




**National Science Foundation • Office of Inspector General**  
4201 Wilson Boulevard, Suite I-1135, Arlington, Virginia 22230

MEMORANDUM

DATE: March 31, 2015

TO: Jeffery M. Lupis, Director  
Division of Acquisition and Cooperative Support (DACS)

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

SUBJECT: NSF OIG Audit Report No. 15-1-013, Follow-up of the *Independent Audit of Association of Universities for Research in Astronomy's (AURA) Accounting System*

The Defense Contract Audit Agency (DCAA) performed a follow-up audit on its pre-award accounting system audit of the Association of Universities for Research in Astronomy (AURA). The report is attached. See NSF OIG Report No. 15-6-002, Additional Information Concerning NSF Report No. 15-1-013, *Follow-up of Independent Audit of Association of Universities for Research in Astronomy's (AURA) Accounting System*, dated March 31, 2015, for additional information.

**OIG Monitoring of Audit**

To fulfill our monitoring responsibilities, the Office of Inspector General:

- Reviewed the 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 DCAA and NSF officials as necessary to discuss audit progress, findings and recommendations;
- Reviewed the report prepared by DCAA; and
- Coordinated issuance of the report.

DCAA is responsible for the attached report on AURA and the conclusions expressed in that 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 Audit Report No. 4301-2012B17740010, *Independent Audit of Association of Universities for Research in Astronomy (AURA) Accounting System*, dated May 31, 2013.

cc: Richard Buckius, OD  
Fae Korsmo, OD  
Ruth David, NSB  
Michael VanWoert, NSB  
Lawrence Rudolph, OGC  
Martha Rubenstein, BFA  
James Ulvestad, AST  
Matthew Hawkins, LFO  
Mary Santonastasso, DIAS  
Allison Lerner, OIG

# Defense Contract Audit Agency



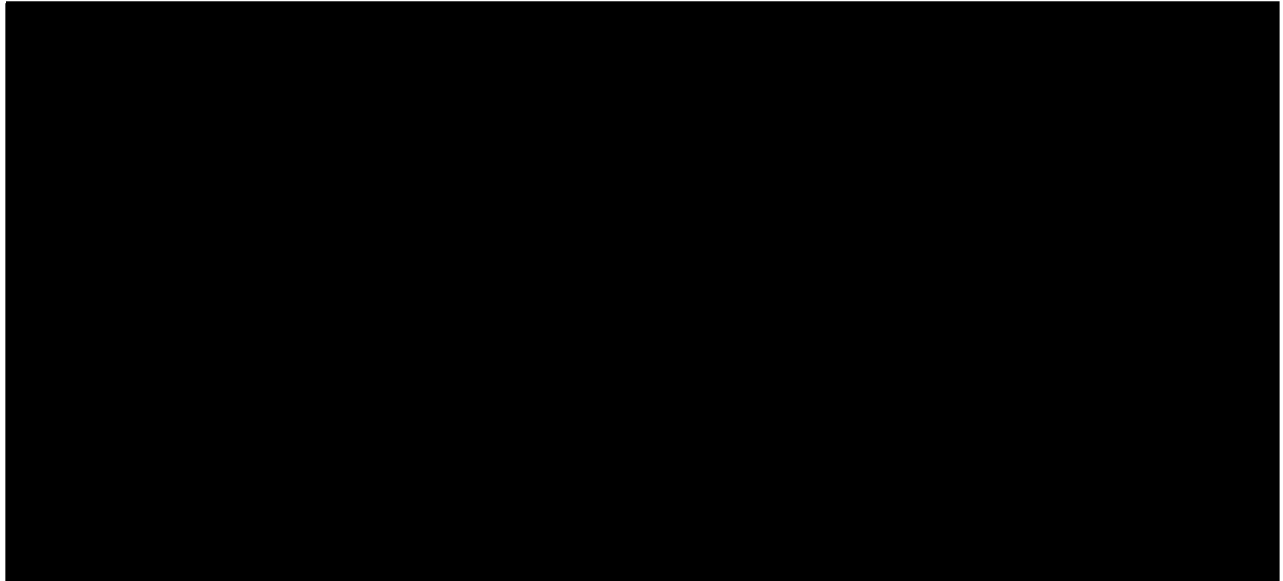
United States  
Department of Defense



May 31, 2013

Independent Audit of Association of Universities for Research  
in Astronomy's (AURA) Accounting System

**AUDIT REPORT NO. 4301-2012B17740010**



## DEFENSE CONTRACT AUDIT AGENCY

**PREPARED FOR:** Audit Manager  
National Science Foundation  
Office of the Inspector General  
ATTN: Mr. David Willems  
4201 Wilson Boulevard  
Arlington, VA 22230

**PREPARED BY:** DCAA Arizona Branch Office  
2121 W. Chandler Boulevard, Suite 207  
Chandler, AZ 85224-6459  
Telephone No. [REDACTED]  
FAX No. [REDACTED]  
E-mail Address [REDACTED]

**REFERENCES:** CSA No. AST-0415302  
Relevant Dates: See Page 5

**CONTRACTOR:** Association of Universities for Research in Astronomy  
950 N. Cherry Avenue  
Tucson, AZ 85719

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**SUBJECT OF AUDIT**

As you requested on November 18, 2011, we examined Association of Universities for Research in Astronomy's (AURA) corrective actions related to significant deficiencies in the design of the accounting system as reported in Audit Report No. 4301-2010B17740006 (revised) dated January 9, 2011. Those deficiencies resulted in noncompliance with the criteria set forth in 2 CFR Part 215 (OMB Circular A-110) and Form 1408NP, Preaward Survey for Non-Profit Organization's Accounting System. By submitting a cost proposal to the Government, AURA asserts that its accounting system is acceptable to perform the prospective contract in accordance with the above CFR criteria.

AURA is responsible for correcting the reported significant deficiencies. Our responsibility is to express an opinion on the acceptability of the design of the accounting system for the award of a prospective contract based on our examination.

**SCOPE OF AUDIT**

We conducted our examination in accordance with Generally Accepted Government Auditing Standards (GAGAS), except DCAA does not currently have an external opinion on its quality control system as required by GAGAS. The most recent external quality control review opinion expired on August 26, 2009. GAGAS require that we plan and perform the examination to obtain reasonable assurance about whether the data and records examined are free of material misstatement. An examination includes:

- obtaining an understanding of the portions of the contractor's internal controls relevant for accumulating costs under prospective Government contracts;
- examining, on a test basis, evidence supporting the ability of the design of AURA's accounting system to meet the criteria set forth in 2 CFR Part 215 (OMB Circular A-110) and Form 1408NP, Preaward Survey for Non-Profit Organization's Accounting System; and
- performing such other procedures as we considered necessary in the circumstances.

Our examination tested the contractor's corrective action related to the previously reported significant deficiencies in the design of the contractor's accounting system as required 2 CFR Part 215 (OMB Circular A-110) and the criteria in Form 1408NP.

The 2 CFR Part 215 and Form 1408NP requires the accounting system to be in accordance with generally accepted accounting principles and provide for:

1. Proper segregation of direct costs from indirect costs;
2. Identification and accumulation of direct costs by contract;
3. A logical and consistent method for the allocation of indirect costs to intermediate and final cost objectives;
4. Accumulation of costs under general ledger control;



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5. A timekeeping system that identifies employees' labor by intermediate or final cost objectives;
6. A labor distribution system that charges direct and indirect labor to the appropriate cost objectives;
7. Interim (at least monthly) determination of costs charged to a contract through routine posting of books of account;
8. Exclusion from costs charged to government contracts of amounts which are not allowable in terms of OMB Circular A-122, Attachment B, or other contract provisions;
9. Identification of costs by contract line item and by units (as if each unit or line item were a separate contract) if required by the proposed contract;
10. Designed to support the Cooperative Support Agreement (CSA) Award Specific Programmatic Terms and Conditions (PTC) reporting and review requirements;
11. Financial information as required by OMB Circular A-110, Financial Management Systems; and
12. Adequate, reliable data for use in pricing follow-on acquisitions.

We believe that our examination provides a reasonable basis for our opinion. We were not engaged to examine and report on the operating effectiveness of AURA's internal controls, and accordingly, we express no opinion on operating effectiveness. Additionally, our examination does not provide a legal determination on whether the design of AURA's accounting systems meets the criteria set for in 2 CFR Part 215 (OMB Circular A-110) and Form 1408NP.

Because of its inherent limitations, internal controls may not prevent or detect and correct misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate.

**RESULTS OF AUDIT**

In our opinion, AURA has effectively implemented corrective actions to correct the significant deficiencies in the design of the accounting system AURA reported in Audit Report number 4301-2010A17740006, dated January 9, 2011. Therefore, the contractor's accounting system is suitably designed, in all material respects, for award of a prospective contract in accordance with the criteria contained in 2 CFR Part 215 (OMB Circular A-110). The accounting system is in operation. Based on our examination we determined AURA adequately accumulates, segregates, and reports the use of ARRA (American Recovery and Reinvestment Act) funds, and adequately monitors sub-awardees' compliance with 2 CFR 215 (accountability of contingency funds) reporting requirements, ARRA reporting requirements, and the terms and conditions of sub-awards. As requested, we have completed a Form 1408NP, Preaward Survey of Prospective Contractor Accounting System.

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Our examination was limited to the evaluation of previously reported deficiencies in the design of AURA's accounting system.

We discussed the results of our examination with [REDACTED] in an exit conference held on May 21, 2013.

## **CONTRACTOR ORGANIZATION AND SYSTEMS**

### **1. Contractor Organization**

The Association of Universities for Research in Astronomy, Inc. (AURA) is a consortium of universities, and educational and other non-profit institutions, operating several astronomical observatories. AURA members include 32 U.S. institutions and 7 international affiliates. AURA has four operating segments. The Gemini Observatory is an international partnership to operate twin 8.1-meter telescopes on Hawaii's Mauna Kea and Chile's Cerro Pachon. The National Optical Astronomy Observatory (NOAO) operates telescopes located on Kitt Peak in Arizona and Cerro Tololo in Chile. NOAO also provides support for the Gemini Observatory. AURA operates NOAO for the National Science Foundation (NSF) under a cooperative agreement. The National Solar Observatory (NSO) provides observing facilities for use by the nation's solar and solar-terrestrial physics community. NSO conducts research at Sacramento Peak in New Mexico and at Kitt Peak in Arizona for the NSF under a cooperative agreement. The Space Telescope Science Institute (STScI) carries out the scientific mission of the Hubble Space Telescope. In addition, STScI is developing the Science and Operations Center for the James Webb Space Telescope (JWST), the successor to the Hubble. AURA manages STScI under contract with NASA. In 1999 AURA established the AURA Observatory Support Services (AOSS) to provide administrative and logistics support for AURA operations in Chile. AOSS is considered a service center in which its costs go directly to NOAO and NSO; it is not a segment of AURA.

### **2. Accounting System**

AURA maintains its accounting system on the accrual system in accordance with GAAP. The contractor's accounting period is from October 1 through September 30.

### **3. Estimating System**

We have not reviewed AURA's estimating system and related internal controls.



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**DCAA PERSONNEL**

Primary contacts regarding this audit:

[REDACTED]

Telephone No.

[REDACTED]

Other contact regarding this audit report:

[REDACTED]

[REDACTED]

FAX No.

[REDACTED]

Arizona Branch Office

E-mail Address

Arizona Branch Office

[REDACTED]

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

**RELEVANT DATES**

Request for Audit: NSF OIG – dated and received November 10, 2011

**AUDIT REPORT AUTHORIZED BY:**

[REDACTED]

Attachment:  
Form 1408NP

[REDACTED]

**AUDIT REPORT DISTRIBUTION**

Audit Manager  
National Science Foundation  
Office of the Inspector General  
ATTN: Mr. David Willems  
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Arlington, VA 22230

E-mail Address  
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PREAWARD SURVEY FOR NON-PROFIT ORGANIZATION'S ACCOUNTING SYSTEM	ARIZONA BRANCH OFFICE	DEFENSE CONTRACT AUDIT AGENCY
	PROSPECTIVE CONTRACTOR: Association of Universities for Research in Astronomy, Inc. (AURA)	

### SECTION I - RECOMMENDATION

1. CONTRACTOR'S ACCOUNTING SYSTEM IS ACCEPTABLE FOR AWARD OF PROSPECTIVE CONTRACT/GRANT.

☒ YES ☐ NO (Explain in 2. Narrative)

☐ YES, WITH A RECOMMENDATION THAT A FOLLOW-ON ACCOUNTING SYSTEM REVIEW BE PERFORMED  
AFTER CONTRACT AWARD (Explain in 2. narrative)

2. NARRATIVE (Clarification of deficiencies, and other pertinent comments. (If additional space is required, continue on plain sheets of paper.)

See DCAA Audit Report No. 4301-2012B17740010, dated May 31, 2013 for information supporting this form.

3. SURVEY MADE BY	a. Signature and Office (Include typed or printed name) [Redacted] Arizona Branch Office	b. Telephone No. [Redacted]	c. Date Signed March 6, 2013
4. SURVEY REVIEWING OFFICIAL	a. Signature and Office (Include typed or printed name) [Redacted]	b. Telephone No. (480) 384-8040	c. Date Reviewed May 31, 2013

If continuation sheets attached - mark here ☐

## SECTION II - EVALUATION CHECKLIST

MARK "X" IN THE APPROPRIATE COLUMN (Explain any deficiencies in SECTION I NARRATIVE)	YES	NO	N/A
1. EXCEPT AS STATED IN SECTION I NARRATIVE, IS THE ACCOUNTING SYSTEM IN ACCORD WITH GENERALLY ACCEPTED ACCOUNTING PRINCIPLES APPLICABLE IN THE CIRCUMSTANCES?	X		
2. ACCOUNTING SYSTEM PROVIDES FOR:			
a. Proper segregation of direct costs from indirect costs. (Circular A-122, Attachment A)	X		
b. Identification and accumulation of direct costs by contract. (Circular A-110, C.21b(1))	X		
(1) Identification and segregation of ARRA (American Recovery and Reinvestment Act) funds and MREFC (Major Research Equipment and Facilities Construction) funds. (Recovery Act §1512)	X		
c. A logical and consistent method for the allocation of indirect costs to intermediate and final cost objectives. (A contract is a final cost objective.) (Circular A-122, Attachment A)	X		
d. Accumulation of costs under general ledger control.	X		
e. A timekeeping system that identifies employees' labor by intermediate or final cost objectives. (Circular A-122, Attachment B)	X		
f. A labor distribution system that charges direct and indirect labor to the appropriate cost objectives.	X		
g. Interim (at least monthly) determination of costs charged to a contract through routine posting of books of account.	X		
h. Exclusion from costs charged to government contracts of amounts which are not allowable in Circular A-122, Attachment B, or other contract provisions.	X		
i. Identification of costs by contract line item and by units (as if each unit or line item were a separate contract) if required by the proposed contract/grant.	X		
j. Designed to support the Cooperative Support Agreement (CSA) Award Specific Programmatic Terms and Conditions (PTC) reporting and review requirements.	X		
3. ACCOUNTING SYSTEM PROVIDES FINANCIAL INFORMATION:			
a. Required by Circular A-110, Standards of Financial Management Systems (2 CFR Part 215.21)	X		
b. Required to support requests for reimbursement payments.(Circular A-110, C.22(e))	X		
c. Required to support requests for advance payments.(Circular A-110, C.22(a)(b))	X		
4. IS THE ACCOUNTING SYSTEM DESIGNED, AND ARE THE RECORDS MAINTAINED IN SUCH A MANNER THAT ADEQUATE, RELIABLE DATA IS DEVELOPED FOR USE IN PRICING FOLLOW-ON ACQUISITIONS?	X		
5. IS THE ACCOUNTING SYSTEM CURRENTLY IN FULL OPERATION? (If not, describe in Section I, Narrative which portions are (i) in operation, (ii) set up, but not yet in operation, (iii) anticipated, or (iv) nonexistent	X		