AUDIT REPORT

OFFICE OF AUDITS

AUDIT OF NASA GRANTS AWARDED TO THE ALABAMA SPACE SCIENCE EXHIBIT COMMISSION'S U.S. SPACE AND ROCKET CENTER

OFFICE OF INSPECTOR GENERAL



Final report released by:

Paul K. Martin Inspector General

Acronyms

C.F.R	Code of Federal Regulations
FY	Fiscal Year
GIC	Grant Information Circular
NPD	NASA Policy Directive
NPR	NASA Procedural Requirements
OIG	Office of Inspector General
OMB	Office of Management and Budget
PMS	Payment Management System
U.S.C.	United States Code

OVERVIEW

AUDIT OF NASA GRANTS AWARDED TO THE ALABAMA SPACE SCIENCE EXHIBIT COMMISSION'S U.S. SPACE AND ROCKET CENTER

The Issue

In September 2011, the NASA Office of Inspector General (OIG) reported that NASA did not have an adequate system of controls in place to ensure proper administration and management of its grant program and that as a result some grant funds were not being used for their intended purposes. Moreover, NASA itself has identified and reported in one of its 2009 Procurement Management Review reports weaknesses in its grant administration process. Among the Agency's findings was that NASA had used grants and cooperative agreements rather than contracts to obtain office space for the use of NASA civil service personnel at the Alabama Space Science Exhibit Commission's U.S. Space and Rocket Center (Rocket Center) in Huntsville, Alabama. ²

The Rocket Center, established with the support of the State of Alabama, tells the story of space exploration and provides science-based displays and computer learning facilities for visitors, teachers, and students. The Rocket Center is the official visitor information center for NASA's Marshall Space Flight Center (Marshall) and houses Marshall's Education Training Facility. It is also the site of SPACE CAMP®, a program founded in 1982 to promote the study of math, science, and technology using classroom instruction and hands-on activities to teach teamwork, decision-making, and leadership. Between July 2005 and September 2009, NASA awarded three grants totaling \$5,271,121 to the Rocket Center for a variety of purposes, including restoration of the Center's Saturn V rocket exhibit, development of educational exhibits, upgrades to the SPACE CAMP® mission simulation program, and an educational workshop. NASA was directed to award each of these grants pursuant to the 2005 Consolidated Appropriations Act, the 2006 Consolidated Appropriations Act, and the 2009 Omnibus Appropriations Act.

The objective of this audit was to determine whether the Rocket Center used NASA's grant funds as intended and whether the costs associated with the grants were allowable, reasonable, and in accordance with applicable laws, regulations, guidelines, and the terms and conditions of the grants. Specifically, we reviewed: (1) program performance and

¹ NASA OIG, "NASA's Grant Administration and Management" (IG-11-026, September 12, 2011).

² The Alabama Space Science Exhibit Commission is an 18-member commission established as an agency of the State of Alabama that oversees the operation of the Rocket Center.

accomplishments; (2) budget management and control; (3) grant reporting; and (4) accounting and internal controls.

Results

We found that the Rocket Center properly managed the three grants we reviewed. Specifically, the Rocket Center fulfilled the grants' performance goals, properly managed the associated budgets, timely and accurately filed the required financial and performance reports, maintained a strong system of accounting and internal controls, appropriately requested reimbursement for allowable and reasonable costs, and adequately accounted for expenditures. However, we identified two areas of concern related to NASA's administration of the Rocket Center grants:

- Grant funds totaling \$424,816 were used to maintain office space for the direct benefit of NASA civil service personnel contrary to Federal and NASA regulations that require contracts be used for such purposes.
- The independent auditors who conducted the required Single Audits for the Rocket Center reported that the Center's current liabilities exceeded current assets in 2005 through 2010, that the Center suffered operating losses in four of those years, and that these conditions created an uncertainty as to the Rocket Center's viability. Although NASA grant officials claimed to have assessed the risks associated with the Center's impaired financial condition, they failed to sufficiently document this assessment. More broadly, NASA lacks a standard process to assess a potential grantee's financial condition prior to grant award or to impose any additional reporting or oversight requirements that such a condition may warrant. Although identification of concerns regarding the financial health of potential grantees would not necessarily preclude making awards to them, such a process would help reduce the risk associated with such awards.

Management Action

NASA needs to strengthen its policies, procedures, and internal controls to ensure that it uses contracts, grants, and cooperative agreements in the appropriate circumstances. We made the same finding in our September 2011 report on NASA's overall grant management and recommended that the Assistant Administrator for Procurement establish internal controls, policies, and procedures to require the independent review and approval of all grants and supplements for propriety of choice of instrument prior to award. With regard to the financial stability of grantees, we recommended that the Assistant Administrator for Procurement assess the feasibility of implementing internal controls, policies, and procedures to ensure that the Agency assesses the financial health of grant recipients prior to award and imposes additional reporting requirements and oversight when warranted.

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In response to a draft of our report, the Assistant Administrator for Procurement concurred with our recommendation, stating that he recognizes that the financial condition of an intended grant or cooperative agreement recipient is an important consideration in the award decision. He said that NASA will work closely with the Office of Management and Budget (OMB) to assess and evaluate the feasibility and effectiveness of proposed reforms recently published in the Federal Register that include a requirement that Federal agencies consider a prospective recipient's financial condition prior to awarding a grant or cooperative agreement. We consider the Assistant Administrator's proposed action responsive to our recommendation and will close the recommendation upon completion and verification of that action.

The Agency's comments in response to a draft of this report are reprinted in Appendix B; the grantee's comments are in Appendix C. The Agency previously provided technical comments on the draft, which we incorporated as appropriate.

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INTRODUCTION

Background

NASA awards approximately \$500 million in grants annually and faces the ongoing challenge of ensuring that these funds are administered appropriately and that grantees are accomplishing stated objectives. In September 2011, the NASA Office of Inspector General (OIG) reported that NASA did not have an adequate system of controls in place to ensure proper administration and management of its grant program and that as a result some grant funds were not being used for their intended purposes.³ Additionally, the Agency identified and reported in its 2009 Annual Procurement Management Review weaknesses in its grant administration process, including use of grants and cooperative agreements rather than contracts to obtain facility space for NASA civil service employees at the Alabama Space Science Exhibit Commission's U.S. Space and Rocket Center (Rocket Center).⁴

The Rocket Center, established with the support of the State of Alabama, tells the story of space exploration and provides science-based displays and computer learning facilities for visitors, teachers, and students. The Rocket Center is the official visitor information center for NASA's Marshall Space Flight Center (Marshall) and houses Marshall's Education Training Facility. It is also the site of SPACE CAMP®, a program founded in 1982 to promote the study of math, science, and technology using classroom instruction and hands-on activities to teach teamwork, decision-making, and leadership. Between July 2005 and September 2009, NASA awarded three grants totaling \$5,271,121 to the Rocket Center for a variety of purposes, including restoration of the Center's Saturn V rocket exhibit, development of educational exhibits, upgrades to the SPACE CAMP® mission simulation program, and an educational workshop (see Table 1 for individual grant award value). NASA was directed to award each of these grants pursuant to the 2005 Consolidated Appropriations Act, the 2006 Consolidated Appropriations Act, and the 2009 Omnibus Appropriations Act.

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³ NASA OIG, "NASA's Grant Administration and Management" (IG-11-026, September 12, 2011).

⁴ The Alabama Space Science Exhibit Commission is an 18-member commission established as an agency of the State of Alabama that oversees the operation of the Rocket Center.

Table 1. U.S. Space and Rocket Center Grants Reviewed				
Grant Award	Number of Supplements	Start Date	End Date	Award Amount
NNM05AA27G	12	7/11/2005	9/30/2010	\$4,428,121
NNX09AR31G	0	9/1/2009	8/31/2010	500,000
NNX09AW17G	0	9/9/2009	9/08/2010	343,000
			Total	\$5,271,121

Source: NASA grant award files

The Rocket Center has two primary missions: to provide a unique learning environment designed to enhance science, technology, engineering, and mathematics skills and knowledge of space and aeronautics of teachers and students; and, through acquisition and display of space and missile artifacts, to be one of the world's premier space museums. Since opening its doors in 1970, the Rocket Center has hosted over 13 million visitors. In fiscal year (FY) 2011, more than 500,000 visitors from 59 foreign countries toured the Center and 32,052 people attended its SPACE CAMP® programs.

The NASA Grant and Cooperative Agreement Handbook (Grant Handbook) contains the policies and procedures NASA procurement and technical officers and grantees must follow in the pre-award, award, post-award, and closeout phases of grant management. The Grant Handbook serves as a reference manual and assists grantees in meeting their fiduciary responsibility to safeguard grant funds and ensure they use the funds appropriately and consistently with the terms and conditions of the award. By accepting NASA awards, the Rocket Center agreed to comply with the financial and administrative requirements set forth in the Grant Handbook.

Objectives

The overall audit objective was to determine whether the Rocket Center used NASA grant funds for their intended purposes and whether the associated expenditures were allowable, reasonable, and in accordance with applicable laws, regulations, guidelines, and the terms and conditions of the grants. Specifically, we reviewed the Rocket Center's (1) program performance and accomplishments; (2) budget management and control; (3) grant reporting; and (4) accounting and internal controls.

⁵ NASA Procedural Requirements (NPR) 5800.1, "Grant and Cooperative Agreement Handbook," is codified in the Code of Federal Regulations (C.F.R.) at Part 1260. NASA issues Grant Information Circulars to disseminate guidance internally and issues Grant Notices to publicize regulatory changes not yet incorporated in the current version of the Grant Handbook.

To accomplish our audit, we conducted interviews with representatives from Marshall's Office of Procurement, grant officers, the grant technical officer, and Rocket Center officials. We visited the Rocket Center to observe the work completed with the grant funds and to document accounting, procurement, and project management processes and internal controls. We also reviewed laws, regulations, and other documentation pertinent to our review. Additional details of the audit scope and methodology, our review of internal controls, and prior audit coverage are in Appendix A.

FINDINGS AND RECOMMENDATIONS

We determined that the Rocket Center managed the three grants we examined in accordance with applicable laws, regulations, guidelines, and the terms and conditions of the grants. Specifically, we found that the Rocket Center fulfilled the performance goals of the grants, properly managed its grant budgets, timely and accurately filed the required financial and performance reports, maintained a strong system of accounting and internal controls, appropriately requested reimbursement for allowable and reasonable costs incurred, and adequately accounted for expenditures. However, we identified two areas in which NASA could improve its internal controls and grant oversight. First, NASA used eight grant supplements to procure office space for NASA civil service personnel when the appropriate procurement vehicle was a contract. Second, NASA lacks a standard process to assess a potential grantee's financial health prior to grant award. Although identification of concerns regarding the financial health of potential grantees would not necessarily preclude making awards to them, such a process would help reduce the risk associated with such awards.

Program Performance and Accomplishment

The overarching goal of the three grants we reviewed was to improve the Rocket Center's operations and space and technology exhibits. One of the grants was intended for the restoration of the Rocket Center's Saturn V exhibit (see Figure 1), for the purchase of equipment, and to support the operations and maintenance of the Center's Education Training Facility. The goal of the second grant was to update the Rocket Center's Mission Center Complex from a focus on NASA's retiring Space Shuttle Program to the Constellation Program then in development and to provide an education workshop on the Constellation Program.⁶ The goal of the third grant was to design several new exhibits, including one displaying a moon rock collected during the Apollo 12 mission.

⁶ The Constellation Program was later canceled.



Figure 1. Saturn V Rocket Exhibit at the Rocket Center in Huntsville, Alabama

Source: U.S. Space and Rocket Center Photo Gallery

To determine if the Rocket Center met these objectives, we interviewed Center officials, toured the Rocket Center's museum and training facility, observed the new and upgraded exhibits, and reviewed the Rocket Center's final performance reports. Overall, we concluded that the Rocket Center adequately met the goals of all three grants. For example, we observed that the Rocket Center used grant funds to repaint, dry, and repair its Saturn V exhibit, to remove old Shuttle and International Space Station equipment and convert an exhibit on Space Shuttle Discovery to an exhibit on the Orion capsule, and to fabricate parts of other new exhibits including one featuring an Apollo 12 moon rock.

Budget Management and Control

According to the Grant Handbook, the budget plan is the financial expression of the project or program as approved during the award process. Although NASA assumes no responsibility for budget overruns, recipients may spend grant funds without strict adherence to the individual allocations in their approved budgets, except for allocations relating to the acquisition of property, awarding of subcontracts, and certain revisions to budget and program plans. In addition, NASA may, but is not required to, restrict the grantee's ability to transfer funds among direct cost categories or programs, functions, and activities for awards that exceed \$100,000 when the cumulative amount of such transfers exceeds or is expected to exceed 10 percent of the total NASA-approved budget.

As we noted in our September 2011 report reviewing NASA's overall grant management, we believe allowing grant recipients such broad discretion to deviate from approved budgets increases the risk that they may incur unauthorized or unallowable costs or expenditures unrelated to the purpose of the grant. In this audit, we examined the extent

to which the Rocket Center adhered to the NASA-approved budgets by comparing the amounts the Rocket Center expended in each general ledger category to the approved budgets.

We did not identify any instances in which the Rocket Center incurred costs or expenditures unrelated to the purpose of the grant or otherwise failed to conform to the requirements of the Grant Handbook. However, we noted one instance in which the Rocket Center paid personnel expenditures totaling \$22,557 that were not included in the NASA-approved budget. According to the Executive Director, Rocket Center officials charged these costs to the grant because they determined that it was more cost-effective to have Rocket Center employees rather than contractors perform some of the exhibit work. She also said that at the time the charges were made she had confused this grant with another NASA grant that included approved personnel expenses, and therefore had not realized that the charges were not part of the approved budget. Because NASA's current guidance allows recipients to spend grant funds without strict adherence to individual allocations within their approved budgets, we did not take exception with this deviation.

In our September 2011 report, we recommended that the Assistant Administrator for Procurement revise the Grant Handbook to require a minimum threshold for all grantee budget deviations (excluding categories already requiring approval) and that technical officers approve budget deviations in excess of such threshold prior to the expenditure of grant funds. The Assistant Administrator for Procurement concurred with our recommendation and proposed corrective action. Accordingly, we are not making a recommendation concerning this issue in this report.

Grant Reporting

The Grant Handbook requires grantees to submit quarterly and final Federal Financial Reports, annual and final performance reports, and final inventory reports to NASA. The Federal Financial Report shows the grantee's 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.

Financial Reports. The Grant Handbook requires grantees to submit quarterly Federal Financial Reports within 30 working days after the end of each reporting period. The grantee is required to report expenditures and drawdowns online for each calendar quarter of the award period. Grantees are also required to submit a final Federal Financial Report within 90 days after the award's completion date.

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⁷ The term "drawdown" refers to the action in which the grantee withdraws funds from the U.S. Department of Health and Human Services' Payment Management System, which NASA and other Federal agencies use.

We analyzed the last four quarterly and the final Federal Financial Reports for the three grants we reviewed. We found that the Rocket Center submitted all reports timely and accurately recorded its general ledger expenditures and drawdown amounts in the Reports.

Performance Reports. The Grant Handbook and the terms of each of the grants we reviewed required the Rocket Center to submit annual performance reports to NASA 60 days prior to the grant anniversary date and a final performance report no later than 90 days after the grant's completion.

Two of the grants had a 1-year period of performance, so only final reports were required. In both instances, the Rocket Center submitted timely and accurate final reports. The third grant had a 5-year period of performance; therefore, four annual performance reports and a final report were required. We found that two of the annual reports were submitted 18 and 29 days late, respectively. When we asked the Rocket Center's Executive Director about these reports, she explained that the initial period of the grant was 1 year and that the performance period was extended through a series of supplements with differing periods of performance. According to the Executive Director, this caused some confusion regarding the anniversary dates for reporting purposes, so to maintain consistency she submitted the reports each May. Given the complexities involved, we believe this was a reasonable approach. We noted no other issues regarding the timeliness or content of the performance reports for this grant.

Inventory Reports. The grant award required final inventory reports be submitted 60 days after the completion of the award. We found that the grantee adhered to this requirement and that the reports were accurate.

Accounting and Internal Controls

According to the Grant Handbook, grant recipients are required to establish and maintain accounting and internal control systems to account for funds awarded to them. We reviewed the Rocket Center's recent Single Audit reports to determine whether they reported any material weaknesses in the Rocket Center's accounting and internal control systems that could affect the grants. We also interviewed Rocket Center employees responsible for payroll, purchasing, and accounts payable and observed accounting activities.

We found that the Center had qualified and experienced staff responsible for the areas we reviewed and that the staff and management openly communicated regarding the Center's mission and goals. We also found that the responsibility for financial duties was properly

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⁸ According to OMB Circular A-133, Single Audit reports are required for any grantee that expends more than \$500,000 in Federal funds in any given year. Single Audits report on financial statements, internal controls, and compliance with laws and regulations, and can include the identification of any related questioned costs as well as recommendations to the grant recipient for corrective action.

segregated among different staff members and that the Rocket Center had formally documented its standard operating procedures. Further, our review of Single Audit reports did not identify any material instances of noncompliance or other material weaknesses.9

Financial Management. According to the Grant Handbook, grantees' financial management systems should provide for accurate, current, and complete disclosure of the financial results and records that adequately identify the source and application of funds for federally sponsored activities. Grantees should also have effective controls over and accountability for all funds, property, and other assets and should adequately safeguard all such assets and assure they are used solely for authorized purposes. Additionally, the grantee should have accounting records supported by source documentation.

In March 2010, the Rocket Center transitioned to a new accounting system. Although the majority of the transactions for the grants we reviewed were maintained in its prior accounting system, we were able to verify and trace the audit trail to the related invoices, purchase requisitions, purchase orders, shipping and receiving documents, and bills of lading, demonstrating both systems' ability to track expenditures and revenues appropriately. In addition, the Rocket Center maintained general ledger reports to track the actual program expenditures chargeable to the grant. The detailed documents supporting the general ledger transactions included employee time records as well as information about other grant-related expenses, such as invoices from contractors, receiving documents, purchase requisitions, and purchase orders. We were able to compare information shown on the general ledger to the totals calculated from the supporting documentation and determine that the general ledger accurately reflected the Rocket Center's expenditures. We did not identify any reportable conditions during our testing of this area.

Grant Drawdowns. The Grant Handbook establishes procedures for NASA to make payments to grantees. These procedures are designed to minimize the elapsed time between the transfer of funds to the grantee and disbursement of funds by the grantee. Accordingly, grantees can receive advance payment for imminent expenditures or can pay the expenses related to the grant and then draw down the funds necessary to reimburse itself for these expenditures. Grantees should draw down the minimum funds needed to cover expenses as incurred and must invest any funds that exceed expenses in an interest bearing account, remitting any interest above \$250 to the U.S. Department of Health and Human Services' Payment Management System (PMS) for ultimate return to the Treasury.

For the three grants we reviewed, NASA disbursed a total of \$5,271,121. We compared drawdowns to grant expenditures and found that the Rocket Center based its drawdowns on the expenditures in its general ledger, did not have excess cash on hand, and made

⁹ As discussed in more detail later in this report, the Single Audit reports did raise an issue concerning the financial viability of the Rocket Center.

drawdowns in accordance with the Grant Handbook. Table 2 shows the number and amount of drawdowns from the PMS the Center made for each grant.

Table 2. U.S. Space and Rocket Center Drawdowns					
Grant Award	Amount of Drawdown per PMS	Grant Expenditures per the General Ledger	Reimbursements in Excess of Expenditures		
NNM05AA27G	\$4,172,505	\$4,172,505	0		
	10,720	10,720	0		
	105,096	105,096	0		
	2,675	2,675	0		
	61,837	61,837	0		
	75,288	75,288	0		
Grant Total	\$4,428,121	\$4,428,121			
NNX09AR31G	\$156,976	\$156,976	0		
	209,024	209,024	0		
	134,000	134,000	0		
Grant Total	\$500,000	\$500,000			
NNX09AW17G	\$ 15,013	\$ 15,013	0		
	8,942	8,942	0		
	11,022	11,022	0		
	13,240	13,240	0		
	115,200	115,200	0		
	115,200	115,200	0		
	12,000	12,000	0		
	52,383	52,383	0		
Grant Total	\$343,000	\$343,000			

Source: PMS reports and the Rocket Center general ledger

Grant Expenditures. To determine the accuracy and allowability of costs charged to the grants, we reviewed a sample of the Rocket Center's expenditures, including exhibit supplies, construction costs, consultant costs, and contractor expenses. We also examined the personnel costs charged to each grant. In total, we reviewed \$2,582,756 in grant transactions, or 49 percent of the total amount expended.

Personnel Expenditures. Personnel costs represented the smallest category of expenditures by the Rocket Center: a total of \$22,557 for the salaries and fringe benefits of employees who worked on grant NNX09AW17G. The other two grants had no associated personnel expenditures.

We reviewed the time and payroll records associated with the \$22,557 expenditure. While we found the expenditures to be accurately recorded, properly allocated, and adequately supported, as discussed above, they were not authorized per the approved grant budget, which contained only two categories: contractual costs and costs for an informal educator workshop. However, as previously noted, because grantees may deviate from their proposed budgets without approval from NASA except when the change involves property or subcontract-related costs, the Rocket Center was not required to seek NASA's permission to pay these personnel costs.

Non-Personnel Expenditures. We reviewed 114 non-personnel transactions totaling \$2,560,199, or 49 percent of total expenditures for the three grants. These transactions consisted of payments for items such as supplies, travel, and contractor expenses. We compared the transactions to the NASA-approved budgets and traced the transactions to supporting documentation. We determined that the expenditures were properly authorized, classified, supported, and charged to the grants and accurately recorded in the Rocket Center's general ledger. We also found that the Rocket Center has established policies and procedures relating to the selection and monitoring of contractors. From our review of contract transactions, we found that the Rocket Center performed due diligence in selecting contractors, reviewing the debarment list, handling bids and proposals, and ensuring that the required certifications for liability issuance, drug-free work place, and equal employment opportunity were obtained.

<u>Inappropriate Use of Award Instrument</u>. While performing expenditure testing, we found that select transactions were for the support and operation of the Rocket Center's Education Training Facility. Upon further review, we learned that grant officers at Marshall awarded eight grant supplements to the Rocket Center totaling \$424,816 to obtain space in the Education Training Facility for NASA's direct use and benefit. As previously noted, the Agency's own internal review also noted this issue.

The Education Training Facility is a two-story building adjacent to the Rocket Center. The first floor, referred to as the Education Resource Center, contains an auditorium, science lab, classroom, and dining area dedicated to Rocket Center use. The NASA Academic Affairs Office occupies the second floor of the Center as well as approximately 4,266 square feet of space on the first floor, which it uses to support NASA's off-site training and development activities. Although the rooms on the second floor are available for public use on a case-by-case basis, NASA has priority and NASA personnel are the principal users of the space.

Under Federal law, agencies are required to use a contract when "the principal purpose of the instrument is to acquire (by purchase, lease, or barter) property or services

for the direct benefit or use of the United States Government." ¹⁰ In contrast, a grant is the proper instrument when the principal purpose of the relationship is to carry out a public purpose of support or stimulation authorized by law. In our September 2011 report, we found that NASA did not have adequate controls established to independently validate its choice of award instrument and recommended that the Assistant Administrator for Procurement establish a formal, recurring training program for grant officers and technical officers that addresses choice of award instrument.

When we asked Marshall officials why they used a grant to acquire space in this particular case, they could not articulate a specific reason, but agreed that the use of a grant for this purpose was inappropriate and said they will not use grants for this purpose in the future. We confirmed that Marshall has corrected the situation at the Rocket Center by awarding a contract for this specific purpose on October 1, 2010. In addition, NASA's Assistant Administrator for Procurement agreed with and is taking corrective action to address our previous recommendation to institute additional training. Accordingly, we are not making a recommendation regarding this issue in this report.

Single Audit. According to Office of Management and Budget (OMB) Circular No. A-133, "Audits of States, Local Governments and Non-Profit Organizations," June 26, 2007, recipients of Federal funds are required to have a Single Audit performed annually if they expend more than \$500,000 in Federal funds in any given year. The Circular states that the audit shall be submitted to the Federal Audit Clearinghouse within 30 days of completion or 9 months after the end of the audit period, whichever is earlier. ¹¹

We reviewed the Single Audit reports for the Rocket Center for FYs 2005 through 2010 and found they were timely completed and submitted. The reports stated that the Rocket Center complied with the requirements of the laws, regulations, contracts, and grants that were applicable to each of its major Federal programs and identified no material internal control deficiencies. However, the notes to the corresponding financial statements identified an uncertainty concerning the Rocket Center's ability to continue as a "going concern." Specifically, the independent auditors reported that the Center's current liabilities exceeded its current assets in FYs 2005 through 2010 and that the Center suffered operating losses during four of those years. The independent auditors noted that these conditions created an uncertainty as to the Rocket Center's viability.

<u>Consideration of Grantees' Financial Health</u>. NASA does not have a process in place to assess a potential grantee's financial health prior to making a grant award.

^{10 31} U.S.C. 6303.

¹¹ The Federal Audit Clearinghouse operates on behalf of OMB and its primary purposes are to disseminate audit information, support OMB oversight and assessment of Federal award audit requirements, assist Federal oversight agencies in obtaining A-133 data, and help minimize the reporting burden of complying with A-133 audit requirements.

¹² "Going concern" is a term used to describe a company that has the resources needed in order to continue to operate indefinitely. If a company is not a going concern, it means the company has gone bankrupt.

Although concerns regarding the financial health of a potential grantee would not necessarily preclude making an award, a standardized process would help reduce the risk associated with such awards. For example, NASA could impose additional reporting requirements or enhance its oversight efforts if it has concerns about a grantee's financial health.

The technical officer responsible for the Rocket Center grants told us that NASA was aware of the Center's financial condition and that before making the FY 2009 award, she conducted a financial health review with the assistance of the NASA Office of Legislative Affairs, the Chief Financial Officer, and the Office of Procurement. She said that based on this assessment she concluded that the Rocket Center would be able to execute the 2009 award without issue. She also said that she provided a grant status report to the Chief Financial Officer on a weekly basis.

However, we found no documentation in the grant files of such a review and the documentation provided to us as support for the review did not pertain to assessing the Center's financial health. For example, the technical officer provided us with the Office of Education's Proposed Evaluation Criteria, none of which address this issue. Further, no additional requirements were imposed on the Center in an attempt to mitigate the risk posed by its impaired financial condition.

Recommendation, Management's Response, and Evaluation of Management's Response

We recommended that the NASA Assistant Administrator for Procurement assess the feasibility of implementing internal controls, policies, and procedures to ensure that grant officers consider the financial condition of intended grant recipients prior to award and that additional reporting requirements are imposed and/or enhanced oversight efforts undertaken in appropriate circumstances.

Management's Response. The Assistant Administrator for Procurement concurred, stating that he recognizes that the financial condition of an intended grant or cooperative agreement recipient is an important consideration in the award decision, particularly at increased dollar levels. He said that NASA will work closely with OMB to assess and evaluate the feasibility and effectiveness of proposed reforms recently published in the Federal Register that include a requirement that Federal agencies consider a prospective recipient's financial condition prior to awarding a grant or cooperative agreement and will implement the final guidance.

Evaluation of Management's Response. Management's proposed action to work with OMB to evaluate the feasibility of implementing a rule that considers a prospective recipient's financial condition prior to the award of a grant or cooperative agreement and to implement the resulting guidance is responsive to our recommendation. Therefore, the

recommendation is resolved and will be closed upon completion and verification of the proposed actions.

APPENDIX A

Scope and Methodology

We performed this audit from October 2011 through May 2012 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 NASA's grant funds were used for their intended purposes and whether the Agency was compliant with established laws, regulations, and NASA-specific requirements in its administration and management of the grants. We interviewed key personnel at the NASA Shared Services Center, Marshall Space Flight Center (Marshall), and the Alabama Space Science Exhibit Commission's U.S. Space and Rocket Center (Rocket Center) involved in grant administration, management, and award processes. We identified and reviewed relevant Federal laws and regulations; NASA policies, procedures, plans, and requirements; and other criteria (a detailed list of items reviewed is provided on the following pages). The methodology we followed for the review is described below.

Grant Selection. We judgmentally selected three grants awarded to the Rocket Center for review based on weaknesses reported in the Agency's grant administration process in one of its Annual Procurement Management Review reports. All three grants selected for review were congressional earmark grants awarded by Marshall and the NASA Shared Services Center.

Grant Award File Documentation. We reviewed grant award documentation, including technical and peer review reports, budget proposals, and summary financial reporting documentation. We interviewed NASA grant officers as well as the technical officer responsible for the grants examined during the audit.

Grantee Site Visits. We visited the grantee's location in Huntsville, Alabama, including the museum where the exhibits are maintained and the Rocket Center's Education Training Facility. We interviewed grantee officials, performed substantive transaction testing necessary to validate whether NASA grant funds were used for their intended purposes, and assessed the sufficiency of grantee performance.

Testing Conducted. We tested compliance with what we consider the most important conditions of the grant. Unless otherwise stated in our report, the criteria we audited against are contained in the NASA Grant Handbook and other related NASA policy and guidance, grant award documents, and relevant OMB Circulars and Federal regulations.

In conducting our audit, we employed a judgmental sampling design to obtain broad exposure to numerous facets of the grant reviewed, such as dollar amounts or expenditure category. This nonstatistical sample design does not allow projection of the test results to the universe from which the samples were selected. Further, we tested the Rocket Center's:

- **Program Performance and Accomplishments** to determine whether the grantee met or is capable of meeting the grant objectives and whether the grantee 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 if the grantee deviated from the approved budget, and if so, if the grantee received the necessary approval.
- **Grant Reporting** to determine if the required reports were submitted on time and accurately reflected grant activity.
- Accounting and Internal Controls to determine whether the grantee had sufficient accounting and internal controls to identify and report expenditures and reimbursements. This included testing:
 - Grant Drawdowns to determine whether grant drawdowns were adequately supported and if the grantee was managing grant receipts in accordance with federal requirements; and
 - o **Grant Expenditures** to determine the accuracy and allowability of costs charged to the grant.

Federal Laws, Regulations, Policies, and Requirements. We identified and reviewed the following criteria as applicable to our audit objectives:

Code of Federal Regulations (C.F.R.), Title 2, Part 215, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations (OMB Circular A-110)," May 11, 2004

2 C.F.R. Part 230, "Cost Principles for Non-Profit Organizations (OMB Circular A-122)," August 31, 2005

14 C.F.R. Part 1260, "Grants and Cooperative Agreements," Subpart A, October 19, 2000

14 C.F.R. Part 1260, Subpart B, "Uniform Administrative Requirements for Grants and Cooperative Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations," October 19, 2000

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Title 31, United States Code, Chapter 63 (31 U.S.C. 63), "Using Procurement Contracts and Grant and Cooperative Agreements," January 7, 2011

OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations," June 26, 2007

NASA Policy Directive (NPD) 1200.1E, "NASA Internal Control," July 21, 2008

NASA Procedural Requirements (NPR) 5800.1, "Grant and Cooperative Agreement Handbook," Section A, June 13, 2008, and Section B, April 20, 2007

NPR 9010.3, "Financial Management Internal Control," September 30, 2008

NPR 9680.1, "NASA's Management of Grants and Cooperative Agreements," October 31, 2008

Grant Information Circular (GIC) 05-03, "Additional Guidance Related to the Processing of Unsolicited Proposals, Successor Proposals and Congressional Interest Items (Earmarks)," April 7, 2005

GIC 06-01, "Additional Guidance Related to the Processing of Congressional Interest Items (Earmarks)," April 12, 2006

GIC 08-01, "Ensuring Only Allowable, Reasonable, and Necessary Costs in the Award of Grants and Cooperative Agreements," February 14, 2008

GIC 09-02, "Guidance On Processing Congressionally Directed Items (Earmarks) for Fiscal Year (FY) 2009," July 23, 2009

GIC 09-04, "Substitution of Standard Form (SF) 425 for Standard Form (SF) 272: Class Deviation from the Requirements at CFR 1260.26 and Exhibits D & G of 14 CFR Part 1260," October 27, 2009

GIC 11-01, "Implementation of the Federal Funding Accountability and Transparency Act (FFATA) of 2006," January 24, 2011

GIC 11-02, "Requirements for Non-Competitive Agency Grant and Cooperative Agreement Actions, Exclusive of those Actions Prescribed by 14 C.F.R. 1260.17, Evaluation and Selection of Unsolicited Proposals," May 24, 2011

Use of Computer-Processed Data. We relied on NASA computer-processed data to determine the NASA grants universe and to provide financial data. While we obtained grant drawdown data and the Federal Financial Reports used during the audit from the Department of Health and Human Services' Payment Management System (PMS), we did not perform any substantive testing of the PMS system to validate the completeness or accuracy of the data. As a result, we placed limited reliance on the accuracy of the data obtained from the PMS System. Further, we also placed limited reliance on the

information obtained from the grantee's financial system to perform detailed transaction testing on the grantee's financial records.

Review of Internal Controls

We reviewed internal controls for the grantee's administration and management of NASA grants, including policies and procedures. We also reviewed NASA's oversight and monitoring of the grantee. The control weaknesses we identified are discussed in this report. Our recommendations in both this report and our September 2011 report, when implemented, should correct the identified control weaknesses.

Prior Coverage

During the last 5 years, NASA and the GAO have issued the following reports and testimony that are of particular relevance to the subject of this report. Unrestricted reports can be accessed over the Internet at http://oig.nasa.gov/audits/reports/FY12/ (NASA OIG) and http://www.gao.gov (GAO).

NASA Office of Inspector General

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

"Audit of NASA's Recovery Act Procurement Actions at Johnson Space Center, Goddard Space Flight Center, Langley Research Center, and Ames Research Center" (IG-10-017, July 27, 2010)

"Final Memorandum on Audit of NASA Education and Training Grants" (IG-07-029-R, September 18, 2007)

"Audit of NASA's Management and Funding of Fiscal Year 2006 Congressional Earmarks" (IG-07-028, August 9, 2007)

Government Accountability Office

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

"Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue" (GAO-11-318SP, March 2011)

"Grants Management – Attention Needed to Address Undisbursed Balances in Expired Grant Accounts" (GAO-08-432, August 2008)

APPENDIX A

REPORT

"Grants Management – Grantees' Concerns with Efforts to Streamline and Simplify Processes" (GAO-06-566, July 2006)

AGENCY COMMENTS

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



JUN 1 9 2012

Feply to Attn of: Office of Procurement

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TO: Assistant Inspector General for Audits

FROM: Assistant Administrator for Procurement

SUBJECT: Response to OIG Draft, "Audit of NASA Grants Awarded to the Alabama Space

Science Exhibit Commission's U.S. Space and Rocket Center" (Assignment No.

A-12-003-00)

The Office of Procurement appreciates the opportunity to review your draft memorandum entitled "Audit of NASA Grants Awarded to the Alabama Space Science Exhibit Commission's U.S. Space and Rocket Center" (Assignment No. A-12-003-00). Overall, we are pleased with the positive findings concerning your review of the Grants awarded for the U.S. Space and Rocket Center. We continue to share your concerns with the need to improve NASA's management and internal controls for Grants and Cooperative Agreements. We are working on specific improvements to policy, practice and training as we have previously reported to you.

In the draft memorandum, the Office of the Inspector General (OIG) outlines several findings and communicates one recommendation to the Assistant Administrator for Procurement. NASA's response to the recommendation, including planned corrective action, follows:

Recommendation 1: The NASA Assistant Administrator for Procurement assess the feasibility of implementing internal cortrols, policies, and procedures to ensure that grant officers consider the financial condition of intended grant recipients prior to award and that additional reporting requirements are imposed and/or enhanced oversight efforts undertaken in appropriate circumstances.

Management's Response: We concur with the OIG's recommendation, while recognizing that the financial condition of an intended grant or cooperative agreement recipient is an important consideration in the award decision, particularly at increased dollar levels.

As you may know, Executive Order 13520 on Reducing Improper Payments, dated November 23, 2009 and the February 28, 2011 Presidential Memorandum on Administrative Flexibility, Lower Costs, and Better Results for State, Local, and Tribal Governments, the President directed the Office of Management and Budget (OMB) to work with Executive Branch agencies; state, local, and tribal governments; and other key stakeholders to evaluate and assess potential reforms to Federal grants policies. One of the proposed reforms includes requiring agency consideration of the merit of each proposal and the "financial risk" associated with each applicant prior to an

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agency making an award. Indicators of risk would include past financial, internal controls, and programmatic performance. These proposed Government-wide reforms were recently published in the Federal Register for public comment to assist in the development and issuance of standardized OMB guidance that would be applicable to all twenty-six (26) Federal grant-making agencies. To avoid duplication and inconsistencies between NASA and OMB, the HQ Office of Procurement will work closely with OMB, as the lead, in assessing and evaluating the feasibility and effectiveness of these proposed reforms, to include the consideration of a prospective recipient's financial condition prior to the award of a grant or cooperative agreement, and in the development and implementation of the resulting government-wide guidance for conducting such functions.

Thank you for the opportunity to review and comment on the subject draft memorandum. If you have further questions or require additional information on the NASA response to the draft memorandum, please contact Andrew O'Rourke at 202-358-4560.

William McNally

GRANTEE COMMENTS



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May 21, 2012

National Aeronautics and Space Administration Office of Inspector General Washington, DC 20546-0001

Subject: Audit of NASA Grants Awarded to the Alabama Space Science Exhibit Commission – Assignment No. A-12-003-00

Dear Mr. Morrison:

I am corresponding in response to your request for comments regarding the audit notated in the subject line. Please be advised that since there were no findings with respect to the management of the grants by the Alabama Space Science Exhibit Commission, I have no disputes with the audit report and hereby affirm concurrence with the report.

Sincerely,

Jennifer Crozier

Executive Director

U.S. Space & Rocket Center Foundation



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REPORT No. IG-12-016



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In order to help us improve the quality of our products, if you wish to comment on the quality or usefulness of this report, please send your comments to Mr. Laurence Hawkins, Audit Operations and Quality Assurance Director, at Laurence.B.Hawkins@nasa.gov or call 202-358-1543.

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