



National Security and  
International Affairs Division

B-280158

July 13, 1998

The Honorable Kevin Brady  
House of Representatives

Subject: NASA Procurement: Status of Efforts to Improve Oversight

Dear Mr. Brady:

As requested, we have reviewed the status of the National Aeronautics and Space Administration's (NASA) efforts to improve its procurement assessment and performance measurement processes. Specifically, you asked us to assess whether those efforts have been sufficient to warrant removing NASA contract management from the Comptroller General's high-risk list.

To make this assessment, we reviewed NASA's ongoing efforts to (1) implement its integrated financial management system, (2) develop procurement-related metrics, and (3) evaluate its field centers' procurement activities.

BACKGROUND

In 1990, we identified NASA contract management as an area at high risk.<sup>1</sup> In our 1992 high-risk series of reports, we stated that NASA's difficulties in ensuring adequate performance by its contractors and managing research and development projects were linked primarily to three problems: (1) planned funding levels that exceeded likely budgets, (2) ineffective systems and procedures for overseeing contractors' activities, and (3) NASA field centers' failure to comply with contract management requirements.<sup>2</sup>

We reported in 1995 that NASA had made progress in addressing these problems, but we noted that contract and related financial management

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<sup>1</sup>At that time, we began a special effort to review and report on the federal program areas that our work had identified as high risk because of vulnerabilities to waste, fraud, abuse, and mismanagement.

<sup>2</sup>High-Risk Series: NASA Contract Management (GAO/HR-93-11, Dec. 1992).

problems have plagued NASA for many years and they will not be quickly or easily solved.<sup>3</sup>

In May 1997, we reported that NASA has been responsive to all our major recommendations for improving NASA contract management and related activities and has implemented or is implementing them. We noted that the one key outstanding matter related to NASA's fulfilling its commitment to improve its ability to oversee contract management activities. We stated that resolving remaining high-risk issues is largely based on improvements to the processes and systems NASA uses to assess and oversee its procurement activities and their capability to consistently produce accurate and reliable information.<sup>4</sup>

NASA recognizes that improvements in contract management are linked to the availability of accurate and reliable information. We stated in March 1997 that NASA officials believe that the agency's integrated financial management system will provide managers with complete, reliable, consistent, and timely information about its procurement activities.<sup>5</sup>

#### RESULTS IN BRIEF

Removing NASA contract management from the high-risk list is premature at this time because the agency has delayed initial implementation of its integrated financial management system by 8 months. Further, NASA has not implemented its procurement metrics initiative. Finally, while NASA is making progress evaluating its field centers' procurement activities based on international quality standards and its own procurement surveys, it has not issued formal requirements for this evaluation. Taken as a whole, we believe this record does not provide sufficient evidence that NASA has met the standard we established in our May 1997 report; namely, that NASA has a demonstrated capability to consistently produce accurate and reliable procurement-related information in order to better assess and oversee its procurement activities.

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<sup>3</sup>High-Risk Series: Quick Reference Guide (GAO/HR-95-2, Feb. 1995).

<sup>4</sup>High-Risk Program: Information on Selected High-Risk Areas (GAO/HR-97-30, May 1997).

<sup>5</sup>NASA Procurement: Contract Management Oversight (GAO/NSIAD-97-114R, Mar. 18, 1997).

NASA DELAYS IMPLEMENTATION OF  
INTEGRATED FINANCIAL MANAGEMENT SYSTEM

In August 1997, NASA stated that its financial management environment is comprised of decentralized, nonintegrated systems with policies, procedures, and practices that are unique to its field centers. NASA also stated that for the most part, data formats are not standardized, automated systems are not "interfaced," and on-line financial information is not readily available to program managers. In addition, NASA pointed out, the cost to maintain these systems is high since both data and software are replicated at each field center. NASA recalled that in June 1989, the Office of Management and Budget designated NASA's accounting system as "high risk" due to lack of standardization and the need to modernize.

NASA's new integrated financial management system is intended to fix these problems, and because it offers the promise of providing reliable and timely information, its successful implementation will be a key part of our decision to remove contract management from the high-risk list. However, NASA and its contractor, KPMG Peat Marwick LLP, orally agreed in April 1998 to delay initial implementation of the financial management system at Marshall Space Flight Center, Huntsville, Alabama, and Dryden Flight Research Center, Edwards, California, from October 1, 1998, to June 1, 1999. According to a NASA official, KPMG is having difficulties integrating the software for two systems that are directly related to contract management; namely, the core financial and procurement systems.

According to NASA, the core financial system is the "backbone" of the integrated financial management system and will provide common processing routines, including budget execution and funds control, support common data for critical financial management functions affecting the entire agency, and maintain the required general ledger control over financial transactions and resource balances. In addition, the financial system will provide data for the measurement of financial performance, analysis, full cost management, financial reporting, and preparation of financial statements.

The procurement system, according to NASA, will support an end-to-end acquisition process. Specifically, it will prepare and track the status of procurement requests, purchase orders, and contracts; record and validate the receipt of goods and services; and provide information to the core financial system.

This delay not only postpones the implementation at NASA headquarters and its field centers but also agencywide implementation. Agencywide implementation has been postponed from July 1, 1999, to June 1, 2000. The terms of NASA's

oral agreement with KPMG are contingent on successfully negotiating a modification of its contract with KPMG.

NASA HAS NOT IMPLEMENTED  
PROCUREMENT METRICS INITIATIVE

In response to our March 1997 report on NASA's contract management oversight, and our observation on NASA's need to produce accurate and reliable procurement-related information, NASA stated on August 27, 1997, that it was "actively working the area of performance measures in order to determine our metric needs and how best they can be used to measure performance." Also, in its October 3, 1997, letter to you, NASA states that this Procurement Quality Assessment Initiative will involve the "development of measurable performance metrics, the benchmarking of these metrics, and the development of both NASA Headquarters and Agencywide procurement 'customer' surveys."

To date, NASA has not completed this initiative, nor is it likely to do so before the end of the current fiscal year. NASA procurement officials have circulated a candidate list of procurement-related metrics and a draft of a customer survey for review and comment by procurement officials in NASA's field centers. According to a NASA official, the purpose of the metrics project is to determine a family of performance metrics that will help procurement managers measure and improve the performance of their organizations. The purpose of the customer survey is to periodically assess customer satisfaction with a field center's procurement office support in areas of timeliness, quality, and service.

EXTERNAL EVALUATION OF PROCUREMENT  
AT NASA'S FIELD CENTERS BEGINS

NASA requires that itself and its suppliers to have a quality management system that, as a minimum, complies with the International Organization for Standardization's ISO 9000 series of standards, which includes a standard for "purchasing." The ISO 9000 series of standards consists, in part, of 20 quality management and assurance standards (ISO 9001). The general purchasing standard states that "the supplier [for example, a NASA field center's procurement office] shall establish and maintain documented procedures to ensure that purchased product conforms to specified requirements."<sup>6</sup> To this end, NASA has hired contractors to annually evaluate its field centers' compliance with these standards.

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<sup>6</sup>An aphorism that describes quality assurance within the context of ISO 9000 is, "Say what you do and do what you say," that is, a quality organization should have documented procedures for work and carry out its work in accordance with these procedures.

To prepare for ISO 9000 certification, the field centers' personnel conduct internal audits, including audits of the centers' compliance with the "purchasing" standard. To date, NASA's contractors have certified Johnson field center and Johnson's White Sands Technical Facility as having complied with the ISO 9001 standards. Marshall field center has been recommended for certification. All field centers are to be certified by the end of fiscal year 1999.

NASA headquarters also conducts procurement management surveys of its field centers' procurement activities. Before 1998, such surveys were performed together with the field centers' own procurement self assessments, which now are being replaced by the ISO 9000-related internal audits. NASA plans to (1) survey either Goddard or Johnson field center each year because each of these centers has the largest amounts of procurement activity and (2) other centers at least once in 3 years. NASA headquarters is surveying Marshall and Johnson field centers in 1998. Langley and Lewis field centers were surveyed in 1997.

In April 1998, NASA's procurement officers<sup>8</sup> agreed that a combination of ISO 9000 external and internal audits and procurement surveys should provide sufficient confidence in the soundness of NASA's procurement system. They also agreed to periodically sample for review a random number of procurement actions, although they were undecided as to the frequency of the reviews and size of the sample. NASA officials plan to formalize these new evaluation procedures by the end of the current fiscal year.

### CONCLUSION

As indicated in our previous reports on high risk, NASA has made progress in correcting weaknesses in contract management. However, removing contract management from high risk must be based on NASA's record of actions rather than its intentions to produce accurate and reliable procurement-related information. NASA is beginning to build such a record with its external and internal procurement evaluations. Because of uncertainties about the software integration and implementation schedule of NASA's financial management system, the fact that its procurement metrics initiative has not been implemented, and a procurement evaluation strategy that is not formalized, we believe it is premature to remove NASA contract management from high risk at this time.

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<sup>8</sup>Procurement officers are the senior procurement officials at NASA's field centers.

AGENCY COMMENTS

In comments to a draft of this letter, NASA did not disagree with the facts presented or our conclusion. In its letter, NASA summarized its activities to establish a strategy for evaluating the effectiveness of its procurement operations and develop procurement metrics. NASA also noted that while it expects to complete its metrics initiative by the end of the fiscal year, it will strive to do so earlier. NASA's comments are enclosed.

SCOPE AND METHODOLOGY

We obtained documents from and interviewed officials at NASA headquarters in Washington, D.C. We also retrieved and reviewed documents on the ISO 9000 series of quality management and assurance standards and integrated financial management system from the Internet.

With regard to NASA's financial management system, we reviewed the system's architecture and implementation schedule to confirm its relevance to our on-going concerns about NASA's capability to consistently produce accurate and reliable procurement-related information. Similarly, we reviewed NASA's plans for its procurement metrics initiative to also confirm its relevance to our concerns about NASA's oversight of its contract management.

To assess NASA's evaluation of its procurement activities, we reviewed a procurement survey of NASA's Lewis Research Center, Cleveland, Ohio, and an ISO 9001 certification of Marshall Space Flight Center.

We performed our work between January and May 1998 in accordance with generally accepted government auditing standards.

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We will continue to monitor NASA's efforts to improve the processes and systems it uses to oversee its procurement activities and their capability to consistently produce accurate and reliable information. We will keep you informed of NASA's progress in this area.

Unless you publicly announce its contents earlier, we plan no further distribution of this letter until 7 days from its issue date. At that time, we will send copies to the Administrator, NASA, and the Director, Office of Management and Budget. We will also make copies available to others upon request.

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If you or your staff have any questions, please contact me at (202) 512-4841, or Mr. Jerry Herley, Assistant Director, at (202) 512-7609.

Sincerely yours,

A handwritten signature in cursive script that reads "Allen Li".

Allen Li  
Associate Director  
Defense Acquisitions Issues

Enclosure

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



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Mr. Allen Li  
Associate Director, Defense  
Acquisition Issues  
General Accounting Office  
Washington, D.C. 20548

Dear Mr. Li,

Thank you for offering NASA the opportunity to provide comments on your draft report entitled Status of Efforts to Improve Oversight (GAO/NSIAD-98-198R). The draft report focuses on our efforts to develop procurement metrics and our evaluation of our Centers' procurement systems.

The establishment and tracking of a useful set of metrics is a key element in being able to assess the overall health of the procurement function, as well as the ability to focus attention on those areas where improvement is needed or desirable. Our efforts under the metrics initiative are intended to assist us in achieving these objectives. As noted in the report, we have provided a preliminary assessment of potential metrics to the Center procurement officers, as well as a draft customer survey for their comment. While we have indicated that we expect to complete this effort by the end of the fiscal year, we will strive to complete the metrics project earlier.

As further stated in the draft report, NASA has developed a strategy for evaluating the efficacy of its procurement operations. That strategy includes use of high quality financial information that will be provided by the IFMP system, procurement metrics developed and approved by NASA management, and an integrated plan for evaluating the health of its procurement operations. The health of the procurement operations will be evaluated through the integration of ISO 9000 compliance of every NASA Center, comprehensive surveys conducted by NASA Headquarters (based on plans noted in the GAO report), and a statistically sound sampling of procurement actions by NASA Centers in addition to the ISO 9000 external and internal audits. ISO 9000 certification activities are well underway at the NASA Centers. The Headquarters

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survey process is well established with firm schedules for reviews of each Center at least every three years, and we are developing with the Centers the methodology by which ISO 9000 self-assessments at the Centers will include procurement samples and the exact requirements for providing self-assessment results (including any raw data requirements) to NASA Headquarters. We will complete these plans by the end of this fiscal year.

Sincerely,

  
Deidre A. Lee  
Associate Administrator  
for Procurement

(707328)



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