National Aeronautics and
Space Administration

Office of Inspector General
Washington, DC 20546-0001

DEC 20 2005

The Honorable Thad Cochran
Chairman
Committee on Appropriations
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

This letter is in response to the concern expressed in the Conference Report (House Report 108-792) that accompanied the fiscal year (FY) 2005 Consolidated Appropriations Act, 2005, Public Law 108-447. The report requested that the NASA Office of Inspector General (OIG) address NASA's contracting process with regard to timely delivery of both services and hardware. The conferees directed us to issue a list of contracting "trouble areas" and provide recommendations to address those areas.

Our audit and investigative work has uncovered a number of trouble areas in NASA's acquisition and contracting processes, including:

- lack of a reliable financial management system to track contract spending,
- inadequate control over Government property held by contractors,
- single-bidder contracts with undefined and changing contract requirements,
- lack of transparency to subcontractors working on NASA programs,
- questionable contract management practices under NASA's Small Business Innovation Research (SBIR) program,
- procurement process abuses by NASA employees and contractors, and
- significant cost overruns in some Agency programs.

To address these identified weaknesses, NASA must improve its internal control framework by establishing a fully integrated and effective financial management system—the backbone of a viable internal control framework, required under a myriad of Government requirements including Office of Management and Budget (OMB) Circular A-123. NASA must also establish institutional procurement officials within the Agency to serve as the accountable internal control for ensuring integrity in acquisition activities.

Discussion of Trouble Areas in NASA Contracting

Lack of A Reliable Financial Management System to Track Contract Spending. Many of the trouble areas in NASA's acquisition and contracting processes are attributable to the lack of a fully integrated and effective financial management system. In the last few years, we reported on, and offered recommendations for improving, numerous components

of NASA's efforts to develop and implement an integrated financial management system. While the Agency accepted and implemented many of our recommendations, thus far it has not developed a clearly articulated strategy to overcome major impediments to sound financial management.

For FYs 2003, 2004, and 2005, the independent public accounting firm that audits NASA's financial statements did not render an opinion because it could not find sufficient support for amounts presented in the statements. The firm also identified numerous material weaknesses in NASA's internal controls, including weaknesses in NASA policies and procedures for accounting for property, plant, and equipment and for reconciling the Agency's fund balance with the Department of the Treasury.

In an April 8, 2005, memo to the NASA Chief Financial Officer (CFO), we restated recommendations offered on March 2, 2005, and November 24, 2004, articulating what we believe to be a credible plan for improving NASA's financial management. Summarized here, we suggested the following:

- Define the problems, design actions to resolve the problems, and identify staff and resources needed to implement the resolution. Focus first on actions that will ensure that the Agency can correctly process current year transactions.

- Define specific roles and responsibilities of relevant Agency organizations, including Center Finance Offices, involved in carrying out corrective actions.

- Assess available staff and resources needed to execute the strategy to determine what actions can realistically be accomplished and when.

- Develop both milestone and completion dates based on the results of the above activities.

In addition, we recommended that the CFO work with Mission Directorates and Support Offices to get concurrence on the Financial Leadership Plan and present it to the Administrator for approval. While the CFO did not implement these recommendations, we believe that such a unified approach is critical to ensuring that the Agency has a collectively supported vision for improving financial management, the resources to accomplish that vision, and the combined will to reach milestone and completion dates.

The need to both develop and implement an Agency-wide approach to a fully integrated financial management system is exemplified by findings from both the OIG and Government Accountability Office (GAO). Progress is being made in implementing components of such a system, but several trouble areas in NASA's financial management system need immediate attention.

Inadequate Control Over Government Property Held by Contractors. NASA's property, plant, and equipment (PP&E) assets at the end of FY 2005 totaled approximately $34.9 billion, representing over 75 percent of NASA's reported total assets.

Approximately 25 percent of NASA's PP&E—$9 billion—is held by NASA contractors. The FY 2005 audit of NASA's financial statements included recommendations on how NASA could improve management of its PP&E fixed assets.[1] The most significant recommendation was that NASA fundamentally revise its approach to capitalizing property by documenting, analyzing, and implementing robust control changes from end to end for all categories of PP&E. The audit report noted the following:

> Until NASA successfully implements a single integrated system for reporting PP&E, and develops a methodology to identify costs that need to be capitalized as the transaction is processed, NASA will continue to experience difficulties in recording property-related balances and transactions.

Although controls over PP&E were cited as a material weakness in each of the last five annual financial audits, the Agency has not proposed a system that relies on NASA employees to determine what costs are capitalized and expensed.

GAO identified contract management as a high-risk area for NASA in 1990, citing NASA's lack of a financial management system that could provide accurate and reliable information on contract spending as well as NASA's lack of emphasis on results, product performance, and cost control. GAO reiterated that assessment in 2005,[2] stating that NASA continues to face challenges in implementing financial management systems that would allow it to manage contracts effectively.

In discussions with the OIG, NASA Office of Procurement officials identified two ongoing initiatives—the Independent Cost Estimating program and the Contract Management Module of the Integrated Enterprise Management Program—designed to improve contract management. Both are important components in NASA's efforts to build an integrated enterprise management architecture.

Single-Bidder Contracts with Undefined and Changing Contract Requirements. We have questioned sole-source procurement actions when the requirements were not fully developed until after procurement actions were initiated.

- In 2004, NASA proposed to enter into sole-source negotiations with an aerospace contractor to modify an existing contract for developing and delivering pre- and post-flight data. The modification included four additional flights of the contractor's developmental launch vehicle, increased the contract amount from $7.7 million to $227.4 million, and extended the period of performance by approximately three years. NASA asserted that data acquired from the additional flights would allow the contractor to demonstrate a unique combination of

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[1] Ernst & Young. *Fiscal Year 2005 "Report on Internal Controls"* (see section titled "Enhancements Needed for Controls over Property, Plant, Equipment, and Materials," in NASA's *Fiscal Year 2005 Performance and Accountability Report* (page 203 at http://www.nasa.gov/pdf/138910main_FY_2005_PAR.pdf).

[2] Government Accountability Office. *Long-standing Financial Management Challenges Threaten the Agency's Ability to Manage Its Programs*, GAO-06-216T (Washington, DC, October 27, 2005).

autonomous rendezvous and proximity operations and the data would benefit the development of future reusable launch systems.

While we found no violation from a procurement process perspective, we took issue with the fact that when the modification was proposed, the contractor was in bankruptcy and had not met milestones under the existing contract. Also, it appeared that the Agency determined the need for the new technical requirements based on what the contractor could potentially provide, then concluded that only this contractor could meet the requirements.

We informally communicated our observations regarding the propriety of the contract modification to NASA management. Subsequent to our communication, a competing contractor formally protested the proposed procurement action to GAO, who conducted a teleconference with the parties on June 17, 2004. A participant in the teleconference later informed us that, on the basis of information provided during the call, GAO advised the parties it would very likely sustain the protest. NASA elected to cancel the proposed procurement action, and GAO formally dismissed the protest as moot. To reimburse the protestor for its legal fees and associated protest costs, NASA paid approximately $200,000.

- NASA awarded a cooperative agreement to the Girvan Institute of Technology (Girvan) in 2002 to establish an "entrepreneurial center" at NASA's Ames Research Center (Ames). Our review found that Ames awarded the agreement noncompetitively and on the basis of an unsolicited proposal that was paid for in part by the Government and prepared with Government involvement. Thus the unsolicited proposal was also invalid because Federal and NASA regulations require that the offeror independently originate and develop the proposal. In addition, NASA's share of funding under the agreement increased more than 1,000 percent—from $600,000 to $6.9 million—during the first year of the agreement without adequate supporting analyses to ensure that the cost to the Government was fair and reasonable. NASA provided 92 percent of Girvan's funding despite the fact that the original agreement specified 23 percent.

  In relation to this agreement, and to improve the effectiveness of procurement and business operations, we recommended that NASA management reevaluate the agreement and determine whether it is in the best interest of the Government to continue the agreement or terminate it. We also recommended that if the decision was to continue the agreement, that management take action to ensure proper financial oversight of the agreement.

  Management concurred with the recommendation to reevaluate the agreement, and elected to terminate it, resulting in "funds put to better use"[3] of approximately $1.5 million. Our final report, "Review of the Girvan Institute of Technology

[3] The auditing term "funds put to better use" means that funds could be used more efficiently if management takes action to implement and complete the recommendations made by the audit, including reduction in outlays or deobligation of funds from programs or operations.

Cooperative Agreement" (IG-04-010), dated February 9, 2004, is available on our web site at http://www.hq.nasa.gov/office/oig/hq/audits/reports/FY04/ig-04-010.pdf.

- NASA may have improperly circumvented the competitive element of the NASA Launch Services (NLS) program by awarding a package of 19 launches to one vendor without providing the other participating vendor a fair opportunity for consideration. The 19 missions constituted 31 percent of all the missions available under the NLS award. The rationale for awarding the 19 launches to the first vendor on a sole-source basis is questionable particularly because at the time of the award, three of the 19 launches were undefined and had no firm launch requirements. We found additional contract management inequities favoring the first vendor, including disparate pricing requirements, unequal treatment of add-on costs known as "fly-out" costs, and other irregularities. (We are in the process of preparing a report to NASA management on this review.)

We are also assessing NASA's procedures for establishing and vetting requirements for awarding contracts to former high-level NASA officials to obtain advisory and assistance services. Several such awards are currently under review by NASA OIG and all were done on a sole-source basis. We recognize that contracting for the services of former high-level officials is a long-standing practice Governmentwide and is not necessarily illegal or in violation of regulations. That said, this practice is inconsistent with Federal Acquisition Regulation (FAR) 37.203(c)(3), which states, "Advisory and assistance services shall not be contracted for on a preferential basis to former Government employees," and with Subpart 1837.2 of the NASA FAR Supplement, "Advisory and Assistance Services," which states, "Advisory and assistance services of individual experts and consultants shall normally be obtained by appointment rather than by contract (see NPR 3300.1, Appointment of Personnel To/From NASA, Chapter 4, Employment of Experts and Consultants)." The process for clearly defining and vetting requirements for "advisory and assistance" services prior to contracting for them raises questions about the propriety of such arrangements.

Lack of Transparency to Subcontractors Working on NASA Programs. Although the Agency can readily identify prime contractors on NASA projects and programs, it cannot identify all subcontractors working on NASA programs. The FAR does not require prime contractors to obtain consent for or even identify their subcontractors to Federal agencies, except under limited specific circumstances.[4] Having no way to identify those working on NASA projects and programs hampers the OIG's ability to identify and prevent waste, fraud, and abuse and hampers the Agency's ability to effectively administer its contracts.

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[4] FAR 44.201, "Consent and Notification Requirements," sets forth the requirements for a prime contractor to obtain Government consent or otherwise notify the Government of its specific subcontracts. The FAR requirements allow for numerous situations in which the prime contractor may subcontract without obtaining Government consent or otherwise notifying the Government. The specific requirements are situation dependent, based on several factors including whether the prime contract is for a commercial item, the status of the prime contractor's purchasing system, the type of the subcontract (for example, cost reimbursement, fixed-price, time-and-materials), and the dollar value of the subcontract.

In conducting our audit, investigative, and other oversight activities, we may become aware of a defective item produced by a particular vendor and need to know whether NASA has done business—either directly or indirectly—with that vendor and, if so, whether NASA was harmed by accepting delivery of the defective item. Or, we may become aware of a vendor who committed fraud under a Government contract and need to determine whether the vendor may have perpetrated the same fraud as a prime contractor or a subcontractor under one or more NASA contracts.

The issue of being blind to who may be working with sensitive technologies and information likely impacts other Federal agencies as it does NASA. Therefore it should be addressed from a Governmentwide perspective. We believe that solving this problem will require, at minimum, changes to the FAR to incorporate more stringent requirements for prime contractors to identify their subcontractors and changes to the Governmentwide Federal Procurement Data System–Next Generation (FPDS-NG) to enable the system to collect and process subcontractor information at the necessary level of detail.

Questionable Contract Management Practices under NASA's Small Business Innovation Research Program. In an April 2004 memo to NASA management concerning SBIR contracts, we described questionable contract management practices, which we had identified in previous and current investigations, that left NASA vulnerable to fraud, waste, and abuse. Two of these investigations have been ongoing since FY 2001, involved five NASA Centers, and thus far resulted in criminal convictions. Our casework found that some SBIR companies

- submitted duplicate proposals to multiple Federal agencies to receive multiple awards for essentially the same work;
- submitted different proposals to multiple Federal agencies but provided duplicate deliverables;
- failed to comply with subcontracting limitations, in violation of SBIR program requirements;
- had principal investigators who were not primarily employed by the small business concern, in violation of SBIR program requirements; and
- had principal investigators who failed to perform a substantial portion of the research work for which NASA contracted, in violation of SBIR program requirements.

A contributing factor to these problems is that SBIR program contractor certification requires that offerors submit certifications attesting their compliance with program requirements only once, along with their proposals, prior to contract award; SBIR contractors are not required to recertify their compliance at any time after the contract is awarded. The lack of a recertification requirement makes it difficult to hold SBIR contractors accountable for meeting program requirements and has, in certain instances,

hampered our ability to prosecute SBIR contractors for criminal and/or civil violations. We believe that requiring a recertification as a condition of receiving final payment will facilitate the Government's ability to hold SBIR contractors accountable for complying with Federal statute, regulation, program, and contract requirements.

Our investigations also found that some NASA contracting officers and technical representatives did not effectively perform contract administration and technical oversight with regard to paying invoices and ensuring satisfactory technical progress and acceptable contract deliverables. On the basis of our reviews, we made the following recommendations:

- The Agency, prior to making final payment to SBIR contractors, should require contractors to complete and submit a recertification of compliance with Program requirements.

- The Office of Procurement should issue periodic notices to the SBIR procurement and technical community to emphasize the importance of effective administration and technical oversight of the Agency's SBIR contracts.

The Agency concurred with our recommendations and is in the process of revising the NASA FAR Supplement to incorporate the recertification requirement. The Agency also agreed to issue periodic notices to the NASA SBIR procurement and technical community to emphasize the importance of effective administration and technical oversight of the Agency's SBIR contracts.

Procurement Process Abuses by NASA Employees and Contractors. We have recently reported criminal fraud and other acts involving more than $4.75 million in taxpayer dollars, that were perpetrated by NASA employees and contractors. The importance of having a fully operating integrated financial management system with strong internal controls is illustrated in part by the fact that NASA has been victimized by numerous cases of criminal frauds and other acts. While it is sometimes difficult to draw a direct link between these frauds and specific systemic weaknesses in NASA's internal controls, it is easy to presume that those who would defraud the Government are emboldened by an environment where weak internal controls persist. The following investigative cases from this semiannual period reflect weaknesses in NASA's internal control systems:

- A NASA civil servant was convicted in a conflict of interest case in which he manipulated the procurement process to steer activities to a company he owned.

- Employees of a subcontractor were indicted for theft of more than $1 million in property from a warehouse maintained by a NASA contractor.

- A NASA civil servant was indicted for awarding a contract totaling $194,000 to a personal acquaintance for services that were never rendered. In a separate scheme, the acquaintance, a benefits specialist at the Social Security Administration,

allegedly illegally directed benefits checks to the NASA employee. After indictment, a plea arrangement was agreed upon, subject to court review.

- NASA subcontractors were indicted for engaging in bid-rigging.
- Indictments and settlements are in process in several cases of improper processing and certification of aerospace hardware, including flight critical hardware.
- A contractor's failure to credit the Government for rebates the contractor received in connection with Government paid-for travel resulted in a multi-agency recovery of $41.9 million, including $275,000 attributable to NASA.
- A NASA contractor's employee (deceased) created fictitious companies to which he diverted contract funds for personal use. The contractor has agreed to a settlement for $1.27 million.
- A case involving kickbacks to a NASA contractor from a NASA subcontractor resulted in a $1.4 million settlement to NASA.
- A NASA contractor failed to provide adequate oversight of a subcontractor that used the wrong materials. NASA settled with the contractor for $375,000.
- A NASA subcontractor agreed to reimburse NASA $208,030 for possible mischarging by an employee, who since resigned from the subcontractor.
- Misuse of grant funds by a university resulted in a $350,000 settlement to NASA.
- We also reported on a theft of grant funds ($55,000), a theft of property loaned by NASA to a museum, and the President of a NASA contractor who embezzled funds from a NASA contract. These cases are pending resolution.

The OIG is involved in a number of ongoing activities to assess the overall internal control systems NASA has in place to provide oversight of its contractors. We believe there is much to be gained through these activities, in terms of developing safeguards and improving policies. In particular, we have been working on initiatives concerning fraud against NASA with the Office of General Counsel.

Significant Cost Overruns in Some Agency Programs. In a review of selected NASA programs, GAO found that NASA lacked the disciplined cost-estimating processes and financial and performance management systems needed to establish priorities, quantify risks, and manage program cost. GAO noted that until NASA has the data, tools, and analytical skills needed to alert program mangers of potential cost overruns and schedule delays, allowing them to take corrective action before problems occur, it will continue to face challenges in effectively overseeing its contractors. NASA has experienced cost overruns on some of its major programs, most notably the International Space Station. The Agency recently disclosed that it was experiencing cost overruns on its effort to return the Space Shuttle to flight and the James Webb Telescope Program.

The OIG will continue its activities to root out fraud, waste, and abuse. NASA is working to improve its internal control environment and the OIG will coordinate its activities with the Agency in that context.

Prior to finalizing this letter, we provided senior NASA management an opportunity to comment on a discussion draft. If you or your staff need further information or would like to meet with us to further discuss these issues, please call Madeline Chulumovich, Executive Officer, at (202) 358-0615 or me at (202) 358-1220.

Sincerely,

Robert W Cobb

Robert W. Cobb
Inspector General

Identical letter to:

The Honorable Robert C. Byrd
Ranking Minority Member
Committee on Appropriations
United States Senate

The Honorable Jerry Lewis
Chairman
Committee on Appropriations
House of Representatives

The Honorable Barbara Mikulski
Ranking Minority Member
Subcommittee on Commerce, Justice, and Science
United States Senate

The Honorable Alan B. Mollohan
Ranking Minority Member
Subcommittee on Science, State, Justice and Commerce
Committee on Appropriations
House of Representatives

The Honorable David R. Obey
Ranking Minority Member
Committee on Appropriations
House of Representatives
Washington, DC 20515

The Honorable David R. Obey
Ranking Minority Member
Committee on Appropriations
House of Representatives

The Honorable Richard Shelby
Chairman
Subcommittee on Commerce, Justice, and Science
United States Senate

cc:

NASA Administrator/Mr. Griffin