National Aeronautics and Space Administration

Office of Inspector General Washington, DC 20546-0001



### August 3, 2009

TO:	Assistant Administrator for Procurement
FROM:	Acting Assistant Inspector General for Auditing
SUBJECT:	Final Memorandum on Review of Wheeling Jesuit University Cost Proposals (Report No. IG-09-020-Redacted; Assignment No. S-09-002-00)

The Office of Inspector General (OIG) conducted a review of NASA's oversight of grants and cooperative agreements with Wheeling Jesuit University (WJU) in West Virginia. Our objectives were to determine whether NASA adequately reviewed WJU's cost proposals for grants and cooperative agreements and to determine whether the cost proposals complied with NASA and Federal policy regulations. We reviewed five grants and cooperative agreements in this memo) between WJU and NASA that were active or not closed<sup>1</sup> as of October 8, 2008. (See Enclosure 1 for details for our scope and methodology.)

## **Executive Summary**

We found that NASA inappropriately approved, obligated, and partially expended more than \$4 million of facility and administrative (F&A) costs<sup>2</sup> because NASA grant officers in charge of the WJU agreements did not adequately review WJU's cost proposals. Specifically, the grant officers failed to note that WJU had included F&A costs as direct costs in its cost proposals to NASA. During our interviews with NASA grant officers assigned to review the WJU agreements, they stated that they were not sufficiently familiar with the definitions and allocation of direct and F&A costs to adequately exercise due diligence to ensure proposal costs were allowable, allocable, and reasonable under the Office of Management and Budget (OMB) Circular A-21, "Cost Principles for Educational Institutions" (Revised August 8, 2000) (Circular A-21).

<sup>&</sup>lt;sup>1</sup> "Not closed" refers to agreements that have completed their period of performance but have not been closed administratively because of pending paperwork. These WJU agreements were within the 90-day timeframe following the period of performance to submit their final expense report with full project cost.

<sup>&</sup>lt;sup>2</sup> According to the Office of Management and Budget, "Facilities" is defined as depreciation and use allowances, interest on debt associated with certain buildings, equipment and capital improvements, operation and maintenance expenses, and library expenses. "Administration" is defined as general administration and general expenses, departmental administration, sponsored projects administration, student administration and services, and all other types of expenditures not listed specifically under one of the subcategories of Facilities (including cross allocations from other pools).

According to Circular A-21, *Direct costs* can be identified specifically with a particular agreement project, an instructional activity, or other institutional activity, or can be directly assigned to such activities with a high degree of accuracy. *F&A costs* are incurred for common or joint objectives and therefore cannot be identified readily and specifically with a particular sponsored project, an instructional activity, or other institutional activity. F&A costs are reimbursed to the institution on the basis of a negotiated and approved F&A rate that limits allocable administrative costs to 26 percent of modified total direct costs for educational agreements. By inappropriately approving F&A costs as direct costs, NASA could be reimbursing WJU for administrative costs in excess of the allocable Federal cap.

In addition, we determined that the NASA grant officers did not note that the cost proposal for one of the five agreements, with a total value of \$271,164, contained \$4,501 in duplicative labor costs. Specifically, for three WJU staff members, labor costs were included in two different areas of the proposal—100 percent of their salaries as individual staff members with specific responsibilities; and an additional 5 percent for two of the staff members and 35 percent for the other for "CET Management." Although the three individuals have dual roles within WJU, the grants officers should not have accepted WJU's proposal to charge more than 100 percent of their salaries to the NASA agreement.

In our June 26, 2009, draft of this memorandum, we recommended that the Assistant Administrator for Procurement provide NASA grant officers with training on Circular A-21 cost principles to assist them in identifying administrative service center costs. We also recommended that the Assistant Administrator for Procurement work with the Department of Health and Human Services, Division of Cost Allocation (the Federal agency responsible for negotiating and approving rates for F&A costs related to educational agreements) and renegotiate WJU's F&A rate for all Federal educational grants and cooperative agreements, to ensure that administrative costs do not exceed the allowable Federal reimbursement cap.

In commenting on the draft of this memorandum, the Assistant Administrator for Procurement concurred with our recommendations to provide NASA grant officers with training on Circular A-21 cost principles and to work with the Department of Health and Human Services to renegotiate WJU's F&A rate (see Enclosure 2). We consider management's proposed actions to be responsive. The recommendations are resolved and will be closed upon completion and verification of management's corrective action.

## Background

NASA awards grants and cooperative agreements (agreements) under the authority of the National Aeronautics and Space Act.<sup>3</sup> The agreements are awarded and administered in accordance with NASA Procedural Requirements (NPR) 5800.1E, "NASA Grant and

<sup>&</sup>lt;sup>3</sup> 42 U.S.C. 2473(c)(5).

Cooperative Agreement Handbook," October 19, 2000. NPR 5800.1E Section A requires compliance with Circular A-21. In addition to addressing issues such as definitions, applicability, deviations, and award requirements, the NPR states that the grant officer is responsible for ensuring that costs charged to the agreement are allowable, allocable, and reasonable under Circular A-21.

Circular A-21 notes that the cost of an agreement is comprised of the allowable direct costs specific to performance of the agreement plus the allocable portion of allowable F&A costs, less applicable credits. The tests of *allowability* under Circular A-21 are that costs must be (1) reasonable; (2) allocable to the agreements, (3) treated consistently through application of generally accepted accounting principles appropriate to the circumstances, and (4) in compliance with any limitations or exclusions set forth in Circular A-21 principles or in the agreement as to types or amounts of cost items. A cost is *allocable* to an agreement if it (1) is incurred solely to advance work under the sponsored agreement; (2) benefits both the sponsored agreement and other work of the institution in proportions that can be approximated through reasonable methods, or (3) is necessary to the overall operation of the institution and, in light of the principles, deemed to be assignable in part to sponsored projects. *Direct costs* can be identified specifically with a particular agreement project, an instructional activity, or other institutional activity, or can be directly assigned to such activities with a high degree of accuracy. F&A costs are incurred for common or joint objectives and therefore cannot be identified readily and specifically with a particular sponsored project, an instructional activity, or other institutional activity. F&A costs are reimbursed to the institution on the basis of a negotiated and approved F&A rate.

Circular A-21 states that the recipient institution is responsible for ensuring proposed costs are appropriate and provides a methodology for educational institutions to use in arriving at a single F&A rate for each major institutional function (general and departmental administration, student administration and services, etc.), and that rate is used to allocate F&A costs to agreements. Each institution's F&A rate process must be appropriately designed to ensure that Federal agencies reimburse a fair percentage of the institution's F&A expense and do not subsidize F&A costs of other sponsors' activities, specifically activities sponsored by industry or foreign governments.

Each institution must submit their calculated F&A rate to the Department of Health and Human Services, Division of Cost Allocation (HHS/DCA). HHS/DCA is responsible for negotiating and approving the F&A rate to be applied to Federal grants and cooperative agreements for all educational institutions on behalf of all Federal agencies. The F&A rate is negotiated based on the institution's F&A submission to HHS/DCA, and the submissions must be compliant with Circular A-21 guidance. In their F&A submission, the institution must show how they calculated the rate and, once approved, the rates are used in determining each agreement's allocable F&A costs. Circular A-21 limits the allocable "administrative" expenses within the F&A rate to 26 percent of modified total direct costs. Thus, WJU negotiated its F&A rate with HHS/DCA and its F&A rate is applied to each of WJU's Government-sponsored agreements.

NASA Agreements with WJU. In 1989, Congress designated WJU as the site for the Robert C. Byrd National Technology Transfer Center (NTTC), and NASA established the Erma Ora Byrd Center for Educational Technologies (CET) at WJU. NTTC facilitates the transfer of technologies between NASA and other Federal organizations to private industries, and CET manages several NASA projects such as the Classroom of the Future (COTF), which serves as NASA's national research and development site and provides technology-based products and services that support NASA's Educational Program. WJU's Sponsored Programs is the division responsible for management and administration of NTTC and CET. NTTC and CET manage the following NASA five agreements, active or not closed as of October 8, 2008, which had a combined value of \$15.6 million:

- NNX06AE26A (NTTC) is a cooperative agreement that provides services to transfer technology between the Government and private industries. Period of performance, September 1, 2006 August 31, 2008; total value, \$7,710,000.
- NNX08BA21A Phase II NASA Technology Transfer and Innovative Partnership Program (NTTC Phase II) is a cooperative agreement that also provides services to transfer technology between the Government and private industries. Period of performance, September 1, 2008 August 31, 2009; total value, \$2,044,000.
- NNX08AP15G (CET) Micronauts Education Simulator is a grant that provides an opportunity for students to participate in a standard classroom activity by providing hand-on activities based on NASA's past and future space projects. Period of performance, August 1, 2008 July 31, 2009; total value, \$271,164.
- NNX08AJ71A (CET) Reshaping Education with 21st Century Technology (Classroom of the Future) is a cooperative agreement designed to develop NASA educational technology resources to improve math, science, geography, and technology education. Period of performance, March 3, 2008 – March 2, 2011; total value, \$3,000,000.
- NNX08AP69G (NTTC) Health E West Virginia (HEALTHeWV) is a grant designed to develop electronic medical records to be implemented across West Virginia to improve health care quality, patient services, and patient safety. Period of performance, October 1, 2008 – September 30, 2009; total value, \$2,576,054.

However, in developing its annual submissions to HHS/DCA, WJU did not include its administrative costs (F&A costs) for management of these agreements. WJU instead charged these F&A costs as direct cost to the NASA agreements. Specifically, WJU allocated administrative expenses as direct costs through cost centers, such as the Finance Service Center and the Combined Management Service Center; however, in accordance with Circular A-21, these should have been considered F&A costs.

## NASA Grant Officers Reviewed and Approved Noncompliant Cost Proposals

We found that WJU submitted F&A costs as direct costs in the five cost proposals we reviewed. NASA approved, obligated, and partially expended more than \$4 million of F&A costs because NASA grant officers lacked training on the cost principles in Circular A-21 that would have enabled them to distinguish direct costs versus F&A costs. NASA could be reimbursing WJU in excess of the OMB-established cap of 26 percent of "administrative" expenses within the F&A rate. NPR 5800.1E states that the NASA grant officer has overall responsibility for ensuring that the award is properly administered, including technical, cost, and schedule aspects. Therefore, the grant officers are responsible for reviewing the proposer's estimated costs and identifying any item that could be unallowable under the cost principles or that appears unreasonable or unnecessary in accordance with Circular A-21.

## WJU Costs Inappropriately Categorized

For the five cost proposals we reviewed, we identified and questioned the allowability of categorizing as "direct costs" expenses listed under the following WJU cost centers:

- Finance Service Center Various finance personnel who are responsible for grant and contract administration that includes accounting, procurement, and financial reporting. A percentage of the total cost is charged to both Federal and non-Federal grants based on a fair allocation.
- Combined Management Service Center Various overall management personnel who are responsible for management of all sponsored projects. A percentage of the total cost is charged to both Federal and non-Federal grants based on a fair allocation.
- Center for Educational Technologies (CET) and National Technology Transfer Center (NTTC) Management Service Center - Various management personnel who are responsible for the executive management of the CET. A percentage of the total cost is charged to both Federal and non-Federal grants based on a fair allocation.
- CET and NTTC Institutional Service Center Various personnel responsible for maintaining the overall CET and NTTC Web sites. A percentage of the total cost is charged to both Federal and non-Federal grants based on a fair allocation.
- CET and NTTC Computer Information Services (CIS)/Technical Service Center Various technical personnel who are responsible for supporting the network, computer, and video infrastructure of CET and NTTC. These individuals are also helpdesk support for ensuring computers are up to date with software, licenses, maintenance, and are protected from viruses. A percentage of the total cost is charged to both Federal and non-Federal grants based on a fair allocation.

WJU stated in the cost proposals that these services support both Federal and non-Federal grants. Thus, they were not specifically identified with a particular sponsored project. WJU's cost proposal defined the above service center costs as general administration and general expenses as well as expenses for departmental administration and sponsored projects administration. These categories do not meet Circular A-21 requirements for allocating them as direct costs. Table 1 shows administrative costs WJU listed as direct costs associated with the noted cost centers.

Table 1. Administrative Costs WJU Identified as Direct Costs					
NTTC (NNX06AE26A) Cost Centers					
Finance Cost	\$				
Combined Management Cost	\$				
NTTC Management Cost	\$				
NTTC Institutional Cost	\$				
NTTC CIS/Technical Cost	\$				
Subtotal	\$2,155,954				
NTTC Phase II (NNX08BA21A) Cost Centers					
Finance Cost	\$				
Combined Management Cost	\$				
NTTC Management Cost	\$				
NTTC Institutional Cost	\$				
NTTC CIS/Technical Cost	\$				
Subtotal	\$656,806				
Micronauts Education Simulator (NNX08AP15G) Cost Centers					
Finance Cost	\$				
Combined Management Cost	\$				
CET Management Cost	\$				
CET Institutional Cost	\$				
CET CIS/Technical Cost	<u>\$</u>				
Subtotal	\$39,578				
Classroom of the Future (NNX08AJ71A) Cost Centers					
Finance Cost	\$				
Combined Management Cost	\$				
CET Management Cost	\$				
CET Institutional Cost	\$				
CET CIS/Technical Cost	<u>\$</u>				
Subtotal	\$663,102				
Health E West Virginia (NNX08AP69G) Cost Centers					
Finance Cost	\$				
Combined Management Cost	\$				
NTTC Management Cost	\$				
NTTC Institutional Cost	\$				
NTTC CIS/Technical Cost	<u>\$</u>				
Subtotal	\$507,370				
Total	\$4,022,810				

During our interviews with NASA grant officers assigned to review the WJU agreements, they stated that they were not sufficiently familiar with the definitions and allocation of direct and F&A costs to adequately exercise due diligence to ensure proposal costs were allowable, allocable, and reasonable under Circular A-21. As a result, more than \$4 million was misclassified as direct costs.

#### **Duplicate Costs on WJU's Micronauts Education Simulator Cost Proposal**

The Micronauts Education Simulator cost proposal for agreement NNX08AP15G contained duplicate labor costs totaling \$4,501. Specifically, for three WJU staff members, labor costs were proposed in two different areas of the proposal. In a table titled "Full-Time Labor," 100 percent of their salaries was proposed as labor costs for 1 to 1.5 months of work. That table also contained a line item for \$4,501 for CET Management, with a Job Title of "Various." We found the breakdown of this line item in the table for the CET Management Service Center. It named the three individuals as recipients of the additional salary, an additional 5 percent for two of the staff members and 35 percent for the other staff member (see Tables 2 and 3).

Table 2. Full-Time Labor Charges for the Three Staff Members Plus a CombinedLabor Charge for a Job Title Identified as "Various"								
Job Title	Annual Salary	Percent of Salary	Monthly Salary	Amount of Time to Be Spent on This Project (Months)	Year One Budget			
CET Executive Director	\$	100	\$	1.00	\$			
Evaluator	\$	100	\$	1.50	\$			
Simulations Designer	\$	100	\$	1.00	\$			
Various <sup>a</sup>					\$ 4,501			

<sup>a</sup>The WJU proposal identifies the individuals holding the above titles as CET's "Management Service Center."

The monthly salary, based on annual salaries for each of the three, as proposed in the CET Management Service Center pool (5 percent for two of the individuals and 35 percent for the third), totaled a combined **Source**. A breakdown of the monthly salary for the personnel identified as "Various" showed a portion of the salaries for these same three individuals for the same period. Thus, in its cost proposal, in which WJU allocates 8.79 percent of labor costs charged to the agreement, WJU allocated 8.79 percent or \$4,501 of their annual salary in the CET Management pool to the Micronauts Education Simulator agreement (see Table 3).

Table 3. Breakdown of Labor Costs for Various/CET Management									
Service Center									
Job Title	Annual Salary	Percent in Pool	Annual Salary to pool	Percent of Cost Charged to the Agreement	Total Cost Allocated				
CET Executive Director	\$	35	\$	8.79	\$				
Evaluator	\$	5	\$	8.79	\$				
Simulations Designer	\$	5	\$	8.79	\$				
Totals	\$		\$		\$4,501				

WJU inappropriately proposed more than 100 percent of these individuals' salaries in the Micronauts Education Simulator cost proposal. These individuals had dual roles in WJU, however, labor costs for the multiple roles would appropriately be applied as percentages within the applicable cost proposals. Labor costs for their responsibilities for work performed under the Micronauts Education Simulator should have been proposed as 95 percent and 65 percent of their full salary as program operatives, and labor costs for their responsibilities as executive management in the CET Management Service Center should have been proposed as 5 percent and 35 percent of their full salary.

## Recommendations, Management's Response, and Evaluation of Management's Response

**Recommendation 1.** We recommended that the Assistant Administrator for Procurement provide grant officers training on the cost principles provided in OMB Circular A-21, "Cost Principles for Educational Institutions," to ensure they are able to correctly identify cost categories.

**Management's Response.** The Assistant Administrator for Procurement concurred and stated that "[t]raining will be provided to grant officers on the cost principles provided in OMB Circular A-21, "Cost Principles for Educational Institutions."

**Evaluation of Management's Response.** Management's planned action is responsive to the recommendation. The recommendation is resolved and will be closed upon completion and verification of management's corrective action.

**Recommendation 2.** We also recommended that the Assistant Administrator for Procurement coordinate with the Department of Health and Human Services, Division of Cost Allocation, to renegotiate WJU's F&A rate to include the identified administrative costs that were inappropriately allocated as direct cost.

**Management's Response.** The Assistant Administrator for Procurement concurred and stated that the Department of Health and Human Services would be contacted and encouraged to renegotiate the F&A rate "to include the administrative costs that are currently being proposed as direct costs." **Evaluation of Management's Response.** Management's planned action is responsive to the recommendation. The recommendation is resolved and will be closed upon completion and verification of management's corrective action.

We appreciate the courtesies extended during our review. If you have any questions, or need additional information, please contact Mr. Raymond Tolomeo, Science and Aeronautics Research Director, Office of Audits, at 202-358-7227.

(signed) Raymond Tolomeo for

Debra D. Pettitt

2 Enclosures

## **Scope and Methodology**

We performed work at NASA Shared Service Center (NSSC), Langley Research Center, Johnson Space Center, and Headquarters. During our audit work, we reviewed NASA controls related to the oversight of the grants and cooperative agreements with WJU. We reviewed NASA and OMB policies and procedures as they relate to the grants and cooperative agreements NASA has with WJU. We met with WJU personnel to acquire an understanding of their cost proposals submissions and to obtain supporting documentation for cost proposals submitted to NASA.

We selected all four centers because of their involvement in the award of the agreements NASA has with WJU. NSSC has the grant officers who awarded the agreements and the technical officers for each agreement are located throughout the three additional centers visited.

We performed this audit from October 2008 through June 2009 in accordance with generally accepted government auditing standards. We limited our scope to address NASA's management of the five active agreements with WJU during the period of our audit. We did not use computer-processed data to perform this audit.

## **Review of Internal Controls**

We reviewed NASA policies, procedures, and internal controls related to the review of the cost proposals for grants and cooperative agreements with universities. We identified the weaknesses discussed in this memorandum. Our recommendations, if implemented, will improve the review of cost proposals for grants and cooperative agreements.

## **Prior Coverage**

During the last 5 years, the NASA Office of Inspector General (OIG) has issued one report of particular relevance to the subject of this report. Unrestricted reports can be accessed over the Internet at

http://www.hq.nasa.gov/office/oig/hq/audits/reports/FY07/index.html (NASA).

## National Aeronautics and Space Administration

"Final Memorandum on the Review of NASA's "Classroom of the Future" Cooperative Agreement with Wheeling Jesuit University" (Assignment No. S-05-01300, January 30, 2006)

## **Management's Comments**

National Aeronautics and Space Administration Headquarters Washington, DC 20546-0001 July 22, 2009 Contract Management Division Reply to Attn of TO: Assistant Inspector General for Auditing FROM: Assistant Administrator for Procurement SUBJECT: Draft Memorandum on Review of Wheeling Jesuit University Cost Proposals (Assignment No. S-09-002-00) Enclosed is the response to the subject draft memorandum, dated June 26, 2009. Please contact Sandra Morris of my staff if you have any questions or need further coordination on this matter. Sandra can be reached at 358-0532. Shuge Goddad William P. McNally Got Enclosure

# Recommendation: 1. Provide grant officers training on the cost principles provided in OMB Circular A-21, "Cost Principles for Educational Institutions," to ensure they are able to correctly identify cost categories. Response: Concur. Training will be provided to grant officers on the cost principles provided in OMB Circular A-21, "Cost Principles for Educational Institutions." Recommendation: 2. Coordinate with the Department of Health and Human Services, Division of Cost Allocations, to renegotiate WJU's F&A rate to include the identified administrative costs that were inappropriately allocated as direct cost. Response: Concur. The Department of Health and Human Services, Division of Cost Allocation will be contacted regarding this issue and we will encourage them to renegotiate Wheeling Jesuit University's F&A rate to include the administrative costs that are currently being proposed as direct costs.