activity is accomplished through funding external awardees, the success of the agency’s overall mission and the achievement of its goals are largely dependent on effective grant and contract administration. OIG audits of NSF’s operations have found that NSF needs to continue to improve its grant management activities, including the oversight of awardees’ financial accountability, programmatic performance, and compliance with applicable federal and NSF requirements.

With regard to contract administration, adequate monitoring of cost reimbursement contracts remains a significant challenge for NSF, and we have focused on the agency’s ability to manage these contracts. Monitoring of cost reimbursement contracts was identified as a significant deficiency in NSF’s FY 2009 and FY 2010 financial statement audits. While the finding fell to a management letter comment in the FY 2011 audit, challenges remain.

Another area of ongoing concern is NSF’s management and use of contingencies in budgets for its large Major Research Equipment and Facilities Construction projects. Audits of the proposed budgets of three of NSF’s large facility construction projects — the Ocean Observatories Initiative (OOI), the Advanced Technology Solar Telescope (ATST), and the National Ecological Observatory Network (NEON) disclosed significant problems with the proposed use and management of contingency funds because the applicable OMB cost principles do not allow “[c]ontributions to a contingency reserve or any similar provision made for events the occurrence of which *cannot be foretold with certainty* as to time, intensity, or with an assurance of their happening.”

For example, the proposed \$386 million budget in OOI contained a total of \$88 million in unallowable contingency funds because there was a lack of evidence to support that the amounts budgeted were for events that were consistent with the cost principle. Follow-up work failed to surface evidence to support the contingency amounts, confirming the original finding that the \$88 million proposed is unallowable. Similar reviews of the budget proposals for the ATST and NEON projects identified an additional \$136 million in unallowable contingency costs.

Identifying funds needed for uncertainties that arise during the conduct of complex projects is an important part of project management; however, there are significant risks associated with NSF’s approach of awarding all

contingency funds to awardees, without regard to whether they are consistent with the cost principle and supported by verifiable data. Simply stated, placing unallowable contingency funds into awardees' hands is not prudent financial management.

The Inspector General's testimony also addressed the OIG's work examining how NSF spends money *internally* for its own operations and activities. In this vein, the OIG has examined NSF's expenditures for wireless plans and devices, refreshments for panelists, and the Independent Research/Development travel program. The agency has been receptive to our recommendations and, among other things, has taken actions to enhance the cost-effectiveness and efficiency of its purchasing practices.

Finally, the Inspector General noted some of the OIG's investigative results including investigative recoveries for fines, restitutions, and other actions totaling \$21.6 million for the past three years. The OIG has also directed significant investigative attention on fraud in the Small Business Innovation Research program, and since 2009 our SBIR cases have resulted in over \$1.2 million in restitution, funds returned to NSF, and funds put to better use.

The OIG's work reflects a sustained commitment to helping NSF be an effective steward of taxpayer dollars, and benefits from the support of NSF management across the Foundation.

Outreach

OIG staff have engaged in numerous proactive activities to address programmatic and financial responsibilities of NSF awardees, and to educate awardees about fraud recognition and prevention, research misconduct, and the responsible conduct of research. Our Outreach program remains an essential component of our mission to prevent and detect fraud, waste, and abuse and to promote economy, efficiency, and effectiveness in NSF programs and operations.

The Inspector General continues to lead the Council of Inspectors General on Integrity and Efficiency (CIGIE) Grant Reform Initiatives Working Group to ensure accountability for financial assistance funds and to maintain robust tools by which OIGs oversee the use of these funds. In addition, the Inspector General continues to lead the SBIR Working Group. Since its inception in 2009, this group has worked toward establishing strong, uniform certifications, modeled on those at NSF that can be used by all SBIR/STTR funding agencies as an effective weapon against fraud in these programs, and as a means to improve the government's ability to prosecute such fraud when it does occur. The Working Group's effort culminated in revisions to the Small Business Administration's SBIR/STTR policy directives, which include requirements for such certifications. SBA posted the revised directives in the Federal Register on August 6, 2012, and the comment period ended on October 5, 2012.

With the Federal Housing Finance Agency Inspector General, the NSF Inspector General also continues to lead a Suspension and Debarment (S&D) Working Group under the auspices of the CIGIE Investigations Committee. Through the Working Group, we continue our efforts to increase understanding and effective use of S&D throughout the community in order to better protect government funds against fraud, waste, and abuse.

The NSF Inspector General participated in a panel discussion at the national conference of the Association of College and University Auditors and emphasized the essential role auditors — both inside the government and at universities play — in the identification and prevention of waste and fraud involving federal grant funds.

Recognized throughout the research community for our efforts to identify and prevent waste and fraud, OIG staff participated in meetings, made presentations, and provided instruction in numerous forums. In the past six months, we gave presentations before, among others, the Society of Research Administrators International; the Association of Government Accountants; the CIGIE/GAO Financial Statement Audit Conference; the Association of Certified Fraud Examiners, and the Misconduct in Research Working Group. We also participated in meetings of the National Single Audit Coordinators, Federal Audit Executive Council, and the Financial Statement Audit Network. We provided research misconduct briefings at four universities and provided instructors to FLETC for grant fraud-related courses and programs.

CHALLENGE: *Establishing Accountability over Large Cooperative Agreements*

Overview: NSF currently has 685 Cooperative Agreements (CAs), totaling nearly \$11 billion; thirty-eight of these CAs are for over \$50 million each and comprise \$5.5 billion of the total number of CAs. A federal agency can use a cooperative agreement when entering into a relationship with a recipient when the primary purpose of the relationship is to transfer a thing of value to carry out a public purpose of support or stimulation, and substantial involvement between the federal agency and the recipient when carrying out the agreement is expected.²⁵

A Cooperative Agreement is not subject to the same rigor and reporting mechanisms as a contract, and does not have the same level of transparency over transactions as a contract. Among other things, NSF uses CAs to construct and fund the operations and maintenance of large facility projects. Since NSF has chosen to use CAs for the construction, operation, and maintenance of high-risk, high-dollar large facility projects, it is imperative that it exercise strong cost surveillance controls over the lifecycle of such projects.

Over the last two years, audits of the proposed construction budgets for three of these non-competitive proposals valued at \$1.1 billion found approximately \$305 million (almost 28 percent), in unallowable or unsupported costs. All three of the awardees' proposals had significant unallowable contingency costs, and two proposals were initially found unacceptable for audit. After much work, one of these proposals was audited, and the auditors issued an adverse opinion, finding that the proposal did not form an acceptable basis for the negotiation of a fair and reasonable price. The third proposal, which was submitted by an awardee found to have an inadequate accounting system, remains unaudited.

Inadequate proposals which contain large amounts of unallowable and unsupported costs undermine NSF's ability to serve as a proper steward of federal funds. Consequently, there are serious questions about NSF's accountability over the \$11 billion in cooperative agreements in its portfolio.

We have also identified serious weaknesses in NSF's post-award monitoring processes for high-risk projects that compound our concern that unallowable costs could be charged to awards, thereby placing federal funds awarded under CAs at further risk. NSF does not routinely obtain incurred cost submissions or audits of costs claimed on its largest CAs to determine the allowability of direct and indirect costs claimed on federal awards. While not required by law or regulation, such submissions and audits are essential tools for ensuring accountability in high-risk, high-dollar projects. In their absence, unallowable costs charged to these awards may go undetected because NSF lacks sufficient visibility over incurred costs. The failure to regularly obtain incurred cost submissions also has a negative impact on our office's ability to conduct incurred cost audits.

²⁵ 31 United States Code §3605.

Challenge for the Agency: It is an ongoing challenge for NSF to establish accountability for the billions of federal funds in its large cooperative agreements. Proper accountability requires cost surveillance measures that include strong pre- and post- award monitoring, especially for high-risk, high dollar facility projects. NSF does not require pre-award audits of awardees' proposals for such projects to ensure that they have reasonable budgets and adequate accounting systems in place before the award is made. Further, NSF does not require the use of OMB's Form 424C (or an equivalent form), for submitting proposals to provide greater visibility and segregate allowable and unallowable proposed costs.

Similarly, NSF does not have a strong post-award monitoring process. NSF does not routinely obtain awardees' incurred cost submissions or initiate audits of costs claimed on its largest CAs, and therefore lacks detailed information necessary to properly oversee these expenses. As a result, there is an increased risk of unallowable costs being charged to these awards and going undetected.

Another ongoing challenge for NSF is the management and oversight of contingency costs in proposed budgets for its large construction projects. In total, audits have identified more than \$224.6 million in unallowable contingency costs out of total proposed costs of over \$1.1 billion. NSF's cooperative agreement award and monitoring process was also cited as a significant deficiency in the FY 2011 financial statement audit.

Without improving end-to-end processes over CA monitoring from the proposal stage to award close-out, NSF cannot affirm that it has received reasonable value for taxpayer dollar and that those dollars are not misused. We recommended that NSF strengthen cost surveillance policies and procedures to ensure adequate stewardship over federal funds.

OIG's Assessment of the Agency's Progress: During the past year, the agency has participated in ongoing discussions with OIG regarding the resolution of audit findings and recommendations related to NSF's management of its large cooperative agreements. NSF has agreed to require the use of Form 424C or an equivalent and has stated that it plans to re-examine its procedures related to requiring support for contingency estimates in budget proposals.

CHALLENGE: *Improving Grant Administration*

Overview: NSF receives approximately 51,600 proposals each year for research, education and training projects. Each year the Foundation funds approximately 11,000 new awards, and as of June 2012, it had a portfolio of over 43,000 active awards totaling \$27 billion. In light of the fact that most of these awards are made as grants, it is vital that NSF's grant management processes ensure the most stringent level of accountability.

Challenge for the Agency: Oversight and management of awards that is sufficient to safeguard federal funds invested in scientific research has been an ongoing challenge for NSF. The FY 2011 financial statement audit noted

several areas of concern about SF's processes for awarding and administering grants, including a lack of follow-up to determine whether awardees acted to correct problems identified in desk reviews and delays in resolving open audit recommendations. Insufficient sub-recipient monitoring, which has led to inadequately supported and unallowable costs being charged to awards, has also been a challenge for NSF.

Additionally, in recent years, budgetary constraints have placed increased pressure on NSF's ability to maintain strong oversight, as the Foundation has had fewer staff than staffing assessments indicated were needed. For example, NSF planned to conduct 30 Award Monitoring and Business Assistance Program (AMBAP) visits in FY 2011, but completed only 26 visits. This situation underscores NSF's challenge to properly make and oversee awards.

OIG's Assessment of the Agency's Progress: NSF's Award Monitoring and Business Assistance Program was designed in part to provide advanced monitoring to ensure that awardee institutions have adequate policies and systems to manage their NSF awards. NSF reported that it completed its annual risk assessment to prioritize AMBAP site visits in FY 2012 and that it completed the 30 AMBAPs that it had planned to conduct.

As part of its efforts to innovate and improve its oversight activities, NSF conducted a virtual site visit pilot program as an enhancement to the AMBAP program. NSF stated that benefits of the program included reduction in travel costs, better use of resources, and more time for documentation review. NSF indicated that it plans to calculate the savings associated with the pilots it conducted; formally solicit awardee feedback; and, develop training on using technology associated with virtual site visits. NSF has also reported that it has started to implement its new financial system and has staffed the project management office that will oversee the system's implementation.

In addition, in response to our audit of NSF's staffing needs for management and oversight of grants, which found among other things, that not having sufficient staffing resulted in NSF reducing the number of planned AMBAP site visits. NSF plans to include the identification and evaluation of opportunities to streamline its operations into its annual workforce planning process to ensure sound financial management and oversight of awardees.

CHALLENGE: *Strengthening Contract Administration*

Overview: For two consecutive years (2009-2010), the monitoring of cost reimbursement contracts was identified as a significant deficiency in NSF's annual financial statement audit. During this past year, the finding was reduced to a management letter comment as a result of actions the agency has taken to correct the situation. Cost reimbursement (CR) contracts are inherently risky because the government assumes much of the risk that poor performance on the part of the contractor will result in cost overruns. In FY 2012, NSF obligated \$402 million for all contracts. Of that amount, \$282 million were for CR contracts, including \$123 million in advance payments issued before work was done.

But concerns with contract administration remain, especially with regard to the U.S. Antarctic Program (USAP). As NSF transitions to a new contractor, significant issues with its prior contract have yet to be resolved. In particular, NSF has not had an adequate and compliant CAS Disclosure Statement (DS-1) for its USAP contract with Raytheon since 2005. In May, NSF decided to halt an audit by DCAA to determine the adequacy of Raytheon's DS-1, a decision that is likely to further delay closing out this contract. An approved DS-1 is required by Federal Acquisition Regulations and is needed to complete close-out audits and final settlement of costs on the contract. Without an approved DS-1, NSF lacks an agreement with Raytheon on the accounting practices to be used in closing out the contract, such as distinguishing between direct and indirect costs. Such issues are typically settled before a contract begins or at an early stage.

The FY 2011 management letter presented seven recommendations for strengthening NSF's contract monitoring practices, reemphasizing that more attention must be paid to basic monitoring procedures such as the review of incurred cost audits, cost disclosure statements, and incurred cost submissions to ensure the contractor's compliance with contract terms and federal regulations. Contracting weaknesses, though mitigated during the past year, continued to come to light as the agency awarded its largest contract, which provides logistical support to the USAP over 13 years. Following several delays in the procurement process, the award was finally made in December 2011.

Challenge for the Agency: NSF's challenge is to correct the deficiencies in contract administration that have been identified by NSF's financial statement audit, to increase the use of firm-fixed price type contracts, and to continue to improve the effectiveness of its contracting policies, practices and professionals. In their most recent management letter, the financial statement auditors recommended that NSF fully implement its cost surveillance oversight procedures and continue improving its controls over cost reimbursement contracts. NSF management must continue to implement its remaining planned corrective actions to ensure that it maintains adequate control over CR contracts.

Cost incurred audits necessary to determine compliance with financial terms and conditions of the contract are critical to meeting this challenge. For large contracts subject to Cost Accounting Standards (CAS), a cost incurred audit can only be effectively performed with an approved CAS disclosure statement and incurred cost submissions. The agency is still in the process of obtaining audits of millions of dollars in costs incurred from 2008 – 2012 by the former USAP contractor and several other of its largest contracts. Incurred cost audits of all open years and of the final close-out voucher are needed. NSF also needs to decide which DS-1 the auditors should use as criteria in performing these audits. An important objective of the final audits should be to ensure the recovery of \$10.4 million in unallowable costs that previous audits have determined the contractor owes NSF.

As a matter of policy, NSF should obtain disclosure statements, incurred cost submissions and incurred cost audits of its largest contracts on a regular basis and promptly resolve any questioned costs that arise. Regarding its

largest contracts, NSF must also review and verify the disclosure statement to determine if it is adequate and compliant with CAS, prior to or shortly after the award is made.

OIG's Assessment of the Agency's Progress: In FY 2012, NSF made progress in addressing some of the problems in its management of contracts. NSF has taken steps to strengthen its guidance, and is receiving some audits of costs incurred. However, the most recent management letter indicates that work remains to be done to strengthen NSF's contract monitoring and cost surveillance procedures, particularly as it relates to CR contracts. Although the Contracting Manual was updated to require cost incurred submissions every 6 months from its largest contractors, in FY 2011 two of three contractors transmitted the submissions late and the third did not submit one at all. The agency must continue its focus on obtaining adequate disclosure statements and obtaining and reviewing or auditing incurred cost submissions on its largest contracts. The agency also should continue to identify cost reimbursement and advance payment contracts for audits of costs incurred based on materiality and risk, and to fund those audits to verify the validity of costs.

CHALLENGE: *Ensuring Proper Stewardship of ARRA Funds*

Overview: The American Recovery and Reinvestment Act (ARRA) provided \$3 billion for the National Science Foundation (NSF) as an investment in research that would produce economic benefits and growth. NSF staff worked diligently to obligate and administer the reporting requirements associated with over 4,000 ARRA-funded awards. NSF awardees have registered a 99.5 percent, or higher, compliance rate each quarter with ARRA's enhanced reporting requirements.

On September 15, 2011, OMB issued a memorandum to the heads of federal agencies urging them to spend remaining ARRA funds, and to recapture discretionary grant funds not spent by the end of FY 2013 "to the fullest extent of the law." The memo further explained that federal agencies could request waivers from the end of FY2013 deadline for discretionary grants in extenuating circumstances. According to NSF, as of August 2012, just \$2.1 billion, or 70 percent, of NSF's ARRA funds have been expended; and 474 awards were either less than 50 percent complete or had not started at all. NSF programs have requested waivers for 449 ARRA awards. As of October 1, 2012 OMB has not made any waiver decisions and has extended the deadline for filing final waiver requests through November 2012.

Challenge for the Agency: The challenge for the agency remains to: 1) assure that ARRA funds are not subject to fraud, waste and abuse; and 2) continue to press those awardees that are able to accelerate spending within the next year to do so. As ARRA awardees spend down their funds, NSF program managers and administrative staff must be attentive to indications of fraud, waste and abuse, and intervene when appropriate, especially in situations when the deadline to expend funds is accelerated. ARRA funds were intended to provide an immediate stimulus to the economy, and a significant number of NSF's ARRA awards will not expire until after 2013. The agency should take all actions necessary to ensure that those funds are spent as prudently and quickly as possible.

OIG's Assessment of the Agency's Progress: NSF indicates that current ARRA expenditures do not yet reflect the impact of its effort to accelerate spending, and that the rate of completed ARRA awards will increase significantly in the 4th quarter of FY 2012, with 1,228 awards set to expire. The agency also continues to actively monitor recipient reporting and the spending of grantees. It has enforced its burn rate grant condition requiring recipients to expend ARRA funds within one year, and implemented report review logic to identify under- or over-reporting of jobs created by ARRA.

The agency has also worked cooperatively with OIG to identify potential occurrences of fraud, waste and abuse associated with ARRA funds. Due to their high visibility, NSF assigns a higher risk adjusted rating to ARRA awards than others and provides them additional oversight. Currently, OIG has 13 active investigations related to Recovery Act funds underway.

CHALLENGE: Management of the U.S. Antarctic Program

Overview: Antarctica is the coldest, driest, windiest, most remote continent on earth. The weather changes frequently and abruptly; temperature drops of as much as 65 degrees F in 12 minutes have been recorded. Since 1956, Americans have been studying the Antarctic and conducting research to better understand Antarctica and its effects on global processes such as climate.

NSF funds and manages the U.S. Antarctic Program (USAP) through its Office of Polar Programs. The program has three year-round research stations—McMurdo, Amundsen-Scott South Pole, and Palmer. The population at McMurdo, the largest station, ranges from approximately 1,100 contractors, staff, and researchers in the summer months from early October through February, to about 265 during the winter. The population at Amundsen, the second largest station, is around 250 in summer and about 50 in the winter. Palmer is the smallest permanent station housing between 15 to 45 people. There are also more than 50 temporary field sites during the summer months. In addition, the program operates two research vessels.

The extreme Antarctic environment and the short period of time during which access to the continent is possible strains the effort to provide logistical support for the USAP. Logistical support activities include communications, health and safety programs, and vehicle and equipment maintenance.

NSF relies on heavy icebreakers operated by the Coast Guard to resupply its Antarctic research stations. Currently, none of those icebreakers is operational and NSF has contracted with a Russian company for an icebreaker for the 2012 and 2013 seasons.

In response to Administration requests, two independent reviews have recently been conducted on the USAP. The first review, headed by the National Research Council, focused on future scientific research and the second conducted by a Blue Ribbon Panel, focused on logistical and infrastructure needs.

Challenge for the Agency: Establishing and maintaining a world-class scientific research program in Antarctica's remote and harsh environment is a formidable logistical challenge. In terms of person-days in Antarctica, the logistics effort represents nine times the number devoted to research activity. The Blue Ribbon Panel report issued in July 2012 stated that the USAP logistics system is badly in need of repair and that failure to upgrade the system will increase the cost of logistics until these costs squeeze out funding for science.

The report identified eight major logistical issues: capital budgeting, alternatives to McMurdo station, icebreakers, transportation on the continent, a hard surface ice runway at the South Pole, energy, communications, and safety and health. In addition, the panel found a number of single point failure risks--circumstances in which the failure of one element of a system would render the entire system incapable of performing its function. Examples of these risks include icebreaking capacity, broadband communications, and fire suppression systems requiring electric power.

Some of these issues are longstanding concerns. For example, an August 2005 report by an OPP advisory committee stated that the resupply system was inherently risky due to a single point of failure condition created by the increasing deterioration of the polar icebreakers. The 2005 report was conducted at the request of the OPP Director after OPP initiated an internal preliminary study in 2004 of several resupply alternatives related primarily to the McMurdo and South Pole stations. The report recommended that NSF further investigate the means and costs associated with the report's findings and continue to evaluate their risks and impacts to science. The 2012 Blue Ribbon Report did provide such further investigation but also indicates that NSF has not acted on the 2005 recommendations.

It is a challenge for NSF to ensure that the icebreakers necessary to resupply the research stations are available, other logistical support to enable research is sound, and programs to ensure the health and safety of the researchers and contractors in Antarctica are adequate. We recognize that these challenges are substantial, particularly under current budget constraints. However, as noted by the Blue Ribbon Panel, failure to address these issues could undermine and ultimately halt certain research efforts. It is imperative that NSF prioritize logistical support needs; develop contingency plans; and establish a long range strategy to address these critical needs.

OIG's Assessment of the Agency's Progress: We understand that NSF plans to respond to the Blue Ribbon Panel Report and to develop an associated action plan later this year. NSF indicated that it had a contingency plan that would have enabled the USAP to operate at a reduced level for two years if an icebreaker was not available; however, in July the agency contracted for a Russian icebreaker that will resupply the 2012 and 2013 seasons.

CHALLENGE: Implementing Recommendations to Improve Workforce Management and the Workplace Environment

Overview: The National Science Foundation is recognized nationally and internationally for its preeminent role in funding scientific research. To maintain its high caliber work force and to strengthen its ties with the research community and provide critical talent and resources, NSF supplements its permanent, career workforce with a variety of non-permanent staff. All of the non-permanent appointments are federal employees except for those on Intergovernmental Personnel Act (IPA) assignments; IPAs remain employees of their home institution.

As of August 1, 2012, there were 198 IPAs at NSF, 21²⁶ of which were in managerial or executive positions. Assistant Directors head each of NSF's seven science directorates and provide leadership and direction to their respective directorates. As of the same date, five of the seven Assistant Directors and one of the Office Heads were IPAs. Assistant Directors are also responsible for planning and implementing programs, priorities, and policy. Similarly, NSF has four science offices led by Office Heads. Within each science directorate are multiple divisions. Fourteen IPAs were division directors. As a result of its reliance on IPAs, NSF experiences a great deal of turnover in its executive ranks.

Challenge for the Agency: Because IPAs' salaries are not subject to federal pay limitations, NSF can incur additional salary cost in using them, above what it would incur for in hiring federal employee in the same position. Other additional costs associated with IPAs can be fringe benefits, lost consulting fees, and travel and relocation expenses.

IPAs generally have not worked in the federal government and therefore, are often not familiar with government rules and administrative processes in the federal workplace. Effectively preparing IPA executives for the federal workplace has been a challenge for NSF.

In addition to the challenges to effective personnel management performance and oversight posed by its use of IPAs, NSF has also faced challenges in implementing recommendations for workforce management change. In response to concerns from the Congress, the OIG, and NSF staff, the Foundation assembled working groups of NSF staff to assess the issues and make recommendations. Between September 2009 and August 2012, these groups made 102 recommendations to NSF management. NSF continues to grapple with prioritizing, tracking, and implementing these recommendations. It is a continuing challenge for NSF to move beyond discussion of issues to acting on workforce management issues, some of which are longstanding and have been made by more than one working group.

OIG's Assessment of the Agency's Progress: NSF has taken several steps to orient IPAs and other rotating executives through its New Executive Transition Program, which includes a pilot for executive coaching and development of knowledge transfer tools. NSF has instituted mandatory

²⁶ Remaining IPA executive was in a position of "science advisor"

training for all new and continuing executives. Additionally, NSF now requires IPAs to receive annual performance ratings just as career employees do. NSF reported that it had resolved 73 of the 102 recommendations for workforce management change.

CHALLENGE: Encouraging the Ethical Conduct of Research

Overview: Congress passed the America COMPETES Act in 2007 to increase innovation through research and development, and to improve the competitiveness of the United States in the world economy. With regard to NSF, the Act mandates new proposal requirements to advance the professional and ethical development of young scientists, such as mentoring plans for all postdoctoral positions, and plans to provide training on the responsible conduct of research to undergraduates, graduate students, and postdoctoral researchers. However, information collected from our site visits and investigations suggests that many institutions are not taking these requirements seriously, thereby undermining the public's confidence in the research enterprise and potentially placing NSF funds at risk. NSF is challenged to provide more oversight on institutional implementation of these requirements and to provide meaningful guidance regarding Responsible Conduct of Research (RCR) training.

Challenge for the agency: NSF's primary challenge is to ensure that awardees implement credible RCR programs, thereby creating a top-down culture of academic integrity that extends to all levels of the university. At a time when opinion surveys indicate that more Americans are becoming distrustful of science, it is important that the conduct of scientific research not be tainted by instances of misrepresentation or cheating. Affirmative steps are necessary to counter the trends of increasing integrity-related violations. Recent surveys suggest that 75% of high school students and 50% of college students admit to cheating, and 30% of researchers admit to engaging in questionable research practices. Consistent with these survey results, OIG has seen a dramatic increase in substantive allegations of plagiarism and data fabrication, especially as it relates to junior faculty members and graduate students. Over the past 10 years, the number of allegations received by our office has more than tripled, as has the number of findings of research misconduct NSF has made based on OIG investigation reports.

Only 10% of the science and engineering workforce hold PhD's. For this reason the NSF Act places responsibility on NSF to "strengthen scientific [and engineering] research potential at all levels in ... various fields." NSF's research and training programs reach individuals who are ultimately employed by academia, industry, and government, and could have a broad and positive impact on the US science, engineering and education workforce. While NSF has been responsive to the recommendations contained in our research misconduct investigation reports, those actions only address incidents after the fact. Extrapolating the number of allegations OIG has received across the 45,000 proposals NSF receives annually, suggests 1300 proposals could contain plagiarism and 450-900 proposals could contain problematic data. Since NSF funds research in virtually every non-medical research discipline, the agency is in a unique position to lead the government response to addressing these disturbing trends at all levels of education.

OIG's Assessment of the Agency's Progress: The agency responded to the America COMPETES Act by instituting a requirement that grantees submit mentoring plans for all NSF-supported "post-docs" and have an RCR training plan for NSF-funded students. The NSF guidance was very limited and offered great flexibility to grantee institutions to develop plans tailored to their needs. OIG has observed a wide disparity among grantee RCR programs ranging from high quality mentoring programs to those that simply refer students to web-based or computer-based training. Early intervention remains critical to any effort to ensure that students understand proper professional practices and the implications of misconduct. Anecdotally, we continue to receive substantive data fabrication/falsification allegations involving students and post-docs; we currently have 20 active investigations regarding such allegations. Therefore we continue to believe that more needs to be done and NSF should expand its influence with institutions regarding this important issue. Accordingly, OIG is developing a plan to systematically review RCR plans after the America COMPETES RCR requirements have been given sufficient time for implementation throughout the research community. We intend to conduct a review of institutional efforts in FY 2013.

Research is also an increasingly global enterprise that includes collaborations among countries. OIG's review of the Basic Research to Enable Agricultural Development (BREAD) program proposals and awards highlighted a significant failure of the US PIs to develop comprehensive oversight programs with foreign subawardees. The most poorly developed aspects of these plans were in RCR training and research misconduct reporting. Based on recommendations in our report, NSF modified its solicitation for the next round of proposals for the program to clearly require oversight plans that address all of the program's requirements, and it asked the current grantees to describe how they would address RCR training and research misconduct enforcement.

An OIG follow-up review found that the majority of the original awardees' plans, as well as three of the four new awardees' plans, were deficient regarding RCR training and research misconduct. In response to our recommendations, NSF agreed to: (1) determine how to bring the current program awardees' oversight plans in line with the requirements for RCR training and research misconduct reporting and enforcement; and (2) make no future awards for proposals that do not provide comprehensive oversight plans that were demonstrably developed in collaboration with the international subawardees, including strong plans for RCR training and research misconduct reporting and enforcement.

CHALLENGE: Managing Programs and Resources in Times of Budget Austerity

Overview: More than ever, Federal agencies and managers are expected to maximize the value of every dollar spent or risk losing the confidence of their stakeholders. Responsible managers across government are reviewing their operational activities in light of increased public anger over waste and mismanagement to determine where and how money might be saved. During the past year, the administration issued an executive order requiring agencies to establish a plan for reducing specific types of administrative costs by at least 20 percent below FY 2010 levels. Travel and conference costs have been singled out for even greater scrutiny and cost savings. While government

budgets are developed long in advance, there are numerous discretionary expenditures in every organization that occur on a weekly or monthly basis and present real opportunities for savings.

OIG has performed several audits over the past few years to examine some of the agency's regular expenditures and identify potential cost savings, as well as changes to the procurement process, that could lead to efficiencies and reduced opportunities for fraud waste and abuse. Our audit of Independent Research/Development (IR/D) travel policies and practices determined that travel costs and time were not being monitored consistently across the agency. Expenditures of approximately \$1.8 million were incurred in FY 2010 under the IR/D program, which allows some NSF staff to spend up to 50 work days a year at their home institutions and attend related conferences. We recommended that the agency consider establishing an annual limit for individual IR/D travel costs, encouraging participants to take fewer trips of longer duration, or to combine NSF telework with IR/D travel. Since the annual cost of IR/D-related trips per traveler ranged from \$225 to \$45,000, reducing IR/D travel costs would help the agency meet the requirements of the administration's executive order.

OIG's audit of NSF staff retreats, a subset of conference-related spending, recommended that the agency reevaluate the practice of traveling outside of the Washington metropolitan area and improve its internal controls to better ensure cost containment and compliance with applicable standards. Without controls such as clear policy guidance and adequate monitoring, NSF may be overpaying for staff retreats. NSF held a total of 95 staff retreats in FYs 2010 and 2011, which the OIG estimated cost the agency at least \$361,000.

Challenge for the Agency: There are many opportunities to conserve money within a \$7 billion dollar organization like NSF without undermining the agency's core mission. The agency is therefore challenged to identify opportunities to streamline processes and cut costs where it can, in order to send a clear message to its employees and stakeholders that strong, sound management practices are being applied; reasonable ideas to reduce spending are welcome and will be implemented; and at a time of hardship for so many Americans, the public's continued financial support for science is not taken for granted.

OIG's Assessment of the Agency's Progress: NSF responded positively to the two OIG reports described in the overview. In June, a staff memorandum from the Director promised that NSF would identify opportunities for savings in spending on travel and conferences, and that new guidelines and goals associated with cost savings are forthcoming. It also reported that it was on track during FY 2012 to reduce agency travel by 9 percent below its 2010 baseline. With regard to the IR/D program, the agency agreed that additional steps are needed to strengthen management controls and implemented changes to improve program oversight and accountability in May. NSF is considering further actions and should encourage new ideas that save the government money and foster a culture of economy and efficiency.

Statistical Data

Audit Data

Audit Reports Issued with Recommendations for Better Use of Funds

		Dollar Value
A.	For which no management decision has been made by the commencement of the reporting period	\$226,238,105
B.	Recommendations that were issued during the reporting period	\$78,657,394
C.	Adjustments related to prior recommendations	\$0
Subtotal of A+B+C		\$304,895,499
D.	For which a management decision was made during the reporting period	\$0
	1. Dollar value of management decisions that were consistent with OIG recommendations	\$0
	2. Dollar value of recommendations that were not agreed to by management	\$0
E.	For which no management decision had been made by the end of the reporting period	\$304,895,499
For which no management decision was mde within 6 months of issuance		\$226,238,105

Audit Reports Issued with Questioned Costs

		Number of Reports	Questioned Costs	Unsupported Costs
A.	For which no management decision has been made by the commencement of the reporting period	20	\$25,955,332	\$3,251,908
B.	That were issued during the reporting period	20	\$10,734,340	\$1,161,138
C.	Adjustment related to prior recommendations		\$0	\$0
Subtotal of A+B+C			\$36,689,672	\$4,413,046
D.	For which a management decision was made during the reporting period	11	\$3,919,940	\$876,326
	1. dollar value of disallowed costs	N/A	\$1,842,743	N/A
	2. dollar value of costs not disallowed	N/A	\$2,077,197	N/A
E.	For which no management decision had been made by the end of the reporting period	29	\$32,769,732	\$3,536,720
For which no management decision was made within 6 months of issuance		10	\$22,062,349	\$2,378,690

Status of Recommendations that Involve Internal NSF Management Operations

Open Recommendations (as of 09/30/2012)	
Recommendations Open at the Beginning of the Reporting Period	48
New Recommendations Made During Reporting Period	5
Total Recommendations to be Addressed	53
Management Resolution of Recommendations*	
Awaiting Resolution	8
Resolved Consistent With OIG Recommendations	45
Management Decision That No Action is Required	0
Final Action on OIG Recommendations**	
Final Action Completed	9
Recommendations Open at End of Period	44

* "Management Resolution" occurs when the OIG and NSF management agree on the corrective action plan that will be implemented in response to the audit recommendation.

** "Final Action" occurs when management has completed all actions it agreed to in the corrective action plan.

Aging of Open Recommendations

Awaiting Management Resolution	
0 through 6 months	5
7 through 12 months	3
More than 12 months	0
Awaiting Final Action After Resolution	
0 through 6 months	0
7 through 12 months	24
More than 12 months	12

List of Reports

OIG and CPA-Performed Reviews²⁷

Report Number	Subject	Questioned Costs	Unsupported Costs	Better Use of Funds
12-1-004	Institute for Defense Analysis (IDA)	\$26,957	\$3,108	\$0
12-1-005	University of California-Santa Barbara	\$6,325,483	\$0	\$0
12-1-006	Drilling, Observation and Sampling of the Earth's Continental Crust, Inc. (DOSECC)	\$263,754	\$247,650	\$0
12-1-007	University Corporation for Atmospheric Research (UCAR)	\$29,384	\$0	\$0
12-1-008	National Ecological Observatory Network Inc. (NEON) Proposal Audit	\$0	\$0	\$78,657,394
12-1-009	Associated Universities, Inc. (AUI) Internal Controls-Program Income	\$0	\$0	\$0
12-2-010	Audit of NSF's Management of Contingency in the EarthScope Awards	\$0	\$0	\$0
12-3-002	ARRA: Lessons Learned Review	\$0	\$0	\$0
12-6-001	Alert Memo: NSF's Management of Cooperative Agreements	\$0	\$0	\$0
12-6-002	QCR of Lautze & Lautze (Chabot Space & Science Center)	\$0	\$0	\$0
12-7-003	IQCR of #09-6-003 Alert Memo Source Selection	\$0	\$0	\$0
12-7-006	IQCR of #11-2-009 Conflict of Interest	\$0	\$0	\$0
	Total:	\$6,645,578	\$250,758	\$78,657,394

²⁷ The Office issued 12 reports this semiannual period.

NSF-Cognizant Reports

Report Number	Subject	Questioned Costs	Unsupported Costs
12-4-051	9-11Museum of Science, Inc. dba Miami Science Museum & Museum of Science - FL	\$0	\$0
12-4-052	6-11 QEMN Quality Education for Minorities Network - DC	\$0	\$0
12-4-053	6-11 Association for Women in Science - VA	\$0	\$0
12-4-054	6-11 Computing Research Association, Inc.- DC	\$0	\$0
12-4-055	6-11 American Museum of Natural History -NY	\$0	\$0
12-4-056	9-11 Virtual Astronomical Observatory LLC - DC	\$0	\$0
12-4-058	6-11 New York Hall of Science - NY	\$0	\$0
12-4- 059	6-11 Museum of Science - MA	\$0	\$0
12-4-060	6-11 Kalispell School District - MT	\$0	\$0
12-4-061	8-11 WGBH Educational Foundation - MA	\$0	\$0
12-4-062	12-11 American Statistical Association - DC	\$0	\$0
12-4-063	6-11 New York Botanical Garden - NY	\$0	\$0
12-4- 064	6-11 Ecological Society of America - DC	\$0	\$0
12-4-065	9-10 REVISED AURA Association of Universities for Research in Astronomy - DC	\$0	\$0
12-4- 066	12-10 REJECTED ScienceFriday, Inc. - CT	\$0	\$0
12-4- 067	12-11 American Physical Society - MD	\$0	\$0
12-4-068	9-11 Fermi Research Alliance - IL	\$0	\$0
12-4-069	12-11 Horizon Research, Inc. - NC	\$0	\$0
12-4- 070	7-11 MSRI Mathematical Sciences Research Institute - CA	\$0	\$0
12-4-071	12-11 Missouri Botanical Garden - MO	\$0	\$0
12-4-072	6-11 MPC Corporation - PA	\$0	\$0
12-4-073	8-11 San Jose Children's Discovery Museum - CA	\$0	\$0
12-4-074	12-11 Chicago Zoological Society - IL	\$0	\$0
12-4-075	12-11 BIOS Bermuda Institute of Ocean Sciences - NY	\$0	\$0
12-4-076	9-11 COL Consortium for Ocean Leadership - DC	\$0	\$0
12-4- 077	0-11 IODP Management International, Inc. - DC	\$1,650,961	\$0
12-4-078	9-11 California Institute of Technology - CA	\$0	\$0
12-4-079	12-11 Botanical Research Institute of Texas, Inc. - TX	\$0	\$0
12-4-080	12-11 DOSECC Drilling, Observation & Sampling of the Earth's Continental Crust - UT	\$0	\$0
12-4-081	12-11 Hopa Mountain Foundation - MT	\$0	\$0
12-4-082	12-11 National Geographic Society - DC	\$0	\$0
12-4-083	12-11 Portland VA Research Foundation - OR	\$0	\$0
12-4-084	9-11 Teachers Development Group - OR	\$0	\$0
12-4- 085	12-11 Denver Museum of Science and Nature - CO	\$0	\$0
12-4-086	12-11 Santa Fe Institute - NM	\$0	\$0

12-4-087	12-11 Science Foundation Arizona - AZ	\$0	\$0
12-4-088	6-11 SoundVision Productions - CA	\$0	\$0
12-4-089	6-10 Jackson Public School District – MS	\$0	\$0
12-4-090	12-11 American Mathematical Society - RI	\$0	\$0
12-4-091	12-11 Institute for Broadening Participation - ME	\$0	\$0
12-4-092	12-11 New England Wild Flower Society, Inc. - MA	\$0	\$0
12-4-093	12-11 Association for Institutional Research – FL	\$0	\$0
12-9-094	12-11 Carnegie Institute – PA	\$0	\$0
12-4-095	12-11 Field Museum of Natural History - IL	\$0	\$0
12-4-096	12-11 Institute of Global Environment & Society, Inc. -MD	\$0	\$0
12-4-097	12-11 ICSI International Computer Science Institute – CA	\$0	\$0
12-4-098	6-11 New Jersey Academy for Aquatic Sciences – NJ	\$0	\$0
12-4-099	12-11 TERC Technical Education Research Centers, Inc. - MA	\$0	\$0
12-4-100	9-11 The Algebra Project – MA	\$0	\$0
12-4-101	12-11 Samuel Roberts Noble Foundation – OK	\$0	\$0
12-4-102	6-10 Tupelo Public School District – MS	\$0	\$0
12-4-103	12-09 WTEC World Technology Evaluation Center, Inc. - PA	\$0	\$0
12-4-104	12-10 WTEC World Technology Evaluation Center, Inc. - PA	\$0	\$0
12-4-105	12-11 American Educational Research Association – DC	\$0	\$0
12-4-106	12-11 Biological Sciences Curriculum Study – CO	\$0	\$0
12-4-108	12-11 Marine Biological Laboratory - MA	\$0	\$0
12-4-109	6-11 The Filmmakers Collaborative, Inc. – MA	\$0	\$0
12-4-110	12-11 Youth Radio – CA	\$0	\$0
12-4-112	9-11 Northwest Association for Biomedical Research – WA	\$0	\$0
12-4-113	12-11 Pisgah Astronomical Research Institute – NC	\$0	\$0
12-4-114	12-11 AAPT American Association of Physics Teachers – MD	\$0	\$0
12-4-115	12-11 UNAVCO, Inc. – CO	\$1,349,296	\$0
12-4-116	12-11 CUREE Consortium of Universities for Research in Earthquake Engineering – CA	\$0	\$0
12-4-117	12-11 Mathematical Association of America – DC	\$0	\$0
12-4-118	12-11 AIM American Institute of Mathematics – CA	\$0	\$0
12-4-119	12-11 Academy of Natural Sciences of Philadelphia – PA	\$0	\$0
12-4-120	6-11 REVISED Science Museum of Minnesota – MN	\$0	\$0
12-4-121	6-10 REVISED WNET.org/Educational Broadcasting Corporation - NY	\$525,655	\$525,655
12-4-122	3-12 ASTC Association of Science-Technology Centers – DC	\$0	\$0
12-4-123	12-11 Detroit Area Pre-College Engineering Program – MI	\$0	\$0
12-4-124	12-11 SCOR Scientific Committee on Oceanic Research – DE	\$0	\$0
12-4-128	12-11 WHOI Woods Hole Oceanographic Institution - MA	\$0	\$0
	Total:	\$3,525,912	\$525,655

Other Federal Reports

Report Number	Subject	Questioned Costs	Unsupported Costs
12-5-072	5-11 Chapman University - CA	\$73,147	\$0
12-5-089	6-11 Universidad Interamericana de Puerto Rico, Inc. - PR	\$35,016	\$0
12-5-096	6-11 University of Medicine & Dentistry of New Jersey - NJ	\$2,034	\$0
12-5-102	6-11 University of Illinois - IL	\$13	\$0
12-5-103	8-11 State of Texas - TX	\$44,102	\$0
12-5-107	6-11 Columbia University - NY	\$76	\$76
12-5-110	6-11 Miles College - AL	\$38,416	\$38,416
12-5-116	6-11 State of Connecticut – CT	\$32,125	\$32,125
12-5-122	6-11 WNET.org - NY	\$24,061	\$11,418
12-5-123	6-11 Georgetown University – DC	\$2,551	\$2,551
12-5-132	6-11 Dillard University - LA	\$275,480	\$275,480
12-5-137	12-11 American Meteorological Society – MA	\$10,486	\$0
12-5-143	9-11 Fort Berthold Community College – ND	\$25,343	\$24,659
	Total:	\$562,850	\$384,725

Audit Reports With Outstanding Management Decisions

This section identifies audit reports involving questioned costs, and funds put to better use where management had not made a final decision on the corrective action necessary for report resolution with six months of the report's issue date. At the end of the reporting period there were 13 reports remaining that met this condition. The status of recommendations that involve internal NSF management is described on page 48.

Report Number	Subject	Questioned Costs	Unsupported Costs	Better Use of Funds
05-1-005	RPSC Costs Claimed FY2000 to 2002	\$12,334,824	\$0	\$0
06-1-023	RPSC 2003/2004 Raytheon Polar Services	\$6,860,500	\$0	\$0
07-1-003	Triumph Tech, Inc.	\$80,740	\$1,192	\$0
07-1-019	ABT Associates	\$22,716	\$0	\$0
09-1-014	University of Michigan	\$1,604,713	\$1,418,889	\$0
09-5-048	8-07 College of the Mainland – TX	\$110,629	\$0	\$0
10-1-012	COL OOI Proposed Budget	\$0	\$0	\$88,118,848
11-1-001	REVISED ATST Price Proposal	\$0	\$0	\$62,338,903
11-1-011	NCCU Internal Control Review for North Carolina Central University	\$351,340	\$268,628	\$0
11-1-021	NEON National Ecological Observatory Network	\$0	\$0	\$75,780,354
12-1-001	ICSI International Computer Science Institute	\$451,189	\$444,551	\$0
12-1-003	University of Notre Dame - IN	\$244,430	\$244,430	\$0
12-5-033	6-11 Howard University - DC	\$1,268	\$1,000	\$0
	Total:	\$22,062,349	\$2,378,690	\$226,238,105

* This report is on hold at the request of the OIG.

Investigations Data

Civil/Criminal Investigative Activities

Referrals to Prosecutors	6
Criminal Convictions/Pleas	8
Arrests	0
Civil Settlements	0
Indictments/Information	0
Investigative Recoveries	\$1,188,265.97

Administrative Investigative Activities

Referrals to NSF Management for Action	26
Research Misconduct Findings	11
Debarments	4
Administrative Actions	82
Certifications and Assurances Received²⁸	14

Investigative Case Statistics

	Preliminary	Civil/Criminal	Administrative
Active at Beginning of Period	55	99	103
Opened	76	53	44
Closed	98	19	44
Active at End of Period	33	133	103

Freedom of Information Act and Privacy Act Requests

Our office responds to requests for information contained in our files under the freedom of Information Act (“FOIA,” 5 U.S.C. § 552) and the Privacy Act (5 U.S.C. § 552a). During this reporting period:

• Requests Received	22
• Requests Processed	22
• Appeals Received	1
• Appeals Upheld	1

Response time ranged between 5 days and 81 days, with the median around 18 days and the average around 20 days.

²⁸ NSF accompanies some actions with a certification and/or assurance requirement. For example, for a specified period, the subject may be required to confidentially submit to OIG a personal certification and/or institutional assurance that any newly submitted NSF proposal does not contain anything that violates NSF regulations.

Recovery Act Retaliation Complaint Investigations

Section 1553 of the American Recovery and Reinvestment Act of 2009 requires OIGs to include in their semiannual reports to Congress the retaliation complaint investigations that they decided not to conduct or continue during the reporting period. Section 1553 also requires OIGs to provide a list of those investigations for which the inspector general received an extension. OIG did not discontinue or decline to conduct any Recovery Act whistleblower retaliation complaint investigations during this reporting period. Regarding extensions, OIG received one extension in a pending investigation involving a Georgia institution.

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