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National Aeronautics and Space Administration

Office of Inspector General

Office of Audits

AUDIT OF A NASA RESEARCH GRANT AWARDED TO THE UNIVERSITY OF MIAMI

January 21, 2016

Report No. IG-16-011





Office of Inspector General

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NASA Office of Inspector General
Office of Audits

RESULTS IN BRIEF

Audit of a NASA Research Grant Awarded to the University of Miami

January 21, 2016

IG-16-011 (A-15-009-00)

WHY WE PERFORMED THIS AUDIT

NASA awards approximately \$875 million in grants and cooperative agreements annually and faces the ongoing challenge of ensuring it administers these awards appropriately and that recipients accomplish stated goals and objectives. In this report, we present the results of our review of a 3-year, \$2.45 million research grant NASA awarded in 2014 to the University of Miami for Earth science research.

The overall audit objective was to determine whether the University used NASA funds for their intended purpose and whether associated costs were allowable, reasonable, and in accordance with applicable laws, regulations, guidelines, and the award's terms and conditions. To accomplish our objective, we interviewed personnel at the University of Miami, NASA, and the NASA Shared Services Center involved in the grant administration, management, and award processes. We also reviewed relevant Federal laws and regulations and NASA policies, procedures, and requirements.

WHAT WE FOUND

We found the University of Miami is managing the research grant in accordance with applicable laws, regulations, guidelines, and the terms and conditions of the award. The University has a strong system of accounting and internal controls, adequately accounted for expenditures, properly managed its award budget, and is fulfilling established performance goals. We also found NASA's oversight of the award was adequate and Agency personnel appropriately monitored the University's performance. However, we identified \$264,399 in payments the University made to a vendor that lacked adequate support.

WHAT WE RECOMMENDED

We recommended the Executive Director of the NASA Shared Services Center and the Associate Administrator for the Science Mission Directorate work with the University to ensure payments associated with the grant are adequately supported in accordance with OMB and NASA requirements.

The Associate Administrator partially concurred with our recommendation, stating that the NASA Shared Services Center will request the University take corrective action to ensure that future invoices it pays with NASA funds are adequately supported. However, the Associate Administrator noted his belief that applicable Federal regulations do not require NASA ensure the University has adequate documentation for all invoices it pays with NASA funds.

We do not agree with the Associate Administrator's reading of Federal regulations. Rather, we believe that agencies have a responsibility to ensure that award expenditures are adequately supported in accordance with requirements. Nevertheless, we consider NASA's proposed corrective actions responsive to our recommendation. Accordingly, the recommendation is resolved and will be closed upon verification of the completed actions.

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Acronyms

CFR	Code of Federal Regulations
FY	Fiscal Year
MOBY	Marine Optical Buoy
NOAA	National Oceanic and Atmospheric Administration
OMB	Office of Management and Budget

INTRODUCTION

NASA awards approximately \$875 million in grants and cooperative agreements annually and faces the ongoing challenge of ensuring it administers these awards appropriately and that recipients accomplish stated goals and objectives.¹ In this report, we present the results of our review of a 3-year, \$2.45 million research grant NASA awarded in 2014 to the University of Miami for Earth science research.

The overall audit objective was to determine whether the University used NASA funds for their intended purpose and whether associated costs were allowable, reasonable, and in accordance with applicable laws, regulations, guidelines, and the award's terms and conditions. Specifically, we reviewed the University's (1) accounting and internal control environment, (2) program performance and accomplishments, (3) budget management and control, and (4) reporting. We also reviewed NASA's administration of the grant. See Appendix A for details on the audit's scope and methodology, our review of internal controls, and a list of prior coverage.

Background

In February 1994, a Marine Optical Buoy (MOBY) was deployed approximately 20 kilometers west of the island of Lanai, Hawaii, in support of NASA's Earth Observing System.² Funded jointly by NASA and the National Oceanic and Atmospheric Association (NOAA), MOBY's primary purpose is to measure visible and near-infrared radiation entering and emanating from the ocean.

The MOBY operations site is located at the University of Hawaii Marine Facility in Honolulu and staffed full time by personnel from the Moss Landing Marine Laboratories (Moss Landing).³ University of Hawaii research vessels support buoy deployments as well as maintenance and quality control operations.

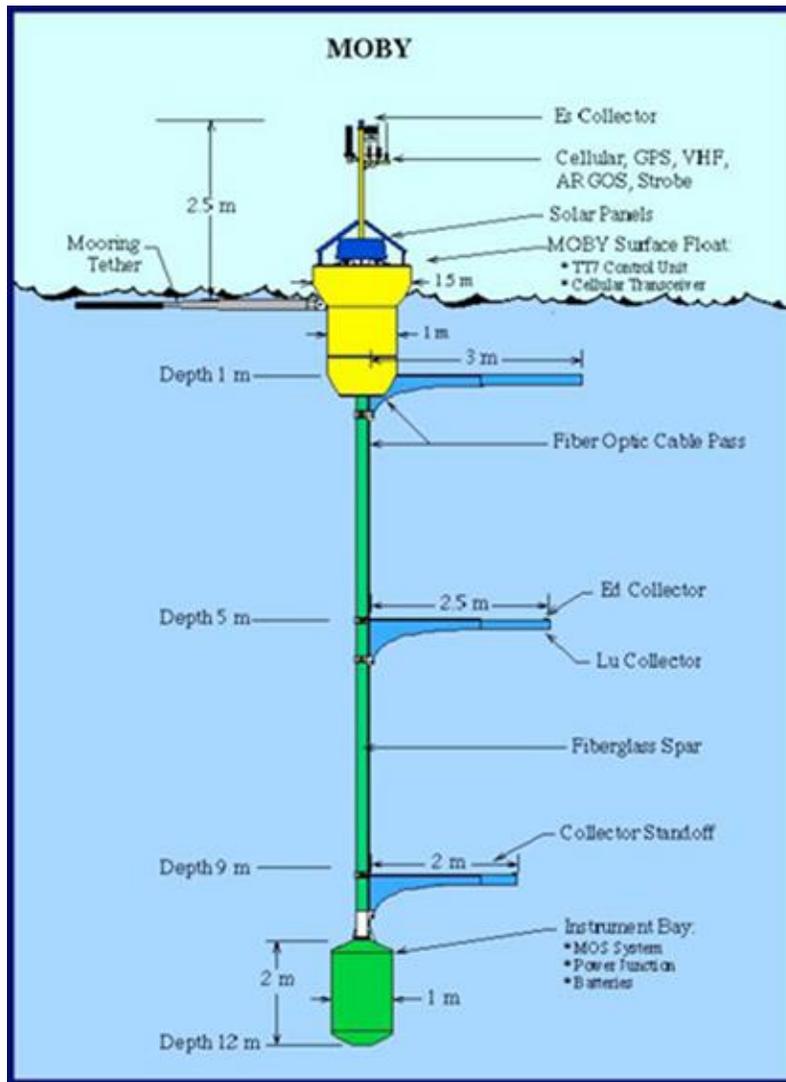
A subset of the data collected by MOBY is transmitted daily, via web linked cellular telephone, to the University of Miami, which manages software development for the MOBY system and closely monitors the data to ensure the software is functioning properly. From the University, the data is transmitted to Moss Landing for processing and is thereafter made available to NOAA. See Figure 1 for a depiction of the MOBY.

¹ This figure is an average gleaned from NASA's Annual Procurement Reports for 2012 through 2014.

² NASA's Earth Observing System is a series of polar-orbiting and low inclination satellites that provide long-term global observations of the land surface, biosphere, solid Earth, atmosphere, and oceans.

³ Operated by San Jose State University, Moss Landing's responsibilities include buoy maintenance and instrument maintenance and calibration.

Figure 1: Diagram of MOBY



Source: MOBY project, Moss Landing Marine Laboratories.

In August 2014, NASA awarded the University of Miami a \$2.45 million research grant to develop a “MOBY-NET instrument suitable for a federation network for Vicarious Calibration of Ocean Color Satellites.”⁴ The work involves developing and performing research on two copies of a prototype vicarious calibration instrument known as MOBY-NET with the augmentations of the existing MOBY instrument that would also be suitable for shipping to other locations. Further, other improvements implemented at the MOBY site since initial deployment of the device were to be incorporated into the new instruments to help reduce uncertainties associated with measurements. The effort is expected to take 3 years to complete, with a projected end date of August 2017.

⁴ “Vicarious calibration” refers to techniques that make use of natural or artificial sites on the surface of the Earth for post launch calibration of sensors.

Federal Guidance

The Office of Management and Budget (OMB) provides guidance to Federal agencies, including NASA, on managing grants. OMB has issued three circulars with guidance relevant to an examination of the University of Miami research grant: Circular A-21, Circular A-110, and Circular A-133.

Circular A-21, *Cost Principles for Educational Institutions*.⁵ Circular A-21 establishes principles for determining costs applicable to grants, contracts, and other agreements with educational institutions. A-21 requires associated costs be reasonable, allocable to sponsored agreements under the principles and methods provided, given consistent treatment through application of generally accepted accounting principles, and conform to any limitations or exclusions set forth in those principles or the sponsored agreement.

Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations*.⁶ Circular A-110 directs awarding agencies to require recipients to relate financial data to performance data and develop unit cost information whenever practical. Further, A-110 states that recipient financial management systems shall provide records that adequately identify the source and application of funds for federally sponsored activities. These records shall contain information pertaining to Federal awards, authorizations, obligations, unobligated balances, assets, outlays, income, and interest. Finally, A-110 requires recipients to maintain effective control over and accountability for all funds, property, and other assets and requires recipients to adequately safeguard all such assets and ensure they are used solely for authorized purposes.

Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*.⁷ Circular A-133 requires recipients that expend more than \$500,000 in Federal funds in any given year to obtain an outside audit – also known as the Single Audit – of their operations. These audits include a review of recipients’ financial statements, internal controls, and compliance with laws and regulations and may identify questioned costs and make recommendations for corrective action. A-133 also requires this audit to determine if the Schedule of Expenditures of Federal Awards prepared by the recipient is presented fairly in all material respects in relation to the financial statements taken as a whole. The schedule lists individual programs by Federal agency, provides total Federal awards expended for each Federal program, and includes notes that describe the significant accounting policies used in preparing the schedule.

NASA Grant and Cooperative Agreement Handbook

The NASA Grant and Cooperative Agreement Handbook (Handbook) contains the policies and procedures NASA procurement, technical officers, and recipients must follow.⁸ The Handbook serves as

⁵ Circular A-21, “Cost Principles for Educational Institutions” (including the Cost Accounting standards), May 10, 2004.

⁶ Circular A-110, “Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations,” September 30, 1999.

⁷ Circular A-133, “Audits of States, Local Governments, and Non-Profit Organizations,” June 26, 2007. OMB Circular A-133 is applicable for awards, renewed awards, and supplements dated prior to December 26, 2014. For awards made after this date, Title II, 2 Code of Federal Regulations (C.F.R.) Part 200, “Uniform Administrative Requirements, Cost Principles, & Audit Requirements for Federal Awards,” (Omniscircular) is the applicable criteria.

⁸ NASA’s Grant and Cooperative Agreement Handbook is codified in 14 C.F.R. Parts 1260, 1273, and 1274. However, on December 16, 2014, NASA issued the Grant and Cooperative Agreement Manual that supersedes 14 C.F.R. Parts 1260 and 1273 for all new grant and cooperative agreement awards, except cooperative agreements with commercial firms subject to 14 C.F.R. 1274 awarded after December 26, 2014.

a reference manual and assists recipients in meeting their fiduciary responsibility to ensure award funds are used appropriately and consistently with the terms and conditions of the award. By accepting a NASA award, recipients agree to comply with the financial and administrative requirements in the Handbook. The Handbook provides guidance on grant and cooperative agreement management in several areas, including award proposals, financial management, budget management and control, budget adjustments, and award reports.

Award Proposals. The Handbook states award proposals shall contain a detailed narrative description of the work to be undertaken, including the objectives of the project and the applicant’s plan for carrying it out. Further, all proposals shall include budget data as prescribed in the “budget summary.” Finally, the recipient institution is responsible for ensuring costs are allowable, allocable, and reasonable under the applicable cost principles governed by OMB Circulars A-21 or A 122.⁹

Financial Management. Recipients of NASA grant funds are required to maintain sufficient fiscal control and accounting procedures to ensure Agency funds are properly spent. In addition, recipients are responsible for minimizing the time between receipt of award funds and expenditure of funds.¹⁰ Further, a recipient’s financial management system should provide accurate, current, and complete disclosure of financial results and records that adequately identify the source and application of funds.¹¹ Finally, recipients should have effective controls over and accountability for all funds, property, and other assets; adequately safeguard and ensure such assets are used solely for authorized purposes; and ensure that accounting records are supported by source documentation.

Budget Management and Control. Although NASA assumes no responsibility for budget overruns, recipients are not required to adhere to individual allocations within proposed budgets except when they relate to the acquisition of property, awarding of subcontracts, or certain revisions to budget and program plans. In addition, NASA may, but is not required to, restrict a recipient’s ability to transfer more than \$100,000 between budget categories or when the cumulative amount of such transfers exceeds or is expected to exceed 10 percent of the total NASA-approved budget.

Budget Adjustments. Recipients are permitted to move funds between approved direct cost budget categories to meet unanticipated requirements; however, post-award changes to the approved budget require prior written authority from the awarding agency when cumulative transfers among direct cost categories exceed or are expected to exceed 10 percent of the total approved budget when the awarding agency’s funding exceeds \$100,000.¹²

Award Reporting. Recipients are required to submit quarterly and final Federal Financial Reports and final performance and inventory reports. Federal Financial Reports show recipient expenditures and drawdowns for the reporting period, performance reports provide information on the progress of the work effort, and inventory reports document NASA-provided equipment and property valued at more than \$5,000 and equipment and property purchased by the recipient for \$1,000 or more.

⁹ 14 C.F.R. 1260.10, “Award Proposals.”

¹⁰ 14 C.F.R. Part 1273.20, “Standards for Financial Management Systems.”

¹¹ 14 C.F.R. Part 1260, “Grants and Cooperative Agreements.”

¹² 14 C.F.R. 1273.30, “Changes.”

WHILE THE UNIVERSITY HAS ADEQUATELY MANAGED NASA'S RESEARCH GRANT, OPPORTUNITIES EXIST TO STRENGTHEN INTERNAL CONTROLS

We found the University of Miami is managing its NASA research grant in accordance with applicable laws, regulations, guidelines, and the terms and conditions of the award. Specifically, the University has a strong system of accounting and internal controls, has adequately accounted for expenditures, has properly managed its award budget, and is fulfilling established performance goals. We also found NASA's oversight of the award was adequate and Agency personnel are active in meeting with the recipient to monitor their performance. However, we identified four invoices totaling \$264,399 paid to one vendor that lacked adequate support and believe the University needs to strengthen its internal controls to obtain adequate documentation to support such payments.

Award Performance and Accomplishments

Despite delays early in the period of performance, the University of Miami is making adequate progress toward accomplishing the goals of its award. During the first year of the performance period, the University experienced internal processing delays in issuing two large purchase orders critical to development of MOBY's optical system and its hull design and delivery. In addition, the University experienced delays with its award of a subcontract to Moss Landing.

At the end of our audit fieldwork in December 2015, the University was awaiting receipt of components necessary for completion of the optical system and is approximately 3 months behind schedule in completing that aspect of the project. In addition, the University reported that MOBY's hull design and delivery is about 6 months behind schedule. However, the Principal Investigator told us this delay was not likely to affect the overall schedule since it was not necessary to complete the hull design this early in the development schedule. The University also reported that the control electronics milestone was approximately 2 months behind schedule due to the delays relating to the optical system. Finally, although delivery of the stability source devices was delayed, the University reported that testing of the devices is still on track. Both the Principal Investigator and NASA officials informed us that none of the delays are expected to materially impact the overall project schedule or performance.

Accounting and Internal Controls

Grant recipients are required to establish and maintain accounting and internal control systems to properly account for award funds. We found University of Miami staff to be knowledgeable and experienced regarding administration and management of NASA's research grant goals and objectives and staff and management openly communicated and collaborated regarding the University's mission

and goals in using the NASA funds. We also found financial duties were generally properly segregated among University staff and the University had formally documented many of its financial operating procedures.

The University's financial statements are audited annually, and in 2014 were subject to Federal reporting requirements for entities that expend more than \$500,000 in Federal funds. We reviewed the 2014 Single Audit and noted the presence of NASA awards listed in the associated Schedule of Expenditures of Federal Awards. However, because the award we reviewed was not issued until 3 months after the University's fiscal year 2014 ended, it was not tested in the 2014 Single Audit. That said, we did not identify any cross-cutting issues in the 2014 audit that would impact the grant we reviewed.

Award Expenditures

During the audit, we tested \$461,175 in personnel and non-personnel expenditures to include indirect costs. This amounted to 90 percent of the total costs incurred for the research grant at the time of our audit.

Personnel Expenditures

OMB guidance states that charges to Federal awards for salaries and wages, whether treated as direct or indirect costs, will be based on payroll documented in accordance with the generally accepted practices of colleges and universities. At least annually a statement will be signed by the employee, Principal Investigator, or responsible official(s) using suitable means of verification that the work was performed and that salaries and wages charged to sponsored agreements are reasonable in relation to work performed.¹³

We tested for compliance with OMB requirements five pay periods of personnel transactions totaling \$13,708 for the two employees the general ledger indicated were paid with grant funds – the Principal Investigator and the Physics Assistant Scientist. We found the employees entered their time into a timekeeping system (Workday) the University of Miami uses to capture time and attendance and to certify work efforts on a quarterly basis. We reviewed the time reports for the periods reviewed and noted no exceptions in the supporting data. Further, we confirmed the positions identified in the payroll system as associated with the grant were consistent with the University's proposal.

Non-Personnel Expenditures

We reviewed 20 non-personnel transactions totaling approximately \$447,467. These transactions represented 18 percent of the total award amount and 87 percent of the total costs incurred at the time of our audit. They included the purchase of computers and other equipment used to build the instruments, payments to sub-award recipients, and indirect costs. We traced the transactions to supporting documentation to determine whether they were properly authorized, classified, and supported.

¹³ OMB Circular A-21, "Cost Principles for Educational Institutions."

Out of the \$447,467 in these judgmentally-selected transactions, we identified four transactions to one vendor totaling \$264,399 (59 percent) that were paid by the University of Miami based on limited supporting documentation. Specifically, although the accounting packages for these transactions included the associated invoices and documentation showing that the invoices had been entered into the University's accounting system and reviewed, approved, and paid, the invoices did not adequately identify or support the expenditures. For example, an invoice dated May 11, 2015, referenced two sets of red lenses but did not include a packing slip or any other documentation to support the invoiced amount.

The Principal Investigator told us that the invoices reflected payments for completion of 4 of the 16 milestones agreed to between the University and the vendor rather than for specific deliverables. We requested a copy of the contract to review the proposed work associated with each milestone; however, the documentation the University provided lacked sufficient detail to support the invoices. Specifically, the milestones were not listed in the contract and the document we were provided describing the milestones did not contain evidence of review and concurrence by both the University and the vendor. Both OMB and NASA require documentation be maintained to support the allowability of costs charged under a Federal award. Given the limited information contained on the invoices and contract, the University should have obtained additional documentation to support that the expenditures the vendor made to complete the milestones were appropriate.

At our request, the University obtained additional information from the vendor to support the four transactions we questioned, including the number of hours the vendor paid for personnel, material and components, and travel. We found this information sufficient to support the transactions and therefore are not questioning the costs associated with them. Going forward, the University should ensure it obtains adequate documentation to support all vendor payments.

Indirect Costs. The grant award permitted recovery of the University's indirect costs, and our testing of non-personnel transactions included reviewing \$19,254 in indirect cost charges. At the time of award, the University's indirect rate agreement with the Department of Health and Human Services, the cognizant agency for University of Miami, indicated that the indirect cost rate tested was effective through May 2017.¹⁴ The University claimed the indirect costs we reviewed at the approved rate, and we identified no concerns with the charges.

Budget Management and Control

We examined the extent to which the University of Miami adhered to the NASA-approved budgets by comparing the amounts the University expended in each general ledger category with the approved budgets. We identified no instances in which the University failed to conform to the requirements of the Handbook relating to budgets.

¹⁴ OMB Circular A-122, Appendix A, defines a cognizant agency as the Federal agency responsible for negotiating and approving indirect cost rates for a nonprofit organization on behalf of a Federal agency.

Award Reporting

NASA requires recipients to submit quarterly and final financial reports and annual and final performance and final inventory reports to NASA showing expenditures and drawdowns for the reporting period and providing information on the progress of the work effort and documenting NASA provided equipment and property, as well as equipment and property purchased by the recipient.

Financial Reports

The grant requires the University of Miami to submit quarterly federal cash transaction reports within 30 working days following the end of each quarter of the Federal fiscal year and a final report for the entire award period within 90 days after the end of the award.¹⁵ Our analysis of the University's Federal cash transaction reporting for the award showed the four reports required by the close of our audit accurately represented the costs contained within the University's accounting system and were submitted in a timely manner.

Performance Reports

The grant award requires the University of Miami to submit annual progress and performance reports to NASA 60 days prior to the award anniversary date and a final summary of research report within 90 days after the period of performance has ended. In addition, the recipient is required to provide mid-year and annual briefings to NASA. We requested the University provide us with the annual progress and performance report due to NASA on June 18, 2015, and we verified timely receipt of the report by the NASA Shared Services Center. Further, we reviewed the report and discussed it with the NASA scientific technical official to determine adequacy and identified no issues of concern. The University also provided copies of the semiannual and annual briefing reports submitted to NASA, which we reviewed for completeness, accuracy, and timeliness and discussed with the NASA scientific technical official. We identified no issues or concerns with these reports.

Inventory Reports

According to the grant award documents, the University of Miami is required to submit an annual inventory report of any federally owned property in its custody no later than October 15th of each year. At the close of our audit work, the University had no federally owned property and therefore was not required to file an inventory report.

¹⁵ On October 27, 2009, NASA issued Grant Information Circular 09-04 authorizing the substitution of Standard Form 425 (Federal Financial Report) for the Standard Form 272 (Federal Cash Transactions Report). The reporting timeframe also changed, allowing recipients to submit reports within 30 days after the end of each Federal fiscal quarter.

RECOMMENDATIONS, MANAGEMENT'S RESPONSE, AND OUR EVALUATION

To strengthen NASA's controls over the management of the University of Miami research grant, we recommended the Executive Director of the NASA Shared Services Center and the Associate Administrator for the Science Mission Directorate work with the University of Miami to ensure future invoices paid by the University using NASA award funds are adequately supported in accordance with OMB and NASA requirements and the University maintains documentation adequate to support the allowability of costs charged under the award.

In response to a draft of our report, the Associate Administrator partially concurred with our recommendation, stating that the NASA Shared Services Center will request the University take corrective action to ensure that future invoices it pays with NASA funds are adequately supported in accordance with OMB and NASA requirements. However, the Associate Administrator noted his belief that applicable federal regulations do not require NASA ensure the University has adequate documentation for all invoices it pays with NASA funds.

We do not agree with the Associate Administrator's reading of Federal regulations. Rather, we believe that agencies have a responsibility to ensure that award expenditures are adequately supported in accordance with requirements. Nevertheless, we consider NASA's proposed corrective actions responsive to our recommendation. Accordingly, the recommendation is resolved and will be closed upon verification of the completed actions.

Management's full response to our report is reproduced in Appendix B, and the University of Miami's response is reproduced in Appendix C. Technical comments provided by the Agency and the University of Miami have also been incorporated, as appropriate.

Major contributors to this report include, Laura B. Nicolosi, Mission Support Director; Joseph A. Shook, Project Manager; Aleisha Fisher, Lead Auditor; Sarah McGrath and Ben Patterson, Editors; Frank Larocca, Counsel to the Inspector General; and Theresa Thompson, Associate Counsel.

If you have questions about this report or wish to comment on the quality or usefulness of this report, contact Laurence Hawkins, Audit Operations and Quality Assurance Director, at 202-358-1543 or laurence.b.hawkins@nasa.gov.



Paul K. Martin
Inspector General

APPENDIX A: SCOPE AND METHODOLOGY

We performed this audit from April 2015 through December 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our overall audit objective was to determine whether grant funds were being used for their intended purpose and whether costs claimed were allowable, reasonable, and in accordance with applicable laws, regulations, guidelines, and terms and conditions of the award. We also reviewed internal controls as they relate to the management of the award. To accomplish our objective, we interviewed key personnel at the University of Miami, NASA, and the NASA Shared Services Center involved in the grant administration, management, and award processes. We also identified and reviewed relevant Federal laws and regulations and NASA policies, procedures, and requirements.

Award Selection

We judgmentally selected the research grant awarded to the University of Miami for substantive testing based on the dollar value, number of supplements awarded, and subject area funded to ensure appropriate audit coverage across NASA's grant and cooperative agreement awards. The grant was awarded by the NASA Shared Services Center.

Award File Documentation

We reviewed the award documentation for the University of Miami grant, including the proposal, budget, technical review reports, and summary financial reporting documentation. We also interviewed NASA officials responsible for administration of the grant.

Recipient Site Visits

We visited the University of Miami's location in Miami, Florida. We interviewed University officials and performed the substantive transaction testing necessary to validate whether NASA grant funds were used for their intended purpose while assessing the sufficiency of the University's performance.

Testing Conducted

We tested compliance with what we considered the most important conditions of the grant. Unless otherwise stated in our report, the criteria we audited against included Federal requirements, the NASA Grant and Cooperative Agreement Handbook, and the terms and conditions of the award. In conducting our audit, we employed judgmental sampling designed to obtain broad exposure to numerous facets of the research grant reviewed, such as dollar amounts or expenditure category. This nonstatistical sample design does not allow projection of the test results to the universes from which the samples were selected. Specifically, we tested the following:

- *Accounting and internal controls* to determine whether the recipient had sufficient accounting and internal controls to identify and report expenditures and reimbursements, including testing
 - award invoices and payments to determine whether grant invoices and payments were adequately supported and whether the recipient was managing award funds in accordance with Federal requirements and
 - award expenditures to determine the accuracy and allowability of costs charged to the cooperative agreement.
- *Program performance and accomplishments* to determine whether the recipient met or is capable of meeting the award objectives and whether the recipient collected data and developed performance measures to assess accomplishment of the intended objectives.
- *Budget management and control* to determine the amounts budgeted and the actual costs for each approved cost category and to determine whether the recipient deviated from the approved budget and, if so, whether the recipient received the necessary approval.
- *Award reporting* to determine whether the required reports were submitted on time and accurately reflected cooperative agreement activity.

We also performed limited work and confirmed that the University of Miami did not generate or receive program income, whether the recipient was in receipt of any Government issued property or equipment that was reportable to NASA, whether the recipient was required to contribute any local matching funds, that the University had subgrantees to monitor, and whether there were any indirect costs associated with the award we reviewed.

Laws, Regulations, Policies, and Requirements

We identified and reviewed all applicable Federal, Agency, and Center level regulations and guidance.

Federal Laws, Regulations, Policies, and Guidance

- Pub. L. No. 95-224, "Federal Grant and Cooperative Agreement Act of 1977," February 3, 1978
- 14 C.F.R. Part 1260, "Grants and Cooperative Agreements," January 1, 2010
- OMB Circular A-21, "Cost Principles for Educational Institutions" (including the Cost Accounting standards), May 10, 2004
- OMB Circular A-110, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations," September 30, 1999
- OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations," June 26, 2007

NASA Policies and Procedures

- NASA Policy Directive (NPD) 1440-6I, "NASA Records Management," September 10, 2014
- NPD 5101.1E, "Requirements for Legal Review of Procurement Matters," September 15, 1997
- NPD 5101.32D, "Procurement," April 13, 2003

- NPD 5101.32E, "Procurement, Grants, and Cooperative Agreements," July 28, 2013
- NASA Records Retention Schedules (NRRS) 1441.1, "NASA Records Retention Schedules," May 7, 2014
- Grant Information Circular 14-01, "Guidance for the Closeout of Grants and Cooperative Agreements," April 15, 2014
- Grant Information Circular 11-02A, "Requirements for Non-Competitive Agency Grant and Cooperative Agreement Actions, Exclusive of those actions prescribed by 14 CFR 1260.17, Evaluation and Selection of Unsolicited Proposals," March 22, 2012
- Procurement Information Circular 12-05, "Authorized Promotional and Personal Use Items," June 25, 2012
- NASA "Guidance for the Preparation and Submission of Unsolicited Proposals," February 10, 2000.

Use of Computer-Processed Data

We relied on NASA computer-processed data to determine the NASA grant and cooperative agreement universe used to select the award to be examined and to provide financial data. While we also obtained award data and information from NASA's enterprise accounting system SAP, we did not perform any substantive testing of SAP to validate the completeness or accuracy of the data. As a result, we placed limited reliance on the accuracy of the data obtained from SAP. Further, we also placed limited reliance on the information obtained from the recipient's financial system to perform detailed transaction testing on the recipient's financial records.

Review of Internal Controls

We reviewed internal controls for the grantee's administration and management of grants, including the adequacy of the University of Miami's policies and procedures. The control weaknesses we identified are discussed in this report. Our recommendations, if implemented, should correct the identified control weaknesses.

Prior Coverage

During the last 5 years, the NASA Office of Inspector General (OIG) and the Government Accountability Office (GAO) have issued 15 reports and 3 testimonies of significant relevance to the subject of this report. Unrestricted reports can be accessed at <http://oig.nasa.gov/audits/reports/FY16> and <http://www.gao.gov>, respectively.

NASA Office of Inspector General

Audit of NASA's Cooperative Agreements Awarded to Wise County Circuit Court (IG-15-022, July 16, 2015)

Audit of NASA's Cooperative Agreements Awarded to the City of New Orleans (IG-15-018, June 29, 2015)

Audit of NASA's Cooperative Agreement with BioServe Space Technologies - University of Colorado at Boulder (IG-14-028, August 4, 2014)

Audit of Grant Awarded to North Carolina State University (IG-14-027, July 23, 2014)

Audit of NASA's Cooperative Agreement Awarded to Rockwell Collins (IG-14-025, July 14, 2014)

NASA's Award Closeout Process (IG-14-014, February 12, 2014)

Audit of NASA Grant Awarded to HudsonAlpha Institute for Biotechnology (IG-12-019, August 3, 2012)

Audit of NASA Grants Awarded to the Philadelphia College Opportunity Resources for Education (IG-12-018, July 26, 2012)

Audit of NASA Grants Awarded to the Alabama Space Science Exhibit Commission's U.S. Space and Rocket Center (IG-12-016, June 22, 2012)

NASA's Grant Administration and Management (IG-11-026, September 12, 2011)

Government Accountability Office

Grants Management: EPA Has Opportunities to Improve Planning and Compliance Monitoring (GAO-15-618, August 17 2015)

Health Resources and Services Administration: Action Taken to Train and Oversee Grantee Monitoring Staff, but Certain Guidance Could Be Improved (GAO-14-800, September 23, 2014)

Federal Grants: Agencies Performed Internal Control Assessments Consistent with Guidance and Are Addressing Internal Control Deficiencies (GAO-14-539, July 30, 2014)

State Department: Implementation of Grants Policies Needs Better Oversight (GAO-14-635, July 21, 2014)

Grants Management: Improved Planning, Coordination, and Communication Needed to Strengthen Reform Efforts (GAO-13-383, May 23, 2013)

Grants Management: Improving the Timeliness of Grant Closeouts by Federal Agencies and Other Grants Management Challenges (GAO-12-704T, July 25, 2012)

Federal Grants: Improvements Needed in Oversight and Accountability Processes (GAO-11-773T, June 23, 2011)

Iraq and Afghanistan: Agencies Face Challenges in Tracking Contracts, Grants, Cooperative Agreements, and Associated Personnel (GAO-10-509T, March 23, 2010)

APPENDIX B: MANAGEMENT'S COMMENTS

National Aeronautics and Space Administration
 Headquarters
 Washington, DC 20546-0001



JAN 14 2016

Reply to Attn of:

Science Mission Directorate

TO: Assistant Inspector General for Audits

FROM: Associate Administrator for Science Mission Directorate

SUBJECT: Response to OIG Draft Report "Audit of a NASA Research Grant Awarded to the University of Miami" (A-15-009-00).

NASA appreciates the opportunity to review and comment on the Office of Inspector General (OIG) draft report entitled "Audit of a NASA Research Grant Awarded to the University of Miami" (A-15-009-00) dated December 15, 2015.

In the draft report, the OIG makes one recommendation addressed to the Associate Administrator for Science Mission Directorate (SMD) and the Executive Director of the NASA Shared Services Center (NSSC) intended to strengthen controls over the management of the University of Miami grant. Management's response to the OIG's recommendations, including planned corrective actions, follows:

The OIG recommends the Associate Administrator for SMD and the NSSC Executive Director work with the University of Miami to:

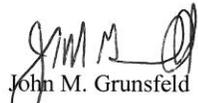
Recommendation 1: Ensure future invoices paid by the University using NASA award funds are adequately supported in accordance with OMB and NASA requirements and the University maintains documentation adequate to support the allowability of costs charged under the award.

Management's Response: Partially concur. In order to address concerns with adequate supporting documentation, the NSSC will request that the University of Miami take corrective action to ensure future invoices paid by the University using NASA award funds are adequately supported in accordance with OMB and NASA requirements supporting invoices paid by the University of Miami. The University should maintain documentation adequate to support the allowability of these costs charged under the award. Once received, NSSC, in consultation with SMD, will evaluate the corrective action to determine if it adequately addresses these concerns. However, NASA disagrees with the recommendation that NASA "ensure" that all future invoices paid by the University using NASA award funds have adequate supporting documentation, as this exceeds the requirements of 2 CFR 1.100 et seq.

Estimated Completion Date: NSSC and SMD will evaluate and determine if the University's corrective action satisfies the concerns within 30 days of receipt of the University's response.

We have reviewed the draft report for information that we believe should not be publicly released and have no concerns regarding the release of information.

Thank you for the opportunity to review and comment on the subject draft report. If you have any questions or require additional information regarding this response, please contact Peter Meister at (202) 358-1557.



John M. Grunsfeld

cc:
NASA Shared Services Center/Mr. Glorioso
Office of Procurement/Mr. McNally

APPENDIX C: RECIPIENT'S COMMENTS



Office of Research Administration
1320 South Dixie Highway
Gables One Tower
Room #650, Locator Code 2960
Coral Gables, Florida 33146

January 8, 2016

Mr. Jim Morrison
Assistant Inspector General for Audits
NASA Office of Inspector General
Office of Audits
Suite 8U71, 300 E ST SW
Washington, D.C. 20546-0001

RE: *Audit of a NASA Research Grant Awarded to the University of Miami (A-15-009-00)*

Dear Mr. Morrison:

The University of Miami Respectfully submits the following response to the draft report dated December 15, 2015 for the audit of NASA grant and cooperative agreement number NNX14AP63G.

Recommendation: To strengthen NASA's controls over the management of the University of Miami research grant, we recommend the NASA Shared Services Center Executive Director and the Associate Administrator for the Science Mission Directorate work with the University of Miami to ensure future invoices paid by the University using NASA award funds are adequately supported in accordance with OMB and NASA requirements and the University maintains documentation adequate to support the allowability of costs charged under the award.

University of Miami Response: *The University concurs with the recommendation from the NASA Office of Inspector General, Office of Audits. The Office of Research Administration has implemented controls to comply with OMB and NASA requirements for invoices paid with NASA funds which necessitate adequate supporting documentation.*

If you have any questions regarding the above response please do not hesitate to contact me at 305-284-3965 or bacole@miami.edu.

Sincerely,

A handwritten signature in blue ink that reads "Barbara A. Cole".

Barbara A. Cole
Associate Vice President, Office of Research Administration

Attachment

Cc:
Chris Songy
Paul Roberts

APPENDIX D: REPORT DISTRIBUTION

National Aeronautics and Space Administration

Administrator
Chief of Staff
Chief Financial Officer
 Deputy Chief Financial Officer for Finance
Assistant Administrator for Procurement
Executive Director, NASA Shared Services Center
Associate Administrator, Science Mission Directorate

Non-NASA Organizations and Individuals

University of Miami, Office of Research Administration
Office of Management and Budget
 Deputy Associate Director, Energy and Science Division
 Branch Chief, Science and Space Programs Branch
Government Accountability Office
 Director, Office of Acquisition and Sourcing Management

Congressional Committees and Subcommittees, Chairman and Ranking Member

Senate Committee on Appropriations
 Subcommittee on Commerce, Justice, Science, and Related Agencies
Senate Committee on Commerce, Science and Transportation
 Subcommittee on Space, Science, and Competitiveness
Senate Committee on Homeland Security and Governmental Affairs
House Committee on Appropriations
 Subcommittee on Commerce, Justice, Science, and Related Agencies
House Committee on Oversight and Government Reform
 Subcommittee on Government Operations
House Committee on Science, Space, and Technology
 Subcommittee on Oversight
 Subcommittee on Space

(Assignment No. A-15-009-00)