



National Science Foundation

4201 Wilson Boulevard
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Office of Inspector General

MEMORANDUM

DATE: March 31, 2011

TO: Jeffery Lupis, Division Director
Division of Acquisition and Cooperative Support (DACCS)

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

SUBJECT: NSF OIG Audit Report No. OIG-11-1-016, Evaluation of AUI's Internal Control over Property, Procurement and Travel

We contracted with the Defense Contract Audit Agency (DCAA), Chesapeake Bay Branch Office, to perform a comprehensive internal control review of Associated Universities, Inc. (AUI). This is the second part of this audit¹, wherein DCAA evaluated AUI's internal controls over procurement and acquisition; property and equipment; and purchasing which includes credit card purchases and travel.

Background

AUI manages astronomical observatories for NSF and is the management organization for the National Radio Astronomy Observatory (NRAO), which is one of NSF's Federally Funded Research and Development Centers (FFRDC). AUI manages research facilities in Green Bank, WV (site of the Green Bank telescope) and in Socorro, NM (site of the Very Large Array and Expanded Very Large Array). AUI also manages the Atacama Large Millimeter Array (ALMA) which is still under construction in Chile. NSF awarded Cooperative Agreement AST-0956545 to AUI, effective from November 15, 2009 through September 30, 2015, for the management and operations of the NRAO. NSF projected it would award about \$458 million of funds to AUI for the management and operations of the National Radio Astronomy Observatory (NRAO) for FYs 2010-2015. We requested an internal control audit of AUI to determine whether AUI has systems in place to ensure compliance with federal regulations and proper stewardship over NSF funds.

The objectives of this specific audit were to evaluate the adequacy of AUI's policies and procedures for procurement and acquisition; property and equipment; and purchasing which includes credit card purchases and travel. The criteria that DCAA used in making its evaluation included 2 CFR Part 230, *Cost Principles for Non-Profit Organizations*.

¹ The first part of the audit was transmitted under NSF OIG Audit Report No. OIG-10-1-013, *Evaluation of the Adequacy of Associated Universities Inc.'s Short and Long Range Planning Processes*, dated September 30, 2010.

DCAA issued a separate audit report to address this objective. DCAA's audit report is included as an attachment to this memo. DCAA's findings and recommendation are summarized below.

AUI's Corporate Office Requires Written Travel Policies and Procedures

DCAA stated that AUI's internal controls over procurement and acquisition, property and equipment; and purchasing which includes credit card purchases are adequate. However, AUI's travel policies and procedures are inadequate to achieve proper internal control over corporate office employees' travel. DCAA stated that during FY 2010 AUI incurred \$273,540 of travel costs which were allocated to NRAO and reimbursed by NSF through its indirect cost rate.²

During DCAA's travel review, AUI corporate told DCAA that it "generally follows" NRAO policies and procedures for travel. However, DCAA found instances where AUI corporate did not follow NRAO's travel policies and procedures, including not submitting travel authorizations prior to travel, and board trustees being reimbursed for actual expenses incurred rather than per diem amounts. DCAA stated that, while travel cost principles for non-profit organizations provide for reimbursement of travel expenses on an actual cost basis, certain conditions must be met for the costs to be allowable which are specified in the federal cost principles.³ DCAA recommended that AUI corporate office establish written travel policies and procedures in accordance with administrative requirements and travel cost principles that provide detailed accounting and travel policies and procedures.

AUI agreed to establish AUI Corporate Office policies and procedures that will provide detailed accounting and travel policies and procedures.

Recommendation

We recommend that the NSF Director of the Division of Acquisition and Cooperative Support address and resolve DCAA's recommendation that AUI Corporate Office establish written policies and procedures that are in accordance with both the administrative requirements and travel cost principles (Appendix B, Paragraph 51) included in 2 CFR 230, Cost Principles for Non-Profit Organizations, and detail the process the traveler undertakes prior to traveling through reimbursement of expenses incurred while on official travel.

As part of its audit resolution process, NSF is responsible for reviewing AUI's revised policies and ensuring that they are adequate and properly implemented.

We are providing a copy of this memorandum to the AUI Program Director. The responsibility for audit resolution rests with DACS. Accordingly, we ask that no action be taken concerning the report's findings without first consulting DACS at (703) 292-8242.

² DCAA did not evaluate the allowability of costs yet, because this review was not an incurred cost audit.

³ Reference 2 CFR Part 230, Appendix B, Paragraph 51, *Travel Costs*.

OIG Oversight of Audit

To fulfill our responsibilities under 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 OIG management to discuss audit progress, findings and recommendations;
- Reviewed the audit report prepared by DCAA to ensure compliance with Government Auditing Standards and Office of Management and Budget Circulars; and
- Coordinated issuance of the audit report.

DCAA is responsible for the attached audit report on AUI and the conclusions expressed in the report. The NSF OIG does not express any opinion on AUI's internal controls over procurement and acquisition; property and equipment; and purchasing which includes credit card purchases and travel, 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 Jannifer Jenkins at (703) 292-4996 or David Willems at (703) 292-4979.

Attachments: DCAA Report No. 6171-2010J17900010 dated March 24, 2010

cc: Martha Rubenstein, CFO and Director BFA
Mary Santonastasso, Division Director, DIAS
Vernon Pankonin, Program Director, MPS/AST
Clifford Gabriel, Senior Advisor, OD

Defense Contract Audit Agency



United States
Department of Defense



March 24, 2011

Independent Audit of Associated Universities, Incorporated
Internal Control over Property and Procurement

AUDIT REPORT NO. 6171-2010J17900010

RESTRICTIONS:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

DEFENSE CONTRACT AUDIT AGENCY

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REFERENCES: Relevant Dates: See Page 5

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SUBJECT OF AUDIT

In response to your request dated August 13, 2009, we have examined the adequacy of Associated Universities, Inc.'s (AUI's) control environment including internal controls over procurement and acquisition; property and equipment; and purchasing which includes credit card purchases and travel to determine whether AUI's controls are adequate to achieve planned objectives and proper stewardship over NSF funds.

AUI is responsible for establishing and maintaining adequate policies and procedures for procurement and acquisition; property and equipment; and purchasing which includes credit card purchases and travel. Our responsibility is to express an opinion on the adequacy of the policies and procedures based on our examination.

SCOPE OF AUDIT

We conducted our examination in accordance with generally accepted government auditing standards, except DCAA does not currently have an external opinion on its quality control system as required by GAGAS 3.55. The most recent external quality control review opinion expired on August 26, 2009. GAGAS require that we obtain a sufficient understanding of internal controls to plan our examination and determine the nature, timing, and extent of tests to be performed. An examination of internal controls includes:

- Obtaining an understanding of the contractor's procurement and acquisition; property and equipment; and purchasing which includes credit card purchases and travel;
- Determining whether reliance can be placed on the work of the contractor's IPA's relating to property and equipment procurement;
- Performing detailed testing of procurement and acquisition; property and equipment; and purchasing which includes credit card purchases and travel; and
- Determining the need for technical assistance.

We evaluated the adequacy of the control environment and related controls over property, procurement, credit card purchase and travel using the applicable requirements contained in:

- 2 CFR Part 230 – Cost Principles for Non-Profit Organizations (OMB Circular A-122);
- 2 CFR Part 215 – Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations (OMB Circular A-110);
- National Science Foundation Grant Policy Manual; and
- Cooperative Agreement terms and conditions.



Audit Report No. 6171-2010J17900010

We have not specifically examined AUI's accounting system and related internal controls. The scope of our examination reflects our assessment of control risk and includes audit tests designed to provide a reasonable basis for our opinion.

Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal control over the property and procurement process to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

RESULTS OF AUDIT

In our opinion, AUI's control environment including internal controls over procurement and acquisition; property and equipment; and purchasing which includes credit card purchases is adequate. However, AUI's travel policies and procedures are inadequate to achieve proper internal control over travel due to its lack of adequate policies and procedures. In addition, its travel policies and procedures do not provide sufficient controls to ensure compliance with 2 CFR Part 230, Appendix B, Paragraph 51 "Travel Costs" which states "...Such costs may be charged on an actual cost basis, on a per diem or mileage basis in lieu of actual costs incurred, or on a combination of the two, provided the method used is applied to an entire trip and not to selected days of the trip, and results in charges consistent with those normally allowed in like circumstances in the non-profit organization's non-federally sponsored activities." Our Statement of Condition and Recommendation below provides the detail of the noted inadequacy.

In your request for audit your office requested that we "determine if the weaknesses identified in NSF's TBSR (Total Business Systems Review) report have been adequately addressed and resolved and determine and report on whether corrective actions noted in the report have been fully implemented." The TBSR report included a section on the conclusions of the review which included corrective actions that related to purchasing and procurement as follows:

- Including some form of cost/price analysis documentation in the file of every procurement action; and
- Adjusting the fair market valuation method used for donated property.

During our evaluation of controls over procurement, we noted that AUI does perform and maintain documentation of cost/price analysis in its procurement files. Our evaluation of property did not include an assessment of the valuation method used for donated property because that is a financial accounting matter that is outside the scope of our audit.

Our audit was limited to determining the adequacy of AUI's overall control environment and internal controls over property and procurement systems, as well as credit card management

and travel. We did not perform a comprehensive audit of the recipient's internal controls. Accordingly, we express no opinion on AUI's system of internal control taken as a whole.

We provided the results of our audit to [REDACTED], in an exit conference on March 3, 2011. The contractor's response is included as an appendix on Page 7.

STATEMENT OF CONDITION AND RECOMMENDATION

Condition: Associated Universities, Inc. (AUI) does not follow its travel policies and procedures with respect to travel approval. In addition, the policy is vague with respect to the necessary documentation required to support the travel; and for establishing reasonableness and allowability in like circumstances for reimbursement on Federal awards.

AUI has an agreement with the National Science Foundation (NSF) to manage the National Radio Astronomy Observatory (NRAO). While NRAO maintains detailed procedures for employee travel, AUI's corporate policy is vague and does not detail the process that is to be followed by employees prior to travel and for reimbursement of travel expenses. The contractor states, that it "generally follows" the NRAO policies and procedures for travel. However; it was determined during testing that there are significant aspects of NRAO's travel procedures that AUI does not follow, including; not being required to submit travel authorizations prior to travel and board trustees being reimbursed for actual expenses incurred rather than per diem or actual expenses that do not exceed the per diem amount.

While the majority of AUI's business is to manage NRAO, there is a need for AUI to establish an independent set of detailed policies and procedures, including travel, to distinguish itself from its research centers.

During FY 2010, AUI incurred \$273,530 of travel costs which is allocated to NRAO and reimbursed by NSF through its indirect cost rate.

Recommendation: We recommend that AUI establish written travel policies and procedures that are in accordance with both the administrative requirements and travel cost principles (Appendix B Paragraph 51) included in 2 CFR Part 230, Cost Principles for Non-Profit Organizations, and detail the process the traveler undertakes prior to traveling through reimbursement of expenses incurred while on official travel.

Contractor's Reaction: The contractor concurred with our finding. It acknowledged the fact that they do not have independent travel procedures and will "establish AUI Corporate Office Fiscal Policies and Procedures that will provide detailed accounting and travel policies and procedures."

CONTRACTOR ORGANIZATION AND SYSTEMS

1. Organization

Associated Universities, Incorporated (AUI) is a not-for-profit organization that was established in 1946 as an educational institution dedicated to research, development, and education in the physical, biological and engineering services. AUI is the Management organization for National Radio Astronomy Observatory (a Federally Funded Research and Development Center) which operates and manages astronomical observatories located in Chile; Greenbank, West Virginia; and Socorro, New Mexico. AUI, in addition to managing NRAO, also manages the support and construction of the Atacama Large Millimeter Array (ALMA) in Chile. AUI's responsibilities include appointing the Observatory Director and other hiring decisions; reviewing ongoing programs and budgets; as well as overseeing any new projects or proposals. AUI is governed by a Board of Trustees, which performs many functions, including electing Corporate Officers who serve the Board in carrying out the everyday business of AUI. For the fiscal year ending September 30, 2009, AUI generated approximately \$147 million in operating revenue from NSF (National Science Foundation).

The most recently awarded NSF cooperative agreement (AST-0956545), effective from November 15, 2009 through September 30, 2015, is applicable for the management and operations of the NRAO. NSF's funding projection to AUI for FY's 2010 – 2015 is approximately \$458 million.

2. Accounting System

Costs are allocated and managed under Scientific Program Orders (SPO's). The contractor maintains a job cost accounting system wherein contracts are assigned individual project numbers that are used to accumulate associated direct costs. The contractor utilizes JD Edward's software for its accounting system. NRAO's unallowable costs are not recorded in NRAO's general ledger. Instead, these costs are charged directly to AUI's books and records to an unallowable account code. There are four indirect rates that are utilized: AUI Indirect rate, common cost recovery rate, fringe, and leave. Employees use an Electronic Timekeeping (ETK) system for inputting time and processing payroll. Claims for reimbursement are submitted weekly by authorized employees using the government directed FastLane software program.

DCAA PERSONNEL

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Primary contacts regarding this audit: [REDACTED]	[REDACTED]

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General information on audit matters is available at <http://www.dcaa.mil/>.

RELEVANT DATES

Audit Request Date: August 13, 2009

AUDIT REPORT AUTHORIZED BY:

[REDACTED]

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AUDIT REPORT DISTRIBUTION

DISTRIBUTION

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APPENDIX



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March 15, 2011

AUI Management Response to DCAA Internal Controls Audit

**Property, Procurement, Credit Cards & Travel
Travel SOCAR**

Condition: AUI Corporate Office does not have its own written travel policies and procedures . In addition, the policy that is followed is vague with respect to the necessary documentation required to support the travel; and for establishing reasonableness and allowability in like circumstances for reimbursement on Federal awards.

AUI has an agreement with the National Science Foundation (NSF) to manage the National Radio Astronomy Observatory (NRAO). While NRAO maintains detailed procedures for employee travel, AUI's separate policy is vague and does not detail the process that is to be followed by employees prior to travel and for reimbursement of travel expenses. The contractor states that although there is a standard policy under AUI, it "will generally follow" NRAO's travel policies and procedures. However; it was determined during testing that there are significant aspects of NRAO's travel procedures that AUI does not follow, including; not being required to submit travel authorizations prior to travel and board trustees being reimbursed for actual expenses incurred rather than per diem or actual expenses that do not exceed the per diem amount.

While the majority of AUI's business is to manage NRAO, there is a need for AUI to establish an independent set of detailed policies and procedures, including travel, to distinguish itself from its research centers.

During FY 2010, AUI incurred \$273,530 of travel costs which is allocated to NRAO and reimbursed by NSF through its indirect cost rate.

Recommendation: We recommend that AUI establish written travel policies and procedures that are in accordance with the both administrative requirements (2 CFR Part 230 Appendix A) and travel cost principles (2 CFR Part 230 Appendix B Paragraph 51) included in 2 CFR Part 230, Cost Principles for Non-Profit Organizations and detail the process the traveler undertakes prior to traveling through reimbursement of expenses incurred while on official travel.

AUI Management Response: AUI Management acknowledges that the AUI Corporate Office does not have its own independent set of detailed fiscal policies and procedures, including travel, to distinguish itself from its research centers. AUI Management will establish an AUI Corporate Office Fiscal Policies and Procedures Manual that will provide detailed accounting and travel policies and procedures. These policies and procedures will be in accordance with the general principles (Appendix A) and cost principles (Appendix B) in 2 CFR Part 230 (*Cost Principles for Non-Profit Organizations*).

