



OFFICE OF  
INSPECTOR GENERAL

**NATIONAL SCIENCE FOUNDATION**

**4201 Wilson Boulevard  
ARLINGTON, VIRGINIA 22230**

MEMORANDUM

DATE: September 30, 2010

TO: Greg Steigerwald, Acting Director  
Division of Acquisition and Cooperative Support (DACCS)

FROM: Dr. Brett M. Baker /s/  
Assistant Inspector General for Audit

SUBJECT: NSF OIG Audit Report No. OIG-10-1-016, Audit of Incorporated Institutions for Seismology's (IRIS) Accounting System for Compliance With Government Contracting Regulations

We contracted with the Defense Contract Audit Agency (DCAA), Chesapeake Branch Office, to perform an audit of Incorporated Research Institutions for Seismology's (IRIS) accounting system to determine whether it is adequate for recording costs under Government awards and whether the billing procedures are adequate for the preparation of cost reimbursement claims. In addition, DCAA performed steps to determine if IRIS' subrecipient monitoring process is adequate; labor distribution system accurately assigns costs to the appropriate cost objectives; time and effort reporting is accurate and complete; and time and labor hours recorded fairly represents the number of actual hours worked. DCAA performed the audit in accordance with Generally Accepted Government Auditing Standards.

DCAA is also performing an audit of the costs that IRIS claimed on its NSF cooperative agreement award nos. EAR-0004370 and EAR-0323310, to determine if those costs are accurately charged to the NSF awards. We will provide you with the report once the audit is completed.

The IRIS cooperative agreement nos. EAR-0004370 and EAR-0323310, with a total value of approximately \$80 million, provide for the exploration of the Earth's interior through the collection and distribution of seismographic data. IRIS' [REDACTED] in annual revenue is substantially derived from the NSF cooperative agreements and as a result, NSF is the federal cognizant agency responsible for ensuring that costs claimed by IRIS complies with federal requirements. Founded in 1984, IRIS is a nonprofit organization made up of a consortium of over 100 U.S. educational and not-for-profit seismology research member institutions and employs [REDACTED] people.

## Summary of Audit Findings and Recommendations

Overall, DCAA determined that IRIS' accounting system is inadequate for accumulating and billing costs under government awards. DCAA identified four material weaknesses in IRIS' accounting system that could adversely affect IRIS' ability to initiate, authorize, record, process and report accurate costs to the government. Specifically, DCAA found material weaknesses in IRIS' 1) subrecipient monitoring, 2) records to document its procurement of subrecipients, 3) accounting for labor costs, and 4) accounting manual.

### 1. Inadequate Monitoring of Subrecipients

#### a. Subrecipient Audits

Over [REDACTED] of the [REDACTED] and [REDACTED] in revenues that IRIS earned in 2008 and 2009, (\$11.7 million and \$13.1 million, respectively) were costs claimed to NSF through its subrecipients. IRIS is required to ensure that required OMB Circular A-133 Single Audits (A-133) of subrecipients are completed nine months after fiscal year end and subsequently review the reports. IRIS does not ensure that the subrecipients are completing the required audits within nine months of year end. Therefore, IRIS cannot meet its requirement to review and issue a management decision concerning the subrecipient's audit findings that affect IRIS' subawards, within six months of the completed audit and ensure that the subrecipient takes timely and appropriate corrective actions.

DCAA recommends that IRIS implement a policy and procedure that will ensure that IRIS adequately monitors and documents IRIS' subrecipient's reporting requirements in accordance with the A-133 Compliance Supplement. IRIS agrees with the finding and recommendation.

#### b. During-the-Award-Monitoring

IRIS does not perform adequate reviews of subrecipient's financial records as required by A-133. IRIS relies on the subrecipient's A-133 audit reports (if received) to provide reasonable assurance that the subrecipient is administering the subaward in compliance with applicable laws, regulations, and cooperative agreement terms and conditions. The Program Managers at IRIS perform site visits to the subrecipients; however they do not review financial records.

Significant portions of the pass through costs at IRIS are to large universities and organizations who receive a majority of their funding through federal programs. IRIS believes that other federal programs are reviewing the universities and organizations to ensure compliance with federal laws and regulations. However, IRIS personnel interviewed were unable to identify the federal programs that are reviewing these universities and organizations, or the nature or results of the reviews performed.

DCAA recommends that IRIS implement a risk-based policy and procedure that will identify audits being performed at IRIS' subrecipients by other awarding entities and appropriately document this review. If no other awarding entities are performing audits at the subrecipient, this policy and procedure should identify the extent of review IRIS should perform at the subrecipient to ensure that the costs claimed on its awards are allowable. IRIS should also ensure that they are notified when another entity identifies non-compliance at the subrecipient. IRIS agrees with the finding and recommendation.

## 2. Lack of Records to Support IRIS' Procurement of Subrecipients

IRIS does not maintain files that include the basis for the subrecipient selection, justification for lack of competition when competitive bids are not obtained, documentation of some form of cost or price analysis, and basis for the award cost or price. IRIS relies on the required audit reports of subrecipients (if received) for determination of an adequate accounting and internal control system in place prior to an award .

DCAA recommends that IRIS implement a policy and procedure that will establish the utilization of procurement files for all subrecipients. Documentation in these files should include, at the minimum, documentation of the cost or price analysis performed, the basis for subrecipient selection, justification for lack of competition when competitive bids are not obtained, and a basis for award cost or price. IRIS agrees with the finding and recommendation.

## 3. Labor Accounting Issues

IRIS exempt employees submit their timesheet's monthly. Non-exempt employees submit their timesheets weekly. IRIS pays their employees bi-monthly. The labor distribution report is posted at month end close. IRIS uses the monthly timesheets for exempt employees to calculate a ratio between jobs they are charging. IRIS then applies the ratio to the standard number of hours (173.3) to post to its accounting system. Non-exempt employees are entered into the accounting system using actual number of hours worked.

### a. Fringe Benefit Allocations

IRIS does not separately identify Paid Time Off (PTO), Holiday, or Administrative hours in the labor distribution. IRIS applies a ratio derived from the direct and indirect labor charges to a standard number of hours for exempt employees. IRIS then records this standard number of hours in the labor distribution. IRIS allocates PTO, Holiday, and Administrative hours based on the ratio of hours claimed on the timesheet. The contractor's methodology for the allocation of PTO, Holiday, and Administrative leave allows for a potential inequitable allocation to occur with employees who record hours on more than one project, or when a project is started or ended in a fiscal year which may result in inaccurate payroll costs claimed on its NSF awards.

DCAA recommends that IRIS implement a policy and procedure that will allow for PTO and administrative days to be absorbed by all organization activities or final cost objectives in proportion to the relative amount of time or effort actually devoted to each. IRIS only agrees to review its accounting practices for compensated absences.

#### b. Use of Standard Hours in Payroll

IRIS' labor distribution does not account for the total hours or activity for which employees are compensated. IRIS exempt employees submit timesheets monthly. IRIS non-exempt employees submit timesheets weekly. When IRIS enters the time into its accounting system for exempt employees, they use the actual hours to calculate a ratio, and apply this ratio to the standard number of hours used for monthly labor distributions in IRIS' accounting system (173.3 hours each month). For example, in November 2008 there are only 160 hours claimed on the employees' timesheets (20 days Monday – Friday \* 8 hours/day). These hours are then allocated to 173.3 standard numbers of hours in the contractor's monthly labor distribution. As a result, the labor distribution represents more hours than the employees worked in the month of November 2008. By recording hours in the labor distribution in this manner, IRIS' labor distribution does not represent an after-the-fact determination of the actual hours or activity of each employee, or the total hours or activity for which employees are compensated.

DCAA recommends that IRIS implement a labor distribution process that will account for the actual and total labor activity of each employee in accordance with federal regulations. By implementing a labor distribution process that accounts for the total and actual activity of each employee, manual computations will be reduced, decreasing the potential for error. IRIS disagreed with the recommendation and stated that its existing practice to use a prorated allocation of hours worked is acceptable.

#### c. Incomplete Employee Handbook Timekeeping Policy and Procedure

IRIS' Employee Handbook, dated October 2008, contains policies and procedures for timekeeping. The policies and procedures do not ensure that employees and supervisors sign their timesheets after the pay period has ended.

DCAA recommends that IRIS revise the Employee Handbook to ensure that employees sign their timesheets after the pay period has ended to ensure that timesheets are the actual activity of each employee. IRIS agrees with the finding and recommendation.

#### d. Timesheets Not Always Authorized in Accordance with IRIS' Employee Handbook

Employee timesheets are not always approved by both the employee and his or her supervisor or designated supervisor as required in the IRIS Employee Handbook.

DCAA recommends that IRIS ensure that employees are following the Employee Handbook requirements through training and internal floor checks. IRIS agrees with the finding and recommendation.

#### e. Timesheets do not Support Actual Hours Worked

Two employee timesheets did not support the actual hours worked. For example, for exempt (salaried) field personnel who are on travel status for extended periods of time, a timekeeping policy based on a full-time schedule (i.e., 2080 hours/year) was implemented by IRIS to record actual days worked (but not hours per day). Employees are required to record the actual number of hours they work to the applicable project or leave code.

DCCA recommends that IRIS employees record all hours worked. If additional tracking is necessary, IRIS should create a project number specific to field work for the program and require the employees to record the hours worked against this project number. IRIS disagreed with the recommendation and stated that its modified timekeeping practice is acceptable.

#### 4. Inadequate Accounting Manual

IRIS' Accounting Manual does not provide a written description of the indirect cost pools and bases for their DC Office Overhead, DMC (Seattle) Office Overhead, and G&A Pool. The accounting manual also does not provide a procedure for accumulating and billing indirect costs.

DCAA recommends that IRIS revise the Accounting Manual to include a description of the indirect pools and bases for the DC Office Overhead, DMC (Seattle) Office Overhead and G&A costs and procedures for accumulating and billing these indirect costs. IRIS agrees with the finding and recommendation.

DCAA also recommends that NSF, as the cognizant federal agency, have a follow-up accounting system review performed after IRIS has implemented DCAA's recommendations. DCAA's audit report, including IRIS' response to the recommendations, is attached.

In accordance with OMB Circular A-50, please coordinate with our office during the six-month resolution period to develop a mutually agreeable resolution of the audit findings. The findings should not be closed until NSF determines that all recommendations have been adequately addressed and the proposed corrective actions have been satisfactorily implemented.

We are providing a copy of this memorandum to the Division and Program Directors for the Division of Earth Sciences (EAR). The responsibility for audit resolution rests with Cost Analysis and Audit Resolution (CAAR). Accordingly, we ask that no action be taken concerning the report's findings without first consulting CAAR at (703) 292-8242.

#### **OIG Oversight of Audit**

To fulfill our responsibilities under Generally Accepted Government Auditing Standards, the Office of Inspector General:

- Reviewed DCAA's approach and planning of the audit;
- Monitored the progress of the audit at key points;
- Coordinated periodic meetings with DCAA and NSF officials as necessary to discuss audit progress, findings and recommendations;
- Reviewed the audit report prepared by DCAA to ensure compliance with Generally Accepted Government Auditing Standards and Office of Management and Budget Circulars; and
- Coordinated issuance of the audit report.

DCAA is responsible for the attached auditor's report on IRIS' accounting system and the conclusions expressed in the report. The NSF OIG does not express any opinion on IRIS' accounting system or the conclusions presented in DCAA's audit report.

We thank you and your staff for the assistance extended to us during the audit. If you have any questions about this report, please contact Kenneth Stagner at (303) 312-7655 or Jannifer Jenkins at (703) 292-4996.

Attachment 1: DCAA Audit Report No. 6171-2009J17740001, *Post-Award Review of Accounting System for Incorporated Research Institutions for Seismology*, dated June 4, 2010.

cc: Martha Rubenstein, CFO and Director BFA  
Mary Santonastasso, Division Director, DIAS  
Robert S. Detrick, Division Director, GEO/EAR  
Gregory J. Anderson, Program Director, GEO/EAR