




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

MEMORANDUM

DATE: March 31, 2016

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. OIG-16-1-018**, *Independent Audit Report on Associated Universities, Inc.'s Proposed Direct Amounts on Unsettled Flexibly-Priced Contracts, Grants, and Cooperative Agreements for Fiscal Years 2008, 2009, and 2010*

At our request, the Defense Contract Audit Agency (DCAA) examined Associated Universities, Inc.'s (AUI) Fiscal Year (FY) 2008, 2009 and 2010 proposed direct costs for reimbursement on unsettled flexibly-priced awards, to determine if the claimed direct costs comply with contract or agreement terms pertaining to accumulating and billing incurred amounts. DCAA's audit report dated December 15, 2015, is attached.

DCAA took no exception to AUI's proposed FY 2008, 2009 and 2010 direct costs totaling \$412,000,688 for the three FYs under audit. However, DCAA rendered a qualified opinion due to a scope limitation, and stated, "...we were unable to complete procedures considered necessary under the circumstances." The scope limitation pertains to DCAA not having performed sufficient testing of existence of employees (on a real-time basis) for the FYs under audit. DCAA performed alternate procedures to obtain a level of assurance regarding the allowability, allocability, and reasonableness of the claimed costs, as well as employee existence. However, the alternate procedures did not provide DCAA with the level of assurance needed to remove the scope limitation. Therefore, the results of DCAA's evaluation related to direct labor (amounting to \$109,058,686 for the three FYs or 26.5 % of total direct costs proposed) are qualified to the extent that they could be significantly impacted by the performance of sufficient real-time procedures.

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 audit report and the qualification and conclusions presented therein.

We thank you and your staff for the assistance extended to us. If you have any questions about this report, please contact David Willems at (703) 292-4979 or Jannifer Jenkins at (703) 292-4996.

Attachment: DCAA Audit Report Nos. 6171-2008J10100012, 6171-2009J10100012, and 6171-2010J10100008, *Independent Audit Report on Associated Universities, Inc.'s Proposed Direct Amounts on Unsettled Flexibly-Priced Contracts, Grants, and Cooperative Agreements for FYs 2008, 2009, and 2010*, dated December 15, 2015

Cc: Richard Buckius  
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DEFENSE CONTRACT AUDIT AGENCY

**Audit Report Nos. 6171–2008J10100012  
6171–2009J10100012  
6171–2010J10100008**

**Chesapeake Bay Branch Office**

10025 Governor Warfield Parkway, Suite 220  
Columbia, MD 21044-3329  
December 15, 2015

**Independent Audit Report on Associated  
Universities, Inc.'s Proposed Direct Amounts on  
Unsettled Flexibly-Priced Contracts, Grants, and  
Cooperative Agreements for Fiscal Years 2008,  
2009, and 2010**



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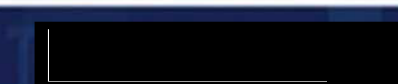
**Audit Report Nos. 6171–2008J10100012, 6171–2009J10100012,  
and 6171–2010J10100008**

**December 15, 2015**

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INDEPENDENT





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**Audit Report Nos. 6171–2008J10100012, 6171–2009J10100012,  
and 6171–2010J10100008**

**December 15, 2015**

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## **EXECUTIVE SUMMARY**

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### ABOUT ASSOCIATED UNIVERSITIES, INC.

Associated University, Inc. (AUI) is a nonprofit organization that has managed the operations of the National Radio Astronomy Observatory (NRAO). Its facilities include the Green Bank Telescope (GBT) in West Virginia, the Very Large Array (VLA) in New Mexico, and the Very Long Baseline Array (VLBA), stretching from Hawaii to the Virgin Islands. AUI's address is 1400 16th Street NW, Suite 730, Washington, DC 20036, and the Cage Code is 0D809. AUI also manages the Atacama Large Millimeter/Submillimeter Array (ALMA), built at 16,500 feet in the mountains of Chile. Since 2010, AUI has jointly operated the Virtual Astronomy Observatory (VAO) with AURA. In fiscal years (FY) 2008 through 2010, AUI staffed approximately [REDACTED] employees. Total revenue was [REDACTED] for FY 2008; [REDACTED] for FY 2009; and [REDACTED] for FY 2010. Approximately, 99.9 percent of the work performed at AUI in each of these FYs is under Government contracts, grants, and cooperative agreements.

### ABOUT THIS AUDIT

We examined AUI's proposed direct amounts for reimbursement on unsettled flexibly-priced contracts, grants, and cooperative agreements contained in its FY 2008 final indirect rate proposal, certified on April 24, 2012; FY 2009 final indirect rate proposal, certified on March 29, 2012; and FY 2010 final indirect rate proposal, certified on July 23, 2015, to determine if the proposed direct amounts comply with contract or agreement terms pertaining to accumulating and billing incurred amounts.

### WHAT WE FOUND

We determined the claimed direct costs contained in AUI's FYs 2008, 2009, and 2010 incurred cost proposals complied in all material aspects with the contract or agreement terms pertaining to accumulating and billing incurred amounts.

INDEPENDENT



**REPORT ON PROPOSED CONTRACTS, GRANTS, AND COOPERATIVE  
AGREEMENTS DIRECT AMOUNTS**

We examined AUI's proposed direct amounts for reimbursement on unsettled flexibly-priced contracts, grants, and cooperative agreements contained in its FY 2008 final indirect rate proposal, certified on April 24, 2012; FY 2009 final indirect rate proposal, certified on March 29, 2012; and FY 2010 final indirect rate proposal, certified on July 23, 2015, to determine if the proposed direct amounts comply with contract, grant, and cooperative agreement terms pertaining to accumulating and billing incurred amounts.

**Management's Responsibility**

AUI's management is responsible for the preparation of proposed amounts in compliance with the criteria cited above, including the design, implementation, and maintenance of internal controls to prevent or detect and correct noncompliance due to fraud or error.

**Auditor's Responsibility**

Our responsibility is to express an opinion on AUI's compliance based on our examination. We conducted our examination in accordance with Generally Accepted Government Auditing Standards (GAGAS).

GAGAS requires that we plan and perform the examination to obtain reasonable assurance about whether AUI's proposed direct amounts materially comply with the criteria cited above. An examination includes performing procedures to obtain evidence about whether AUI's proposed direct amounts materially comply with the criteria cited above. The nature, timing, and extent of the procedures selected depend on our professional judgment, including an assessment of the risks of material noncompliance, whether due to fraud or error, and involve examining evidence about the proposed direct amounts.

We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our audit opinion. Our examination does not provide a legal determination on AUI's compliance with contract, grant, and cooperative agreement terms.

**Basis for Qualified Opinion**

Due to the scope limitation described below, we were unable to complete procedures considered necessary under the circumstances.

## **SCOPE LIMITATION**

We did not perform sufficient testing of existence of employees (on a real-time basis) for the FYs under audit. The purpose of testing existence of the employee at the time the labor costs are incurred (real-time) is to establish that the employees are employed by the company, actually at work and performing their job, the costs are charged to the proper charge codes, and the proper procedures are followed at the time the labor costs were incurred and are properly accounted for through the proper chains of approval. We performed alternate procedures to obtain a level of assurance regarding the allowability, allocability, and reasonableness of the claimed costs, as well as, employee existence. However, the alternate procedures did not provide us with the level of assurance needed to remove the scope limitation. Without testing of the employee existence on a real-time basis, we cannot make a definitive conclusion regarding the allowability, allocability, and reasonableness of the direct costs. Therefore, the results of our evaluation related to direct labor are qualified to the extent that they could be significantly impacted by the performance of sufficient real-time procedures.

## **Qualified Opinion**

In our opinion, except for the effects of noncompliances, if any, that we might have identified had we completed the procedures discussed in the Scope Limitation section above, AUI's proposed direct amounts on unsettled flexibly-priced contracts, grants, and cooperative agreements comply, in all material respects, with contract, grant, and cooperative agreement terms pertaining to accumulating and billing incurred amounts. The results of audit of the contractor's claimed direct costs for FYs 2008, 2009, and 2010 are presented in Exhibit A. A schedule of AUI's flexibly-priced contracts and awards is presented in Exhibit B.

## ***EXIT CONFERENCE***

We discussed the results of our examination with [REDACTED], Controller and Chief Financial Officer and [REDACTED], Accounting Manager, in an exit conference held on November 25, 2015.

**DCAA PERSONNEL**

Primary contacts regarding this audit:

[REDACTED]

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Telephone No.

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[REDACTED]

Other contacts regarding this audit report:

[REDACTED]

[REDACTED]

Chesapeake Bay Branch Office

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E-mail Address

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[REDACTED]

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

**AUDIT REPORT AUTHORIZED BY:**

/s/

DCAA Chesapeake Bay Branch Office

[REDACTED]



**AUDIT REPORT DISTRIBUTION**

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DCAA Boston Branch Office 495 Summer Street, Suite 336 Boston, MA 02210-2192	   dcaa-fao02171@dcaa.mil
National Aeronautics and Space Administration Mail Code 5M18 300 E Street SW Washington, DC 20546-0001	   nasa-price-analysts@lists.hq.nasa.gov
DCAA Non-DoD Senior Financial Liaison Auditor ATTN: [REDACTED] Senior Financial Liaison Auditor 8725 John J. Kingman Road, [REDACTED] Fort Belvoir, VA 22060-6219	   [REDACTED]

STATEMENT OF CONTRACTOR'S CLAIMED DIRECT COSTS  
AND RESULTS OF AUDIT

**FY 2008**

<u>Cost Element</u>	<u>Proposed</u>	<u>Questioned</u>	<u>Reference</u>
Direct Labor	\$ 38,549,528	\$ -	Note
Direct Material	83,624,122	-	
Other Direct Costs	17,647,669	-	
Total	<u>\$ 139,821,319</u>	<u>\$ -</u>	

**FY 2009**

<u>Cost Element</u>	<u>Proposed</u>	<u>Questioned</u>	<u>Reference</u>
Direct Labor	\$ 33,850,508	\$ -	Note
Direct Material	73,591,397	-	
Other Direct Costs	37,807,261	-	
Total	<u>\$ 145,249,166</u>	<u>\$ -</u>	

**FY 2010**

<u>Cost Element</u>	<u>Proposed</u>	<u>Questioned</u>	<u>Reference</u>
Direct Labor	\$ 36,658,650	\$ -	Note
Direct Material	62,301,159	-	
Other Direct Costs	27,970,394	-	
Total	<u>\$ 126,930,203</u>	<u>\$ -</u>	

**EXPLANATORY NOTE**

**Direct Labor**

**a. Summary of Conclusions:**

We take no exception to the contractor's claimed direct labor costs for FYs 2008, 2009, and 2010. As noted in the Scope Limitation section of this report, the results of our evaluation are qualified to the extent that testing of existence of employees on a real-time basis was not accomplished during the years under audit. The contractor was unable to provide the I9's for nine of our 77 sampled employees. These procedures were being performed as alternate procedures since testing of existence of employees on a real-time basis was not accomplished during the years under audit. We requested the contractor to provide other support for these employees. AUI provided the employees' W4 forms and various HR documents. However, none of the provided documentation is of the level of assurance that an I9 would provide. We reviewed what the contractor provided and evaluated the documentation to determine if it was sufficient to provide us with appropriate alternate procedures and evidence to remove the qualification that the testing of existence of employees was not completed during the years under audit. In our opinion, the lack of 9 out of 77 I9's sampled and lack of sufficient evidence the other data provided for the alternate procedures performed prohibits us from removing the scope limitation of not testing existence of employees on a real-time basis.

**b. Basis of Contractor's Cost:**

The contractor claimed actual direct labor costs charged to contracts, grants, and cooperative agreements as recorded in their books and records for FYs 2008, 2009, and 2010. Direct labor costs are accumulated using primary account numbers specific for labor. The primary account numbers also have business unit numbers, which are unique identifiers for individual contracts. Costs included in direct labor include labor costs for hours worked on the various direct labor projects and leave as allocated per the contractor's policies and procedures.

**c. Audit Evaluation:**

Our evaluation of the proposed direct labor costs included the following steps:

- reconciled the proposed costs to the contractor's books and records;
- performed a comparative and trend analysis of the direct labor by contract;
- reviewed adjusting entries and exception reports for direct labor;
- verified costs were in the cost accounting period claimed;
- performed a reconciliation of timesheets to labor distribution reports, and time and pay entry registers, to payroll; and determined costs are allowable per Title 2 CFR, Appendix A Part 230, Section A(2), Factors Affecting Allowability of Costs;

- verified the selected salary costs to proof of payment;
- examined the contractor's allocation of leave cost to contracts, grants, and cooperative agreements for compliance with the provisions of Title 2 CFR, Appendix A Part 230, Section B, Direct Costs, and the NASA FAR Supplement; and
- examined the proposed direct labor for compliance with Title 2 CFR, Appendix A Part 230, Section B, Direct Costs, NASA FAR Supplement, and associated grants and cooperative agreements, examined the proposed direct labor for allowability in accordance with Title 2 CFR, Appendix A Part 230, Section A(2); Title 2 CFR, Appendix A Part 230, Section A(3), Reasonable Costs; and Title 2 CFR, Appendix A Part 230, Section A(4), Allocable Costs.

**SCHEDULE OF CONTRACTOR’S FLEXIBLY-PRICED CONTRACTS AND AWARDS  
Associated Universities, Inc.  
for Fiscal Year Ended September 30, 2008**

<u>Prime Award Agency</u>	<u>Award Number</u>
National Science Foundation (NSF)	AST-0223851/AST-0226933
National Science Foundation (NSF)	AST-0223851/AST-0244577
National Science Foundation (NSF)	AST-0223851/AST-0331358
National Science Foundation (NSF)	AST-0223851/AST-0452760
National Science Foundation (NSF)	AST-0223851/AST-0653330
National Science Foundation (NSF)	AST-0223851/AST-0705244
National Science Foundation (NSF)	AST-0223851/ATM-0320967
National Science Foundation (NSF)	AST-0223851/ATM-0532973
National Science Foundation (NSF)	DRL-0737641

<u>Sub-Award Agency</u>	<u>Award Number</u>	<u>Prime Award Number</u>
National Aeronautics Space Administration (NASA)	G09-0069B	NAS8-03060
National Aeronautics Space Administration (NASA)	HST-HF-51258-01-A	NAS5-26555
National Aeronautics Space Administration (NASA)	946695	NNN06AA01C
National Science Foundation (NSF)	8203-53665	AST-0122449
National Science Foundation (NSF)	AST-0804508	
National Science Foundation (NSF)	AST-9987339	AST-0352705

**SCHEDULE OF CONTRACTOR’S FLEXIBLY-PRICED CONTRACTS AND AWARDS  
Associated Universities, Inc.  
for Fiscal Year Ended September 30, 2009**

<u>Prime Award Agency</u>	<u>Award Number</u>	
National Science Foundation (NSF)	AST 0223851/SPO 1	
National Science Foundation (NSF)	AST 0223851/SPO 2	
National Science Foundation (NSF)	AST 0223851/SPO 3	
National Science Foundation (NSF)	AST 0223851/SPO 4	
National Science Foundation (NSF)	AST 0223851/SPO 5	
National Science Foundation (NSF)	AST 0223851/SPO 6	
National Science Foundation (NSF)	AST 0223851/SPO 7	
National Science Foundation (NSF)	AST 0223851/SPO 8	
National Science Foundation (NSF)	AST 0956545/CSA 1	
National Science Foundation (NSF)	AST 0956545/CSA 2	
National Science Foundation (NSF)	DRL-0737641	
National Science Foundation (NSF)	OISE-0819073	
National Aeronautics Space Administration (NASA)	S-19897-E	
<u>Sub-Award Agency</u>	<u>Award Number</u>	<u>Prime Award Number</u>
National Science Foundation (NSF)	8203-53665	AST-0122449
National Aeronautics Space Administration (NASA)	HST-HF-51258-01-A	NAS5-26555
National Aeronautics Space Administration (NASA)	GO9-0069B	NAS8-03060
National Aeronautics Space Administration (NASA)	SPO# 000007044	NNA09DB30A
National Aeronautics Space Administration (NASA)	946695	NNN06AA01C

**SCHEDULE OF CONTRACTOR'S FLEXIBLY-PRICED CONTRACTS AND AWARDS  
Associated Universities, Inc.  
for Fiscal Year Ended September 30, 2010**

<u>Prime Award Agency</u>	<u>Award Number</u>	
National Science Foundation (NSF)	AST 1027064	
National Science Foundation (NSF)	AST-0223851/SPO 1	
National Science Foundation (NSF)	AST-0223851/SPO 2	
National Science Foundation (NSF)	AST-0223851/SPO 3	
National Science Foundation (NSF)	AST-0223851/SPO 4	
National Science Foundation (NSF)	AST-0223851/SPO 6	
National Science Foundation (NSF)	AST-0223851/SPO 7	
National Science Foundation (NSF)	AST-0223851/SPO 8	
National Science Foundation (NSF)	AST-0223851/SPO 9	
National Science Foundation (NSF)	AST-0836064/CSA 1	
National Science Foundation (NSF)	AST-0836064/CSA 2	
National Science Foundation (NSF)	AST-0836064/CSA 3	
National Science Foundation (NSF)	DRL-0737641	
National Science Foundation (NSF)	OISE 0929121	
National Science Foundation (NSF)	OISE-0819073	
National Aeronautics Space Administration (NASA)	S-19897-E	
<u>Sub-Award Agency</u>	<u>Award Number</u>	<u>Prime Award Number</u>
Department of Defense (DoD)	FA8721-05-C-0002	F19628-00-C-0002
National Science Foundation (NSF)	5-54873	AST-0959447
National Aeronautics Space Administration (NASA)	HST-HF-51258.01-A	NAS5-26555
National Aeronautics Space Administration (NASA)	HST-GO-11615.01-A	NAS5-26555
National Aeronautics Space Administration (NASA)	G09-0069B	NAS8-03060
National Aeronautics Space Administration (NASA)	SPO# 0000070044	NNA09DB30A
National Aeronautics Space Administration (NASA)	946695	NNN06AA01C
National Aeronautics Space Administration (NASA)	09-547-NRAU	OISE-0968296