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Before the

**HOUSE SUBCOMMITTEE ON GOVERNMENT EFFICIENCY,
FINANCIAL MANAGEMENT, AND
INTERGOVERNMENTAL RELATIONS**

March 20, 2002

Mr. Chairman and Members of the Committee, thank you for the opportunity to be here today to discuss NASA financial management issues.

INTRODUCTION

NASA's financial management system is comprised of 10 decentralized, non-integrated systems established many years ago in response to requirements, policies, procedures, and practices that have changed substantially throughout NASA's history. The systems are not transaction-based,¹ standardized, or interfaced. Although the systems have been upgraded over the years, they remain antiquated and expensive to maintain. Data entered by Center personnel is summarized and processed to update the Center's general ledger accounts. Subsequently, this summarized data is reported to NASA Headquarters. The financial management systems do not provide NASA management with on-line, up-to-date information designed to assist managers in making daily decisions. Each system is unique, and the cost to maintain the systems is high because each system must be evaluated and updated based on its unique capabilities. In fiscal year (FY) 2001, as it has done for the past several years, NASA management designated financial management systems as a "significant area of

¹ Under a transaction-based system, the general ledger is updated automatically as transactions are entered into the financial management system.

management concern" because these systems lack standardization and need to be modernized. NASA's nonintegrated, decentralized financial management system is one of the primary causes for NASA's receiving a disclaimer on its FY 2001 financial statements. The system contributes greatly to the inability of NASA managers to determine complete and accurate costs of Agency projects and programs and to NASA's lack of complete and accurate cost-benefit analyses.

FY 2001 FINANCIAL STATEMENT AUDIT

The NASA Office of Inspector General (OIG) is responsible for NASA's annual financial statement audit. For the FY 2001 audit, the NASA OIG contracted with PricewaterhouseCoopers LLP, an independent certified public accounting firm. The audit must comply with generally accepted government auditing standards; Office of Management and Budget (OMB) Bulletin 01-02, "Audit Requirements for Federal Financial Statements"; and the General Accounting Office/President's Council on Integrity and Efficiency "Financial Audit Manual," published in July 2001. The contract required that the audit be done using a "some" controls² reliance approach in the first 2 years for audit testing in all financial component areas. The "some" controls and Financial Audit Manual requirements were placed in the contract in response to a General Accounting Office (GAO) recommendation in its March 2001 report, "Misstatement of NASA's Statement of Budgetary Resources."

After NASA received unqualified (clean) audit opinions³ on its financial statements for the last 7 years, PricewaterhouseCoopers disclaimed an opinion. The disclaimer resulted primarily from NASA's inability to provide, in a timely manner, documentary evidence to fully substantiate the accuracy and the classification of amounts reported as obligations; expenses; property, plant, and equipment; and materials.

What changed?

Sample size and methodology. For FY 2001, NASA reported obligations incurred of \$14.9 billion and total program expenses of \$14.9 billion. To obtain reasonable assurance about whether these large amounts were fairly stated, PricewaterhouseCoopers, in accordance with the Financial Audit Manual, selected a large statistical sample size of 268 obligations and 219 expense

² A "some" controls reliance approach requires a more substantial level of transactions testing; internal controls are not fully relied upon to reduce testing.

³ An unqualified opinion means that the financial statements present fairly, in all material respects, the financial position of NASA for the period, its budgetary resources for the fiscal year then ended, and its net cost, changes in net position, and financing for the fiscal year ended, in conformity with accounting principles generally accepted in the United States.

transactions covering 11 NASA Centers.⁴ The previous year's auditor, Arthur Andersen, sampled 79 obligations and 84 expense transactions covering 3 NASA Centers and obtained the sample from a system⁵ that NASA reconciled to the general ledger on a monthly basis. Each year, Arthur Andersen selected different Centers. Arthur Andersen was in the fifth year of a 5-year contract and had a different degree of cumulative audit knowledge and experience with NASA's financial systems. In contrast, PricewaterhouseCoopers used a transaction-based sampling approach from a universe of transactions that comprised the general ledger accounts.

To statistically select a sample of obligations and expense transactions, the universe had to be established that agreed with the June 30, 2001, financial statement and general ledger amounts. To accomplish this, NASA financial managers tasked the Centers to electronically provide all transactions that made up their portions of the overall universe. The Centers were tasked at the end of August 2001 and were given a September 7th deadline. Ultimately, it took until mid-December 2001, three and a half months later, to identify all of the Center transactions that made up the universe necessary to select the sample.

In the ensuing 6-week period through February 13, 2002, Center financial personnel were tasked to send supporting documentation for the sampled obligations and expenses. Although weekly audit status meetings⁶ were attended by the acting Chief Financial Officer (CFO), the Inspector General (IG), and their staffs to identify backlogs and problems with acquiring documentation, as of February 13, 2002, 64 (24 percent) of 268 supporting obligation transaction documents were not received by PricewaterhouseCoopers. Of the 204 obligation documents that were received, 62 (30 percent) did not adequately support the sampled transactions. In comparison, only 4 (2 percent) of 219 expense documents were not received; however, of the 215 expense documents that were provided, 64 (30 percent) did not adequately support the sampled transactions. Because of the lack of adequate support for such a large percentage of transactions, PricewaterhouseCoopers could not conclude whether these amounts were fairly presented in the financial statements. This situation along with others that follow greatly contributed to the disclaimer.

Accounting Changes of Shuttle Components. NASA changed its accounting policy for certain assets⁷ held by contractors and used in the Space Shuttle

⁴ The 11 Centers are NASA Headquarters, Ames Research Center, John H. Glenn Research Center, Langley Research Center, Dryden Flight Research Center, Goddard Space Flight Center, Jet Propulsion Laboratory (processed by Goddard), George C. Marshall Space Flight Center, John C. Stennis Space Center, Lyndon B. Johnson Space Center, and John F. Kennedy Space Center.

⁵ The system Arthur Andersen used was the Financial and Contractual Status system that summarized obligations and costs by fund source, unique project number, and object class type.

⁶ Weekly status meetings were held January 9, 16, and 23 and February 1, 6, 13, and 20, 2002.

⁷ These assets were valued at \$1.2 billion on the financial statements.

program, reclassifying them from depreciable property⁸ to materials that will be expensed as they are consumed. This change was effected through the reporting of assets held by NASA's contractors on the annual NASA Form 1018 reports.⁹ In accordance with the new accounting policy, most Space Shuttle components would be expensed as they were used. But other components, such as engines that are typically refurbished and reused rather than consumed in a single mission, would not be expensed until they were destroyed or replaced by a new model. Thus the acquisition costs of the engines would not be attributed to the periods in which they were used. NASA believed that the total impact on the financial statement was only \$22.8 million; however, the information provided by NASA did not contain sufficient documentary evidence for PricewaterhouseCoopers to determine the appropriateness or the effect of the accounting change.

Prior Period Adjustment for Launch Costs on the International Space Station (ISS). NASA increased the amount of costs capitalized to the ISS for Space Shuttle launches made during FY 2000 by \$636 million. According to NASA (but not verified by PricewaterhouseCoopers) the Agency recorded two FY 2000 launches in its financial records at \$411 million each based on budget figures. In FY 2001, NASA said the actual costs for the launches were \$729 million each. NASA did not provide sufficient documentary evidence in support of this adjustment for PricewaterhouseCoopers to determine whether the additional amount that was capitalized fairly presents Shuttle launch costs attributable to the ISS.

Other documentation problems.

Makeup of ISS Costs. NASA capitalized approximately \$5.8 billion¹⁰ in costs for the ISS during the year ended September 30, 2001. These costs included \$2.1 billion in hardware delivered to orbit, \$3.0 billion in Shuttle launch costs, and \$746 million in integration contract and testing, launch support, operations, and ground processing costs. NASA did not provide sufficient documentary evidence for PricewaterhouseCoopers to determine the accuracy and completeness of those capitalized costs.

Contractor-held property. NASA reported in its consolidated balance sheet approximately \$4.7 billion of NASA-owned materials held by contractors. The contractors reported materials using a definition that commingled the Federal Accounting Standards Advisory Board's definition of inventory (materials) and its definition of property, which impaired NASA's ability to classify these assets in

⁸ The cost of depreciable property is "capitalized" as an asset on the financial statements. Capitalized costs benefit more than 1 year and are, therefore, expensed over multiple years rather than in a single year.

⁹ The Agency uses Form 1018, "NASA Property in the Custody of Contractors," as the primary documentation in establishing the value of ISS property in its annual financial statements.

¹⁰ Of the \$8.9 billion in total ISS costs since inception, \$5.8 billion in costs occurred in FY 2001.

conformity with generally accepted accounting principles. NASA subsequently reclassified the materials as property, plant, and equipment. The information NASA provided did not contain sufficient documentary evidence for PricewaterhouseCoopers to determine how much of the reported contractor-held materials amount should have been presented as materials and how much should have been presented as property, plant, and equipment.

Communications during the audit.

Better communications should have occurred to earlier alert the most senior management levels at both NASA and OMB of potential problems with the audit opinion. During the audit, monthly status meetings were conducted from August 6 through December 19, 2001. PricewaterhouseCoopers, the Acting CFO, the IG, and their staffs attended each meeting. When time began to run short, weekly meetings were held January 9, 16, and 23 and February 1, 6, 13, and 20. PricewaterhouseCoopers distributed score sheets at the meetings showing the NASA Centers that either did not provide documents or provided inadequate documents for the obligations, expenses, and property samples. The score sheets showed some progress, and NASA financial management officials repeatedly stated they would take the necessary steps to provide the requested documentation to PricewaterhouseCoopers.

At the November 19th meeting, the PricewaterhouseCoopers timeline indicated that it would deliver a draft of the opinions to NASA on January 19, 2002. Throughout the audit, even though there was a delay in constructing the universe of transactions, NASA financial management officials consistently stated they would take the necessary steps to provide the requested documentation to PricewaterhouseCoopers. On February 13, 2002, PricewaterhouseCoopers indicated that because of multiple problems, including the lack/inadequacy of obligations and expenses documentation and the lack of supporting analyses and documentation for Shuttle, ISS, and contractor-held property costs, NASA would receive a disclaimer of opinion. The NASA Administrator was briefed for the first time on the same day. The next day, February 14, 2002, OMB was briefed.

Corrective actions planned.

NASA financial managers are formulating a corrective action plan that will be shared with PricewaterhouseCoopers and the OIG by the end of this month. Those accounts that affect next year's audit, such as Shuttle, ISS, and contractor-held property and materials, must be analyzed and adequately documented by NASA and audited by PricewaterhouseCoopers to establish accurate opening balances for the FY 2002 audit. Methodologies for obtaining obligations and expense documentation must be established, and Center financial personnel must respond promptly with accurate supportable documents. In addition, to ensure that the most senior levels of NASA management are

informed of progress on the FY 2002 audit, PricewaterhouseCoopers will set up a timeline that will include NASA Administrator briefings when milestones are not met or major problems are identified. Without adequate and timely resolution of these items, the FY 2002 financial statement opinion, due February 1, 2003 -- 1 month sooner than in FY 2002, will be in jeopardy. With sufficient management attention, existing analyses and documentation issues should be resolved.

NASA's INTEGRATED FINANCIAL MANAGEMENT SYSTEM

History.

OMB Circular A-127, "Financial Management Systems," requires Federal agencies to establish and maintain a single, integrated financial management (IFM) system that complies with applicable accounting principles, standards, and related requirements as defined by OMB, the Department of the Treasury, and the Agency. Currently, NASA does not have a single, integrated financial system as required by Circular A-127, but instead, has 10 separate systems producing information that must be consolidated at Headquarters through cumbersome techniques. It currently takes enormous efforts to produce financial statements and information for NASA decision makers, the Congress, and the public.

First attempt.

NASA has been trying to implement an integrated financial system for more than 10 years but has not been successful. In 1989, OMB cited NASA's financial accounting systems as "high risk" for not having a standardized, centralized financial accounting system. To correct that problem, the Agency began work on two major system development projects: (1) the NASA Accounting and Financial Information System (NAFIS) and (2) the Time Attendance and Labor Collection/Labor Distribution System (TALC/LD). NASA's primary contractor, Computer Sciences Corporation, attempted to design both systems to incorporate and link the many different systems that already existed at the Centers and Headquarters using specially designed software. However, in February 1995, the NASA Chief Financial Officer terminated all work on NAFIS and TALC/LD and redirected efforts toward a new approach for an IFM information system through the purchase of Commercial-off-the-Shelf (COTS) software. NASA referred to the new project as the Integrated Financial Management Project (IFMP).

Second attempt.

In our audit, "Early Phases Of NASA's Integrated Financial Management Project" (October 1996), we reported to NASA management that additional steps should be taken in its planning of the IFMP to ensure that the project is cost-effective and consistent with important management objectives and legal requirements, including:

- conducting functional and overall risk analyses as part of the requirements definition;
- performing and documenting a comprehensive analysis of alternatives for meeting requirements;
- modifying project plans to include several key cost issues and alternatives; and
- preparing a more realistic project schedule.

In September 1997, NASA awarded a fixed-price contract, valued at \$186 million, to KPMG Peat Marwick (KPMG) of Washington, D.C., to provide COTS software for, and to implement NASA-wide, the IFMP. The contract required that the IFMP be implemented at all NASA locations by July 1, 1999.

During a subsequent audit of the IFMP entitled, "Implementation of NASA's Integrated Financial Management Project" (April 1999), we reported that KPMG would not deliver to NASA a COTS-based IFM system by July 1999.

Developmental and technical problems required further contract modification, and NASA was unable to determine the extent to which the problems would impact the delivery schedule.

NASA issued a stop work order to KPMG on March 10, 2000. At that time, NASA had already obligated \$198 million on IFMP of which \$10.2 million was paid to KPMG. On October 10, 2000, NASA and KPMG signed a Settlement Agreement and Mutual Release between the parties. Under the terms of the agreement,¹¹ NASA paid KPMG \$37.9 million.

Latest IFMP effort.

NASA is continuing its efforts to develop an IFM system, and we are continuing audit coverage in this area. In March 2000, NASA developed a new strategy in its third attempt to implement an integrated financial system by using lessons learned from its prior efforts and by benchmarking other successful business system implementations. The goal of the latest effort, the IFMP, is to modernize and improve the Agency's business processes by implementing eight individual projects (or modules) in the areas of financial management, procurement, human resources, and logistics.¹² In addition, the IFMP is a prerequisite for

¹¹ The agreement was the result of an Armed Services Board of Contract Appeals Consent Judgment.

¹² The eight projects and scheduled completion dates as of February 15, 2002, are Resume Management (completed in March 2002), Position Description Management (October 2002), Travel Management (December 2002), Core Financial (June 2003), Budget Formulation (September 2003), Human Resources (July 2005), Asset Management (June 2006), and Procurement Management (June 2008).

implementation of the Agency's full cost initiative.¹³ The latest IFMP is scheduled for completion on June 30, 2008, at a cost of \$835 million.

One of the eight individual IFMP projects, the Core Financial Module,¹⁴ is being developed. This project is the backbone of the IFMP as it consists of the standard general ledger, accounts receivable, accounts payable, budget execution, purchasing, fixed assets, and cost management functions. NASA plans to fully implement the Core Financial Module Project by June 2003.

On September 18, 2001, the OIG started an audit on the IFMP Core Financial Module Project. Our specific audit objectives and the status of each, based on our initial work are as follows:

Objective 1: Assess the adequacy of the procurement actions taken to acquire and implement the module. We noted no discrepancies in procurement documentation reviewed and procurement actions taken as of November 2001 that support acquisitions and implementation of the core financial module.¹⁵ We plan no further audit work under this objective.

Objective 2: Determine whether module implementation is on target with budget and schedule expectations. As of January 2002, the core financial module was within budget and NASA met the first two major milestones.¹⁶ At that time, nothing came to our attention to indicate that the module will not fall within budget and will not meet schedule. We plan no further audit work under this objective.

Objective 3: Determine whether the module meets Federal financial management system requirements. As a result of our initial work, we plan to perform a detailed audit to determine whether:

- The IFMP's Core Financial and Budget Formulation Modules will properly implement NASA's full cost initiative.

¹³ According to NASA's "Full Cost Initiative Agencywide Implementation Guide," February 1999, full cost is the concept of tying all Agency costs, including civil service personnel costs, to major activities.

¹⁴ The COTS software for the Core Financial Module is supplied by SAP Public Sector and Education, Inc., of Washington D.C., under NASA contract number H 32946D with the George C. Marshall Space Flight Center.

¹⁵ We reviewed documentation supporting purchases made from Accenture LLP; PriceWaterhouseCoopers; SAP Public Sector Education, Inc.; Credit Card Solutions, Inc.; OAO Corporation; and Thomson Financial Publishing.

¹⁶ The two main milestones completed by the Core Financial Module were the formulation and design phases. The formulation phase developed system requirements, and the design phase developed a standard operating solution based on re-engineered business processes that would operate within the software's capabilities.

- The Core Financial Module will adequately support NASA's preparation and audit of its financial statements. In considering the circumstances surrounding the recent disclaimer of opinion in the audit of NASA's financial statements, we will determine whether the Core Financial Module will provide an adequate audit trail to support all transactions processed and ultimately support the financial statements. Additionally, we plan to determine how the system will compile the financial statements and whether this process will support the current and projected revised financial statement due dates.

Additional audits planned.

We recently announced a review of the IFMP's change management¹⁷ plans and accomplishments. Specifically, we will determine whether NASA Centers are receiving adequate funding and support to implement the IFMP modules.

Also, our Information Assurance Audit Directorate will be conducting information security and integrity-related audits at both the pre- and post-implementation phases of the IFM system project. The scopes of these audits will include the adequacy of security planning prior to the implementation of the system as well as verification of adequate security controls after implementation.

Until project completion, NASA managers will not have complete financial visibility and insight into major programs such as the ISS and Space Shuttle. In addition, until the IFMP is fully implemented, NASA will have to use cumbersome, alternative procedures to fully account for major programs. Finally, without the IFMP, NASA will incur substantial costs to maintain legacy systems that an IFM system would replace.

COST-BENEFIT ANALYSES AND COST ESTIMATING

History.

IFM systems that provide reliable and accurate full cost information serve as the basis for reliable and accurate cost estimates. For many years, NASA has faced significant financial management challenges in providing accurate cost estimates for its programs and projects. In 1996, we reported¹⁸ that NASA had not fully established an independent program assessment function in accordance with the

¹⁷ Change Management is the process of aligning an organization's people and culture with changes in systems, processes, structure, and/or strategy. This alignment is achieved when people are successfully compelled to accept the value of the change and to transition into their new roles and working environment.

¹⁸ The OIG issued a report on "Assessment of the Relocation of NASA Independent Program Evaluation & Assessment Activities to LaRC [Langley Research Center]" on July 8, 1996.

recommendations of the Augustine Report¹⁹ and a 1992 GAO review.²⁰ Specifically, NASA did not implement the Augustine Report recommendation to establish an adequately staffed Systems Concept and Analysis Group at Headquarters to serve the Administrator. NASA also did not follow GAO's recommendations that the Agency direct the independent cost analysis group to review program estimates at all major milestones, decision points, or other significant events; strengthen the independent cost analysis staff with sufficient personnel to generate independent estimates; ensure that the cost analysis group operated independently with the results of cost reviews reported directly to the Administrator; and require that the advice on cost estimates be formally documented. We recommended that the Agency's independent cost analysis group, the Independent Program Assessment Office²¹ (IPAO), be assigned organizationally to Headquarters to ensure its independence, even if physically located at a NASA Center. Management did not agree with the recommendation. Management agreed with our recommendation to enhance staff capabilities in systems analysis and cost estimation.

Impeded steps to improvement.

In September 2000, we reported that NASA was taking steps to improve the Agency's independent cost estimating capability by establishing a Systems Management Office²² at each Center and by adding cost estimators to the IPAO at Langley.²³ However, we found that NASA had not established career development plans for its cost estimators and did not have a requirement to develop independent cost estimates at all major reviews. Further, we questioned whether the Agency's reporting and funding structures provide assurance that the cost estimates were independent in both fact and appearance. Management agreed to institute a requirement for an independent cost estimate after a program's critical design review and agreed to improve the training of cost estimators. However, management did not agree to establish an independent funding source for either the IPAO or for Systems Management Offices.

¹⁹The Augustine report was issued in December 1990 as the "Report of the Advisory Committee on the Future of the U.S. Space Program."

²⁰GAO issued report NSIAD-93-73, "SPACE PROGRAMS: NASA's Independent Cost Estimating Capability Needs Improvement," in November 1992.

²¹The IPAO serves as Agency lead for the independent technical and programmatic assessment of advanced systems concepts and programs to provide Agency senior management with information needed to make sound decisions.

²²The Systems Management Office provides (1) support and independent evaluations of programs and projects for compliance with implementation of NASA guidelines; (2) leadership, consultation services, and technical expertise on system engineering processes; and (3) support in forecasting costs for advanced program and project planning initiatives.

²³The OIG issued report IG-00-045, "NASA's Independent Cost Estimating Capability," on September 20, 2000.

Follow-up review.

Our September 2001 report, on a follow-up of our 1996 review, again found that the effectiveness of the IPAO could be improved by increasing the organization's independence and enhancing its capabilities.²⁴ In addition, criteria for delaying or canceling an independent annual review should be clarified to ensure that projects needing an independent review receive such a review. NASA also needed to strengthen the capacity of the IPAO by recruiting experienced cost analysts and estimators. Further, relocating the IPAO organizationally (not necessarily physically) to NASA Headquarters could improve its effectiveness and independence. True independence and impartiality require the IPAO to report operationally and administratively to officials that have no stake in the competition for program funding.

NASA needed to modify the recently approved Integrated Review Process to ensure that the independence and effectiveness of the program/project reviews are maintained. Management agreed with five of the report's nine recommendations. Management disagreed with our recommendations to reassign the IPAO to Headquarters and to make improvements in the Integrated Review Process. Management was not responsive to our recommendation to establish clearly defined criteria for conducting independent reviews throughout the various phases of programs and projects. Management stated that criteria exist informally and have been used in the past.

Need for cost-benefit analyses.

The lack of credible cost estimates has prevented the preparation of reliable cost-benefit analyses so that sound decisions can be made by carefully examining alternatives that can result in expenditures of billions of dollars. For example, NASA did not perform a cost-benefit analysis as part of the decision-making process prior to awarding²⁵ the Consolidated Space Operations Contract²⁶ (CSOC) to ensure that the consolidation was the best approach for fulfilling space operations.²⁷ Without this analysis, NASA is not assured that the integrated operations approach will reduce the Agency-estimated \$1.4 billion cost of operations over 10 years. Similarly, NASA cannot substantiate, as required,

²⁴ The OIG issued report G-01-019, "Followup Review of the Independent Program Assessment Office," on September 28, 2001.

²⁵ NASA awarded the CSOC to the Lockheed Martin Space Operations Company on September 25, 1998. The contract is valued at more than \$3.6 billion and includes a 5-year base period and a 5-year option period. The CSOC consolidates 13 NASA contracts.

²⁶ The CSOC contractor will provide and manage space operations services to meet the requirements of the NASA space flight programs. The contractor will also be accountable for data transmission to the end user, data processing and storage, mission support display and control, spacecraft operations support, mission planning and analysis, and mission control center operations.

²⁷ The OIG issued report IG-00-043, "Consolidated Space Operations Contract—Cost Benefit Analysis and Award Fee Structure," on September 30, 2000.

the \$62 million of cost savings reported to the Congress for the first 2 years of the CSOC.²⁸ NASA based the reported cost savings on budget reductions rather than on an analysis of actual costs for work performed under the contract. As a result, the Congress and NASA cannot evaluate current cost savings for the CSOC or whether it will achieve the anticipated \$1.4 billion cost savings through FY 2008.

NASA faces additional challenges in its management of the CSOC. The contractor's recent reorganization and performance issues including cost overruns, inadequate customer service and weaknesses in property management will require NASA's careful oversight.²⁹ Management agreed with our recommendation to perform a cost-benefit analysis before exercising any CSOC contract options. However, management does not plan to report cost savings in the future because NASA based anticipated savings on a mission model that is no longer valid. Also, management did not agree with our recommendation to revise cost savings amounts previously reported to the Congress to reflect savings based on actual costs.

In addition, NASA did not perform a cost-benefit analysis³⁰ prior to consolidation of Space Shuttle contracts under the Space Flight Operations Contract (SFOC).³¹ The NASA Associate Administrator for the Office of Space Flight directed the consolidation of Space Shuttle contracts³² in 1995 based on recommendations of a review team³³ commissioned by the NASA Administrator. Without a cost-benefit analysis and periodic evaluation, NASA cannot be certain it will achieve net savings from further consolidation of Space Shuttle contracts valued at about \$10 billion for main engines, external tanks, and reusable solid rocket motors. Management agreed with our recommendation to perform a cost-benefit analysis before further consolidation of contracts into the SFOC.

²⁸ The OIG issued report IG-01-029, "Consolidated Space Operations Contract: Evaluating and Reporting Cost Savings," on August 31, 2001.

²⁹ Although we did not make a formal recommendation, we identified these issues in a June 27, 2001, memorandum to the Associate Administrator for Space Flight.

³⁰ The OIG issued report IG-00-015, "Space Flight Operations Contract Phase II—Cost-Benefit Analysis," on March 14, 2000.

³¹ The basic SFOC contract awarded to United Space Alliance (a joint venture between Boeing and Lockheed Martin) is 6 years with a value of \$6.949 billion. The contract has two 2-year option periods.

³² Under the SFOC, NASA identified 12 Space Shuttle contracts to be combined during Phase I and 15 contracts to be combined during Phase II. NASA's plan for the SFOC was designed to include a subset of Space Shuttle contracts and activities specifically focused on operational (rather than developmental) functions. As part of the SFOC, United Space Alliance is also responsible for certain Space Station Program mission operations functions.

³³ This team is known as the Kraft review team and was headed by the former Johnson Space Center Director, Dr. Christopher Kraft.

The absence of cost estimating data has impacted outsourcing decisions.³⁴ For example, in FY 1997, NASA management decided to outsource the Agency's desktop computing requirements.³⁵ Management made the decision based on a business case (outsourcing) analysis that concluded that desktop outsourcing could produce costs savings (about \$226 million over 5 years) and other nonquantified benefits. However, NASA lacks a full cost accounting system, and many in-house desktop computing costs had to be estimated. The data the Centers used were incomplete and inconsistently compiled. Consequently, NASA made the decision to outsource its desktop computing needs without assurance that this alternative would save money. After its decision to outsource, NASA conducted additional cost analyses, but the data remained deficient.

Conclusion.

NASA financial managers are committed to providing adequate analyses and documentation that support NASA financial statement balances. PricewaterhouseCoopers is committed to working diligently with NASA managers to provide an early understanding of what is required for the FY 2002 audit. PricewaterhouseCoopers is also committed to providing to the NASA Administrator early warnings of problems that will jeopardize the FY 2002 audit opinion. In addition, it is vital to ensure that independent program assessment officials are independent in fact and in appearance and report their results directly to the NASA Administrator. Equally important is the successful implementation of an integrated, full cost NASA financial management system that provides accurate cost data in support of major program and project decisions by NASA leaders.

³⁴ The OIG issued report IG-98-029, "Outsourcing of Desktop Computers," on September 14, 1998.

³⁵ Desktop computing includes hardware, software, local area networks, and customer support.