

NATIONAL SCIENCE FOUNDATION
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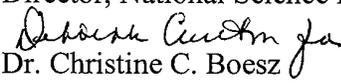


OFFICE OF
INSPECTOR GENERAL

November 11, 2005

To: Dr. Warren M. Washington
Chairman, National Science Board

Dr. Arden L. Bement
Director, National Science Foundation

From: 
Dr. Christine C. Boesz
Inspector General

Subject: Audit of the National Science Foundation's
Fiscal Years 2005 and 2004 Financial Statements

This memorandum transmits KPMG LLP's financial statement audit report of the National Science Foundation (NSF) for its Fiscal Year 2005, which includes Fiscal Year 2004 comparative information.

Results of Independent Audit

The Chief Financial Officer's (CFO) Act of 1990 (P.L. 101-576), as amended, requires NSF's Inspector General or an independent external auditor, as determined by the Inspector General, to audit the Foundation's financial statements. Under a contract monitored by the Office of Inspector General (OIG), KPMG, an independent public accounting firm, performed an audit of NSF's Fiscal Years 2005 and 2004 financial statements. The contract required that the audit be performed in accordance with the Government Auditing Standards issued by the Comptroller General of the United States, and Bulletin 01-02, *Audit Requirements for Federal Financial Statements*, issued by the United States Office of Management and Budget.

KPMG issued an unqualified opinion on NSF's financial statements. In its Report on Internal Controls Over Financial Reporting, KPMG identified two reportable conditions relating to NSF's post-award administration and contract monitoring. KPMG also reported that there were no instances in which NSF's financial management systems did not substantially comply with the requirements of the Federal Financial Management Improvement Act of 1996 (FFMIA), and found no reportable noncompliance with laws and regulations it tested.

Management's response dated November 8, 2005, follows KPMG's report.

Evaluation of KPMG's Audit Performance

To fulfill our responsibilities under the CFO Act of 1990, as amended, and other related financial management legislation, the Office of Inspector General:

- Reviewed KPMG's approach and planning of the audit;
- Evaluated the qualifications and independence of the auditors;
- Monitored the progress of the audit at key points;
- Coordinated periodic meetings with NSF management to discuss audit progress, findings and recommendations;
- Reviewed KPMG's audit report to ensure compliance with Government Auditing Standards and Office of Management and Budget Bulletin No. 01-02; and
- Coordinated issuance of the audit report.

KPMG LLP is responsible for the attached auditor's report dated November 4, 2005, and the conclusions expressed in the report. We do not express any opinion on NSF's financial statements, internal control, conclusions on compliance with laws and regulations, or on whether NSF's financial management systems substantially complied with FFMIA.

The Office of Inspector General appreciates the courtesies and cooperation extended to KPMG LLP and OIG staff by NSF during the audit. If you or your staff have any questions, please contact me or Deborah H. Cureton, Associate Inspector General for Audit.

Attachment

cc: Dr. Mark S. Wrighton, Chair, Audit and Oversight Committee



KPMG LLP
2001 M Street, NW
Washington, DC 20036

Independent Auditors' Report

Dr. Warren M. Washington
Chairman, National Science Board

Dr. Arden Bement
Director, National Science Foundation

We have audited the accompanying balance sheets of the National Science Foundation (NSF) as of September 30, 2005 and 2004 and the related statements of net cost, changes in net position, budgetary resources, and financing (hereinafter referred to as the financial statements) for the years then ended. The objective of our audits was to express an opinion on the fair presentation of these financial statements. In connection with our audits, we also considered NSF's internal control over financial reporting and tested the NSF's compliance with certain provisions of applicable laws, regulations, contracts, and grant agreements that could have a direct and material effect on its financial statements.

Summary

As stated in our opinion on the financial statements, we concluded that NSF's financial statements as of and for the years ended September 30, 2005 and 2004, are presented fairly, in all material respects, in conformity with accounting principles generally accepted in the United States of America.

Our consideration of internal control over financial reporting resulted in the following conditions being identified as reportable conditions:

- **Post-award Administration** – Post-award administration, especially with respect to financial monitoring, has been a long-standing concern. In fiscal year 2005, NSF has made progress to address the reportable condition identified in the Independent Auditors' Report in prior years. However, additional improvements are needed to create an effective post-award monitoring program at NSF.
- **Contract Monitoring** – NSF does not adequately review quarterly expenditure reports submitted by contractors receiving advance payments to ensure that the reported expenditures are correct and consistent with the contract. Without adequately performing such procedures, misstatements in expenditures may remain undetected.

However, we believe that neither of the reportable conditions are material weaknesses.



The results of our tests of compliance with certain provisions of laws, regulations, contracts, and grant agreements disclosed no instances of noncompliance or other matters that are required to be reported herein under *Government Auditing Standards*, issued by the Comptroller General of the United States, and Office of Management and Budget (OMB) Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements*.

For management's response dated November 8, 2005, see Exhibit III.

The following sections discuss our opinion on the NSF's financial statements, our consideration of the NSF's internal control over financial reporting, our tests of the NSF's compliance with certain provisions of applicable laws, regulations, contracts, and grant agreements, and management's and our responsibilities.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of the National Science Foundation as of September 30, 2005 and 2004, and the related statements of net cost, changes in net position, budgetary resources, and financing, for the years then ended.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the NSF as of September 30, 2005 and 2004, and its net costs, changes in net position, budgetary resources, and reconciliation of net costs to budgetary obligations, for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

The information in the Management Discussion and Analysis, Required Supplementary Stewardship Information, and Required Supplementary Information sections is not a required part of the financial statements, but is supplementary information required by accounting principles generally accepted in the United States of America or OMB Circular A-136, *Financial Reporting Requirements, Part A, Form and Content of the Performance and Accountability Report*. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of this information. However, we did not audit this information and, accordingly, we express no opinion on it. Based on our limited procedures, we determined that NSF could not complete the intragovernmental balance reconciliations with its governmental trading partners, as required by OMB A-136, because, although NSF issued confirmations to its major partners, such partners did not respond with adequate information to assist in reconciling such balances.

Our audits were conducted for the purpose of forming an opinion on the financial statements taken as a whole. The Detailed Performance Information (Section II) is an integral part of the NSF's *Fiscal Year 2005 Performance and Accountability Report*. However, this information is not a required part of the financial statements and is presented for purposes of additional analysis. Accordingly, it has not been subjected to auditing procedures and, therefore, we express no opinion on it.

Internal Control Over Financial Reporting

Our consideration of internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be reportable conditions. Under standards issued by the American Institute of Certified Public Accountants, reportable conditions are matters coming to our attention relating to significant deficiencies in the design or operation of the internal control over financial reporting that, in our judgment, could adversely affect the NSF's ability to record, process, summarize, and report financial data consistent with the assertions by management in the financial statements.



Material weaknesses are reportable conditions in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements, in amounts that would be material in relation to the financial statements being audited, may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions.

In our fiscal year 2005 audit, we noted certain matters, described in Exhibits I, involving internal control over financial reporting and its operation that we consider to be reportable conditions. However, none of the reportable conditions are believed to be material weaknesses.

* * * * *

A summary of the status of prior year reportable conditions is included as Exhibit II.

We also noted certain additional matters that we reported to the management of the NSF in a separate letter dated November 14, 2005.

Compliance and Other Matters

Our tests of compliance with certain provisions of laws, regulations, contracts, and grant agreements, as described in the Responsibilities section of this report, exclusive of those referred to in the *Federal Financial Management Improvement Act of 1996* (FFMIA), disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* and OMB Bulletin No. 01-02.

The results of our tests of FFMIA disclosed no instances in which the NSF's financial management systems did not substantially comply with Federal financial management systems requirements, applicable Federal accounting standards, and the United States Government Standard General Ledger at the transaction level.

We noted other matters involving compliance with laws and regulations that, under *Government Auditing Standards* and OMB Bulletin 01-02, were not required to be included in this report, that we have reported to the management of NSF in a separate letter dated November 14, 2005.

Responsibilities

Management's Responsibilities

The *Government Management Reform Act of 1994* (GMRA) requires agencies to report annually to Congress on their financial status and any other information needed to fairly present their financial position and results of operations. To meet these reporting requirements, the NSF prepares and submits financial statements in accordance with Part A of OMB Circular A-136.

Management is responsible for the financial statements, including:

- Preparing the financial statements in conformity with accounting principles generally accepted in the United States of America;
- Preparing the Management Discussion and Analysis (including the performance measures), Required Supplementary Information, and Required Supplementary Stewardship Information;
- Establishing and maintaining internal controls over financial reporting; and
- Complying with laws, regulations, contracts, and grant agreements, including FFMIA.



In fulfilling this responsibility, management is required to make estimates and judgments to assess the expected benefits and related costs of internal control policies. Because of inherent limitations in internal control, misstatements due to error or fraud may nevertheless occur and not be detected.

Auditors' Responsibilities

Our responsibility is to express an opinion on the fiscal year 2005 and 2004 financial statements of the NSF based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards*, and OMB Bulletin No. 01-02. Those standards and OMB Bulletin No. 01-02 require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the NSF's internal control over financial reporting. Accordingly, we express no such opinion.

An audit also includes:

- Examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements;
- Assessing the accounting principles used and significant estimates made by management; and
- Evaluating the overall financial statement presentation.

We believe that our audits provide a reasonable basis for our opinion.

In planning and performing our fiscal year 2005 audit, we considered the NSF's internal control over financial reporting by obtaining an understanding of the design of NSF's internal control, determining whether internal controls had been placed in operation, assessing control risk, and performing tests of controls in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements. We limited our internal control testing to those controls necessary to achieve the objectives described in *Government Auditing Standards* and OMB Bulletin No. 01-02. We did not test all internal controls relevant to operating objectives as broadly defined by the *Federal Managers' Financial Integrity Act of 1982*. The objective of our audit was not to provide assurance on the NSF's internal control over financial reporting. Consequently, we do not provide an opinion thereon.

As required by OMB Bulletin No. 01-02, in our fiscal year 2005 audit, we considered the NSF's internal control over the Required Supplementary Stewardship Information by obtaining an understanding of the NSF's internal control, determining whether these internal controls had been placed in operation, assessing control risk, and performing tests of controls. Our procedures were not designed to provide assurance on internal control over the Required Supplementary Stewardship Information and, accordingly, we do not provide an opinion thereon.

As further required by OMB Bulletin No. 01-02, in our fiscal year 2005 audit, with respect to internal control related to performance measures and reported in the Management Discussion and Analysis, we obtained an understanding of the design of significant internal controls relating to the existence and completeness assertions and determined whether they had been placed in operation. Our procedures were not designed to provide assurance on internal control over reported performance measures and, accordingly, we do not provide an opinion thereon.



As part of obtaining reasonable assurance about whether the NSF's fiscal year 2005 financial statements are free of material misstatement, we performed tests of the NSF's compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts, and certain provisions of other laws and regulations specified in OMB Bulletin No. 01-02, including certain provisions referred to in FFMIA. We limited our tests of compliance to the provisions described in the preceding sentence, and we did not test compliance with all laws, regulations, contracts, and grant agreements applicable to the NSF. Providing an opinion on compliance with laws, regulations, contracts, and grant agreements was not an objective of our audit and, accordingly, we do not express such an opinion.

Under OMB Bulletin No. 01-02 and FFMIA, we are required to report whether the NSF's financial management systems substantially comply with (1) Federal financial management systems requirements, (2) applicable Federal accounting standards, and (3) the United States Government Standard General Ledger at the transaction level. To meet this requirement, we performed tests of compliance with FFMIA Section 803(a) requirements.

Distribution

This report is intended for the information and use of NSF's management, NSF's Office of the Inspector General, OMB, the Government Accountability Office, and the U.S. Congress, and is not intended to be and should not be used by anyone other than these specified parties.

KPMG LLP

November 4, 2005

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Fiscal Year 2005 Reportable Conditions

05-01 Post-Award Monitoring

In fiscal year 2005, NSF had a budget of approximately \$6 billion and managed approximately 35,000 awards. Post award monitoring of these funds to ensure that they are spent by awardees in accordance with Federal and NSF requirements has been a long-standing concern. In fiscal year 2005, NSF has made progress by implementing numerous procedures to address the reportable condition identified in the Independent Auditors' Report in prior years. For example, NSF:

- Updated the Standing Operating Guidance (Guide), which provides procedures for award risk assessments and on-site visits to ensure, among other things, that awardees' financial management practices are sound. Also, the Guide provides templates and procedures to be applied in conducting reviews of institutions with high risk awards, and
- Implemented a number of recommendations reported in an NSF consultant's report titled *Post-award Monitoring Assessment*, which was issued in March 2004.

The Guide currently indicates that awards are assessed as high, medium, or low risk based on objective factors such as type of award organization, the complexity of award, and cost sharing requirements, and subjective factors such as programmatic concerns, timely submission of Federal Cash Transactions Reports (FCTRs) and concerns raised by the Division of Grants and Agreements, the Office of Inspector General, or the Division of Contracts and Complex Agreements.

All awards are subject to baseline reviews that cover for example, cash on hand, interest income, and advances to subawardees. Medium and low risk grants are subject to reviews of their FCTRs on a sample basis. Finally, institutions with high risk awards are subject to a more detailed level of review such as site visits and Total Business System Reviews.

While these are important steps to an effective post-award administration program, we believe that improvements are still needed. In particular, not all procedures in the Guide were followed. We noted the following deficiencies:

- While the Guide establishes a process for assessing the risk of NSF awards, it does not provide a detailed plan for monitoring all the institutions identified as having high risk awards. For example, the risk assessment model identified 167 institutions with high risk awards, but NSF only conducted site visits of 25 institutions and performed one Total Business System Review. The 141 institutions that were not selected for site visits became subject to less monitoring than the medium and low risk awardees that are subject to being selected for FCTR transactional testing. However, these 141 institutions were excluded from the sample universe for FCTR reviews.
- The Guide provides a process for excluding certain institutions with high risk awards from the site visit process. For example, institutions at which the office of Budget, Finance, and Award management has conducted site visits during the past four years, those at which OIG conducted audits during the past four years, those that are in the last year of performance of a high risk grant, and those that will be considered in the future are excluded from the current year site visit plan. We question the basis for a number of those exclusions and suggest that management revisit this process.
- The Guide requires that NSF consider both objective and subjective factors in identifying high risk awards. However, NSF only used the objective factors to determine the high risk awards. The

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Fiscal Year 2005 Reportable Conditions

subjective factors were used once the risk assessment was completed to determine which institution with high risk awards would be visited. As a result, by limiting the factors for identifying high risk awards, NSF has potentially not surfaced all institutions that should receive the highest levels of award monitoring.

- The Guide indicates that medium and low risk awards are annually subject to FCTR reviews. In fiscal year 2005, NSF engaged a contractor to perform a review of FCTRs for a statistically selected sample of 293 medium and low risk awards. KPMG also noted the FCTR review was not performed on the most recent FCTRs that were available in fiscal year 2005. Instead, it was performed on fiscal year 2004 FCTRs only.
- NSF has not provided documentation of the results of the Total Business System Review for the Federally Funded Research and Development Center (FFRDC) conducted in September 2005.
- Without adequate monitoring of its awardees, NSF cannot ensure that its grant expenditures were allowable, allocable, and reasonable under the terms of the award, which increase the risk of potential misstatements of its financial statements.

Recommendations

We believe that continued improvement in the post-award monitoring program is needed. Accordingly, we recommend that the NSF Chief Financial Officer:

- Revise the fiscal year 2005 risk assessment model and the Guide to:
 - Establish and implement a detailed strategic plan to monitor all institutions identified by the model as having high risk awards. The plan should have specific procedures to monitor those institutions having high risk awards that were not selected for site visits. Also, NSF management should consider expanding the review procedures for the high risk awardees to a level commensurate with their level of risk.
 - Clearly state how site visits selections are to be determined. If not all high risk awardees are to be visited, NSF should document its basis for excluding institutions with high risk awards from a site visit review including a determination of the sufficiency of the number of awardees selected. In addition, revise the factors used to exclude institutions with high risk awards from site visits to ensure that the factors used are appropriate considering the level of risk assessed.
 - Comply with the Guide requirements to ensure that both the objective and the subjective factors are applied during the risk assessment process to capture all high risk awards.
- Complete and document the FCTR transactional testing that covers the most currently available FCTRs.
- Complete and document the Total Business System Review for the FFRDCs selected including the review plan and the related report. This includes documenting in the Guide a detailed Total Business System Review plan and related procedures.

Management's Response

See Exhibit III.

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Fiscal Year 2005 Reportable Conditions

Auditors' Comments

As stated in the finding, high risk awards at 141 institutions did not receive any form of advanced monitoring. Although some of the 141 institutions that were not selected for site visits may have some medium and low risk awards that are subject to being selected for FCTR transaction testing, the high risk awards at these institutions are subject to less monitoring than the moderate and low risk awards at these awardees. In addition, there was no evidence that other institutions were added to the 167 institutions with high risk awards based on subjective factors.

We continue to believe that the inadequate post-award monitoring program creates a risk that grant funds are not spent for the purpose originally intended. The objective of this finding is to convey to management that improvements are still needed in order for its post-award monitoring program to effectively mitigate such risk.

05-02 Contract Monitoring

Contractors submit advance requests to NSF's Division of Financial Management (DFM). These advance requests are evaluated by DFM and the Contracting Officer's Technical Representative (COTR) to determine whether funds are available. The contractor electronically submits a *Quarterly Expenditure Report for Purchases and Services Other than Personnel* (Quarterly Expenditure Report) on a quarterly basis to DFM. The quarterly expenditure report is supported by project expenditure reports that contain obligations, advances, and expenses summarized by contract modification and are used to reconcile the amounts advanced to the amounts expended on the contract. DFM uses the information contained in the quarterly expenditure report to record expenditures incurred on the contract and to reconcile the expenditures to the outstanding advance payment balance in NSF's records.

As noted in last year's Independent Auditors' Report, NSF does not adequately review quarterly expenditure reports submitted by contractors receiving advance payments to ensure that the reported expenditures are correct and consistent with the contract. Without adequately performing such procedures, misstatements in expenditures may remain undetected. In addition, neither the contracting officer nor the COTR receives copies of quarterly expenditure reports. As a result, a recent audit performed by the Defense Contract Audit Agency (DCAA) of one of NSF's major contractors, questioned \$33.4 million in claimed expenditures. This underscores the large sums of money that are subject to advance payment and therefore at risk of misuse. While NSF is considering engaging DCAA to perform reviews of these quarterly expenditure reports, no review was performed over the fiscal year 2005 expenditures.

Recommendations

We recommend that the Chief Financial Officer develop procedures to require that Quarterly Expenditure Reports be distributed to all responsible officials for review and approval of the reports accuracy and propriety, correct computations, and authorized purpose under the contractual agreement. In addition, the review and approval process should include periodic testing of a sample of expenditures to actual invoices/other supporting documentation.

Management's Response

See Exhibit III.

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Auditors' Comments

We continue to believe that the inadequate review of the quarterly expenditure reports creates the potential for abuse or errors and elevates the risk of fraudulent activities occurring without detection. The purpose of this finding is to convey the concern that without adequate review of the quarterly expenditure reports, unauthorized expenditures may take place. These quarterly expenditure reports support the amounts expended on the contract using the funds that were advanced by NSF and are the only source for the contract expenditures recorded by NSF.

Status Of FY2004 Reportable Conditions

Post-award Grant Monitoring

NSF continues to need improvement in the post-award monitoring program. Our review of NSF's corrective actions in fiscal year 2005 revealed that NSF made progress in addressing prior years' reportable condition, however, NSF needs to revise the fiscal year 2005 risk assessment model and the Standing Operating Guidance (Guide) to establish and implement a detailed strategic plan to monitor all institutions identified by the model as having high risk awards, clearly state how site visits selections are to be determined, and comply with the Guide requirements to ensure that both the objective and the subjective factors are applied during the risk assessment process to capture all high risk awards. In addition, NSF needs to perform the Federal Cash Transactions Report transactional testing on the most currently available Federal Cash Transactions Reports and the Total Business System Review for the Federally Funded Research and Development Center selected including the review plan and the related report. This is the fifth year that we reported post-award grant monitoring as a reportable condition.

Management's Response

See Exhibit III.

Auditors' Comments

NSF responded that there was no reference to the FCTR review and the Total Business System Review for the Federally Funded Research and Development Center in the fiscal year 2004 recommendation. The FCTR review and Total Business System Review are considered advance monitoring and accordingly, the purpose of this comment is to provide an update of our fiscal year 2004 recommendation that the Chief Financial Officer needs to develop and begin implementing a plan for required baseline and advanced monitoring of all grantees.

Contract Monitoring

NSF continues to need improvement in implementing a comprehensive monitoring and review program for expenditures under advanced payment basis contracts. While NSF is considering engaging DCAA to perform reviews of the quarterly expenditure reports, no review was performed over the fiscal year 2005 expenditures. This is the second year that we reported, contract monitoring as a reportable condition.

**NSF Management's Response to Independent
Auditors' Report for Fiscal Year 2005**

