

W

April 27, 1999

TO: B/Associate Director, Integrated Financial Management Project

FROM: W/Assistant Inspector General for Auditing

SUBJECT: Final Report on the Audit of the Implementation of NASA's
Integrated Financial Management Project (IFMP)
Assignment Number A-HA-98-030
Report Number IG-99-026

The subject final report is provided for your use. Please refer to the executive summary for the overall audit results. We have incorporated your comments into the final report, as appropriate, and included them in their entirety as an appendix to our report. Management's actions on Recommendation 1 through 3 were responsive. For Recommendations 1 and 3, please provide us copies of the cost analysis and your documented decisions regarding KPMG Peat Marwick's nonperformance. For Recommendation 2, please notify us when final actions have been completed. All the recommendations are undispositioned and will remain open until corrective actions are completed and you notify us of the extent of testing performed to ensure the agreed-to corrective actions are effective.

If you have questions concerning the report, please contact Mr. Chester A. Sipsock, Program Director, Financial Management and Environmental Audits, at (216) 433-8960, or Mr. Karl Allen, Auditor-in-Charge, at (202) 358-2595. We appreciate the courtesies extended to the audit staff. The report distribution is in Appendix G.

[Original signed by]

Russell A. Rau

Enclosure

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IG-99-026

**AUDIT
REPORT**

**IMPLEMENTATION OF NASA'S INTEGRATED
FINANCIAL MANAGEMENT PROJECT**

APRIL 27, 1999



**National Aeronautics and
Space Administration**

OFFICE OF INSPECTOR GENERAL

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ACRONYMS

CO	Contracting Officer
COTR	Contracting Officer's Technical Representative
COTS	Commercial-off-the-shelf
IFMP	Integrated Financial Management Project
IITF	IFMP Integrated Test Facility
JFMIP	Joint Financial Management Improvement Program
KPMG	KPMG Peat Marwick

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EXECUTIVE SUMMARY

INTRODUCTION

Office of Management and Budget Circular A-127, “Financial Management Systems,” requires Federal agencies to maintain a single, integrated financial management system. To fully comply with the circular, NASA established the Integrated Financial Management Project (IFMP), which will also facilitate compliance with other statutory and regulatory requirements including the Federal Financial Management Improvement Act of 1996. See Appendix B for the applicable requirements.

On September 18, 1997, NASA awarded a fixed-price contract, valued at \$186 million, to KPMG Peat Marwick (KPMG) to provide commercial-off-the-shelf (COTS) software for, and to implement NASA-wide, the IFMP. The contract required that the IFMP be implemented at all NASA Centers by July 1, 1999. On February 26, 1998, KPMG notified NASA that it would not meet key elements of the contract delivery schedule. NASA issued a contract modification that recognized a revised delivery schedule and allowed additional costs of up to \$7.1 million for an extended delivery schedule.

On December 1, 1998, KPMG made an incomplete delivery of the IFMP system to the IFMP Integrated Test Facility (IITF) – the first major milestone under the revised delivery schedule. The incomplete delivery of IFMP required further contract modification, and NASA was unable to determine the extent to which the incomplete delivery would impact the revised delivery schedule.

OBJECTIVES

The overall objective was to evaluate contractor performance on the IFMP. Specifically, we determined whether:

- the IFMP contractor’s performance was adequate, and
- NASA’s oversight of the IFMP contractor was adequate.

See Appendix A for details on our audit scope and methodology.

RESULTS OF AUDIT

From its inception, the IFMP contract experienced significant performance problems. In 18 months since the contract award, the project has experienced a delivery schedule slip of 11 months with additional schedule slippage pending, and the COTS software that KPMG promised to be available at contract award is still incomplete. The delay in implementing IFMP will prevent NASA from meeting Federal financial management system requirements and will result in material costs to the agency. Additionally, the IFMP as delivered, may not fulfill Federal financial management system requirements in areas such as agency reports, standard general ledger, receipts management, and payment management and will require additional testing by NASA to ensure that those requirements are met.

Since contract award, NASA has taken steps to ensure the success of IFMP. The Agency has implemented a contractor surveillance plan to better monitor KPMG's performance on IFMP. NASA has also prepared a contingency plan to better prepare itself in the case of further problems with contractor performance.

RECOMMENDATIONS

The IFMP Director should:

- Take necessary steps to ensure that NASA receives reasonable consideration due to KPMG's nonperformance including requesting the IFMP contracting officer (CO) to perform an assessment of the cost impact to NASA for use in evaluating proposed consideration.
- Perform validation testing of the IFMP core financial module to ensure that it meets Joint Financial Management Improvement Program (JFMIP)¹ requirements as contracted for, and implement compensating controls for those JFMIP requirements that will not be met.
- Document the contract file regarding NASA's decisions concerning the contractor's non-performance.

¹ The JFMIP is a joint and cooperative undertaking of the U.S. Department of the Treasury, the General Accounting Office, the Office of Management and Budget, and the Office of Personnel Management, working in cooperation with each other and other agencies to improve financial management practices in Government.

**MANAGEMENT'S
RESPONSE**

Management concurred with the recommendations and has taken actions to correct identified weaknesses. The complete text of the response is in Appendix F.

**EVALUATION OF
MANAGEMENT'S
RESPONSE**

Management's corrective actions planned or completed are responsive to the recommendations.

FINDINGS AND RECOMMENDATIONS

IFMP PERFORMANCE

KPMG has not fulfilled its contract requirements and will not deliver to NASA a COTS-based, integrated financial management system by July 1, 1999. NASA-wide implementation of IFMP has slipped to no sooner than June 1, 2000. Also, KPMG has not developed the COTS software and several technical requirements according to schedule and has not provided a detailed work plan as agreed to under the contract. Furthermore, KPMG has made an incomplete delivery of the IITF² on December 1, 1998, -- the first major milestone in the revised contract schedule. Reasons for not meeting the contract terms include, insufficient risk planning by KPMG in submitting its bid, and poor contractor performance. As a result, NASA will incur a material cost to maintain legacy financial management systems that IFMP would otherwise replace. Also, NASA will continue to be less than fully compliant with Federal requirements for a single, integrated financial management system and with Agency plans for full-cost management.

Federal Requirements for the IFMP

Circular A-127 requires that COTS software for core financial systems meet the requirements defined by the JFMIP. JFMIP and NASA's proposed model of an integrated financial management system is shown in Figure 1.

Contract Award Requirements

NASA awarded a fixed-price contract to KPMG to deliver the IFMP NASA-wide by July 1, 1999. Details regarding NASA's procurement methodology are in Appendix C. KPMG indicated in its proposal that it would meet all contract requirements. Key points of KPMG's proposal are in Appendix D.

² The contract required IITF to be a NASA-provided facility, located at the Goddard Space Flight Center, for testing, validating, evaluating, auditing, benchmarking, baselining, and demonstrating: (1) the IFMP architectures, (2) software capabilities, (3) configurations, (4) internal and external integration, and (5) interfaces. IITF was to be the initial delivery point for all IFMP software. IITF is not intended to suffice as the actual IFMP system.

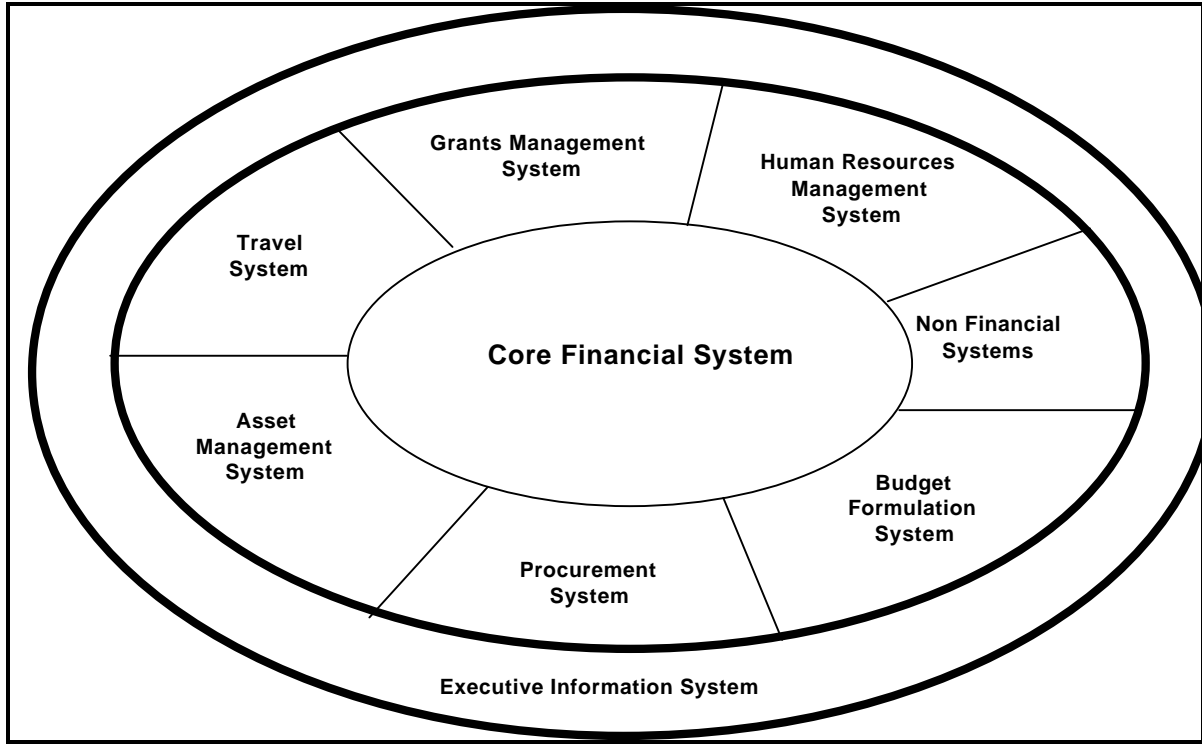


Figure 1. IFMP Model

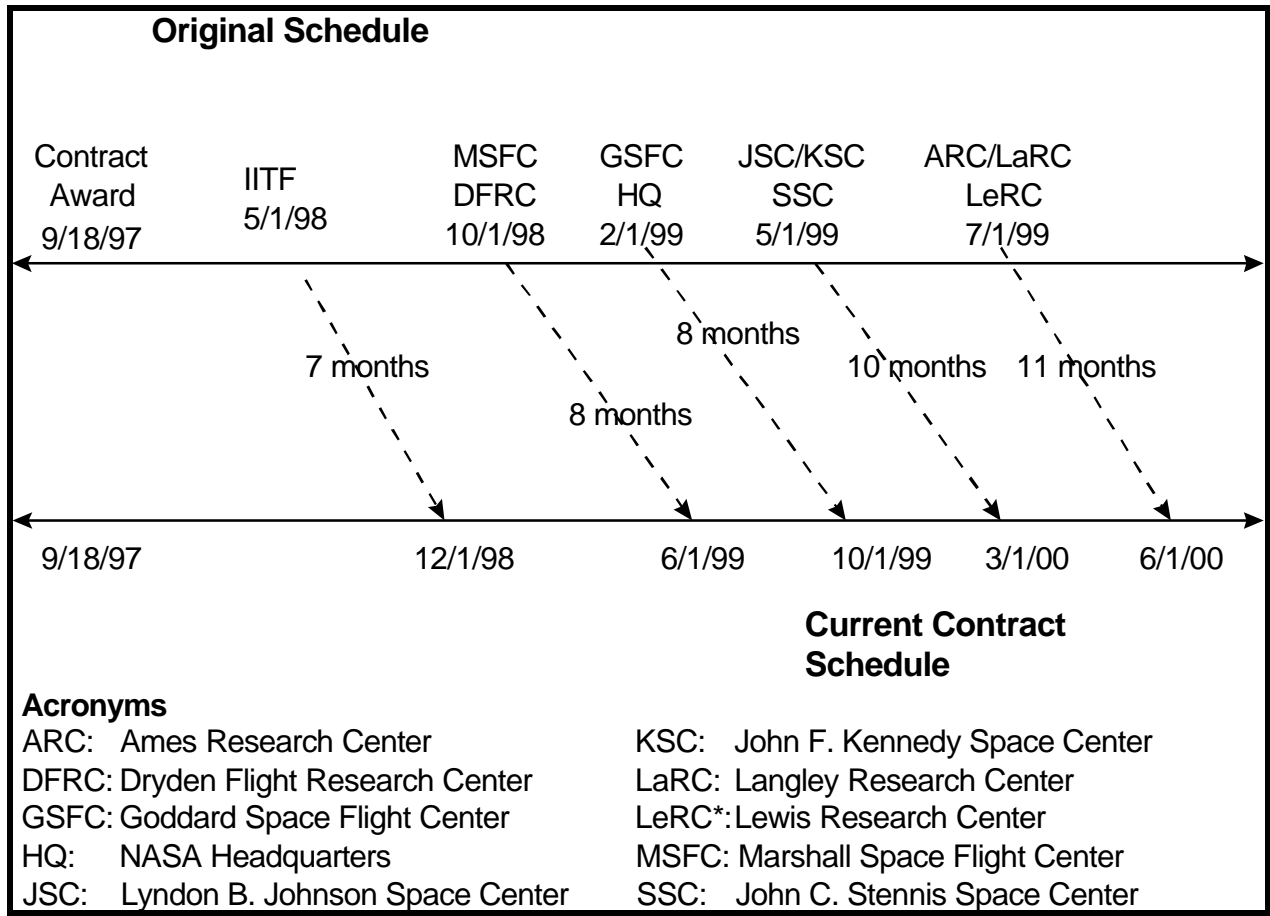
Meeting Contract Provisions

KPMG either has not or will not satisfy the following contract provisions:

- Development of basic COTS software packages and certain software enhancements, as well as various technical requirements, prior to scheduled system testing.
- Preparation of an adequate detailed work plan.
- Complete delivery of the IFMP system to the IITF by the revised delivery date of December 1, 1998.
- Full implementation of the IFMP by July 1, 1999.

Schedule Slippage. The schedule for final implementation of the entire IFMP has slipped. On February 26, 1998, KPMG notified NASA that it would not meet the May 1, 1998, delivery of the IFMP IITF and probably would not meet the remaining contract delivery schedule. NASA and KPMG met in March 1998 to work on a revised schedule. As a result of

that meeting, final delivery of the IFMP slipped by 11 months, as shown in Figure 2. However, the contract modification that implemented the revised delivery schedule did not resolve the issue of consideration due the Government for the slippage.



* Now the John H. Glenn Research Center at Lewis Field

Figure 2. IFMP Schedule Slip

On December 1, 1998,³ KPMG provided an incomplete delivery of the IFMP system to the IITF and had not completed system and integration testing of all other components in the IFMP system that were delivered. The incomplete delivery will likely

³ The contract required the IFMP system to be delivered to the IITF at the Goddard Space Flight Center on May 1, 1998. The contract was modified to require the IITF delivery at the Marshall Space Flight Center by December 1, 1998.

result in additional schedule slippage and will further complicate the determination of consideration due the Government for continued poor performance.

Software Development. As part of the contract, NASA stated that its objective was to use COTS software that had been defined as being fully programmed, tested, and maintained by the software developer. KPMG asserted in its implementation plan (contract Addendum 2, Attachment G) that its Performance Series software met all but a few of NASA's requirements at contract award. KPMG further agreed to make certain enhancements such as a permanent change of station travel module and a procurement forms generation module in order to deliver the complete COTS packages by the May 1, 1998, delivery of the IITF. KPMG met neither milestone. On December 1, 1998, KPMG delivered each COTS package to the IITF as required under the revised delivery schedule. At that time, some software functional requirements such as contractor cost accruals, travel reports, and permanent change of station travel were still incomplete.

Technical Requirements. KPMG did not complete, on schedule, certain technical requirements such as the World Wide Web access to certain functions (for example, travel authorizations and timecards) or establish IFMP compatibility with the Apple Macintosh (Mac) platform and interfaces with other NASA systems as detailed in Appendix E. The interfaces and Web access from Mac computers were still not complete in time for the December 1, 1998, delivery to the IITF.

Detailed Work Plan. The contract solicitation required KPMG to submit a detailed work plan that fully described its approach for the implementation of IFMP on a Center-by-Center basis. NASA did not receive what it considered an acceptable detailed implementation plan. In a December 1997 letter to KPMG, the Contracting Officer's Technical Representative (COTR) notified KPMG that it had not yet delivered a project schedule containing the necessary detail, accuracy, and internal linkages required for a sound baseline. The letter also stated that KPMG's responses to the Agency's requests for information were lacking in both timeliness and quality.

A December 1998 IFMP status report prepared by the IFMP Director noted that various planning documents delivered by KPMG lacked necessary detail, making it difficult for NASA to effectively monitor the project.

Factors Affecting Contract Performance

KPMG did not meet contract requirements because of (1) inadequate risk planning by KPMG in its bid for IFMP and (2) inadequate staffing of the IFMP by KPMG.

Risk Planning. Significant risks were associated with the early planning of IFMP, which were reported to NASA in an earlier audit report issued by the NASA Office of Inspector General.⁴ KPMG bid on and accepted the IFMP contract notwithstanding some significant risks that were known by all bidders.

- NASA used a firm-fixed-price contract despite vendors' concerns about using this type of contract for a high-risk project like IFMP, as opposed to using a cost-reimbursement type contract.
- None of the proposed vendors had federally compliant COTS packages that had been (1) used in a client/server architecture (the proposed platform for IFMP), (2) deployed by way of the World Wide Web (as some IFMP functions were planned to be deployed), or (3) used on Mac computers (Macs comprised 30 percent of the desktop computers planned to access the IFMP).
- Vendors recognized the delivery schedule as being aggressive; nevertheless all the prospective contractors were aware of the contract schedule prior to submitting their proposals. The final offerors, including KPMG, responded that the delivery schedule was achievable.

KPMG Staffing for IFMP. KPMG did not immediately staff the IFMP project as indicated in its proposal and work plan. The COTR and IFMP functional manager both stated that they suspected that the proper level of staffing did not take place during the first 3 months of the contract. The COTR stated, in a December 9, 1997, letter to KPMG that the lack of adequate staffing contributed to many of the problems that NASA noted

⁴ NASA Office of Inspector General audit report number IG-97-001, dated October 21, 1996, questioned the early planning of the IFMP. The Office of Inspector General reported that (1) NASA should conduct risk analyses as part of the requirements definition, (2) alternatives for a financial management system should be fully analyzed and documented, and (3) a more realistic project schedule was needed.

at that time. KPMG did not commit staff and resources to the project until NASA exercised all contract options (3 months after contract award), because KPMG did not want to risk developing software that NASA would not purchase. As a result, KPMG sustained a significant delay in IFMP efforts, which contributed to its inability to deliver the IITF by May 1, 1998. KPMG could not provide us documentation to support its IFMP staffing levels.

The IFMP Director's December 1998 IFMP status report showed that the lack of KPMG support to Centers was starting to cause delays in various activities.

***Other Factors Affecting
IFMP Progress***

Additional factors had an effect on the progress of IFMP, including (1) lack of contractor surveillance by NASA early in the project and (2) untimely negotiations.

Monitoring KPMG's Performance. The Federal Acquisition Regulation, Section 42.11, describes production surveillance as a function of contract administration to determine contractor progress and identify factors that may delay performance. Because IFMP is a firm-fixed-price contract and because the Agency was expecting to purchase a true COTS product, NASA did not initially use surveillance to monitor KPMG's progress in the critical early stages of the contract performance period. In February, 1998 NASA took steps to increase monitoring of KPMG's performance and developed an IFMP Quality Assurance plan to monitor the IFMP progress. The CO and COTR also recognized that a surveillance plan would have been beneficial for IFMP and developed one in May 1998, after NASA and KPMG agreed to a revised delivery schedule. As part of the contract modification that incorporated the revised delivery schedule, KPMG allowed NASA to establish an IFMP Resident Office at KPMG's work site in order to have better insight into KPMG's operations and performance.

Untimely Negotiations. On May 8, 1998, NASA and KPMG signed a contract modification (Modification 12) incorporating a revised delivery schedule into the IFMP contract. As of March 1999, NASA and KPMG officials had been unable to come to a negotiated settlement. During a critical time in the IFMP life cycle (February 1998, when KPMG first notified NASA of its nonperformance through March 1999), high-level NASA and KPMG officials expended valuable time discussing, preparing, and negotiating the cost proposal for the revised delivery

schedule. The most recent incomplete delivery of the IITF further complicates this process. When NASA notified KPMG of its incomplete delivery of the IITF, KPMG responded that it was concerned that final negotiations for contract Modification 12 were still incomplete.

***Contractor Nonperformance
Effects on NASA***

KPMG's inability to implement the IFMP on schedule will cause NASA to:

- Be less than fully compliant with Federal law and Agency requirements.
- Incur additional contract costs and maintenance costs for legacy systems that would otherwise be avoided through IFMP's implementation.

Continuing Noncompliance. The Office of Management and Budget and the General Accounting Office have previously reported on NASA's lack of an integrated financial management system.

- In June 1989, the Office of Management and Budget designated NASA's accounting system as high risk due to the lack of standardization and the need to modernize.
- In 1991, the General Accounting Office reported that NASA's accounting and reporting systems were costly, outdated, and not in compliance with the Office of Management and Budget's mandate for a single, integrated financial management system.
- In July 1998, the General Accounting Office reported that removing NASA contract management from the high-risk list was premature because of the delay in implementing IFMP.

Further, without the IFMP, NASA will not readily meet its own requirements for planned full-cost management. The Agency planned to use IFMP to implement and operate full-cost management. Until the IFMP is fully implemented, NASA will have to account for full costs using cumbersome alternative procedures.

Additional Costs and Consideration. NASA will incur additional costs either in the form of added contract costs or

costs savings that will not be realized as a result of the schedule extension. NASA, however has not assessed the cost impact to NASA as a result of KPMG's nonperformance. Such an assessment would ensure that the Agency receives reasonable consideration.

- NASA allowed additional costs to the contractor not to exceed \$7.1 million, based on the 11-month extension of the final implementation date. The \$7.1 million was for an additional 4-month extension that NASA placed on the contract delivery schedule, in addition to a 7-month, no-cost extension agreed to by KPMG.
- NASA will lose a material cost benefit as a result of maintaining (for the 11-month schedule extension) legacy financial systems that the IFMP would have replaced. NASA has not quantified the amount of this monetary loss. NASA should perform a cost assessment as an input to the CO in negotiating monetary and nonmonetary consideration for the contractor's non-performance.
- NASA has received some consideration from KPMG for the schedule slip. KPMG provided NASA with office space for surveillance purposes and agreed to allow NASA to review specifications for all proposed software enhancements. In addition, KPMG will submit a complete proposal for the revised delivery schedule including additional appropriate consideration. As of March 1999, that proposal had not been finalized.
- The CO has not yet assessed the cost impact to NASA due to KPMG's nonperformance. Such an assessment will better prepare NASA to evaluate total consideration proposed by KPMG, which NASA has also not yet received. We recognize that ultimately the CO has to determine whether the consideration offered, both monetary and nonmonetary, is fair and reasonable. We do not expect a dollar-for-dollar exchange of consideration. However, a cost assessment of the impact on NASA of the contractor's nonperformance should be available for the CO's consideration.

Core Software Must Be JFMIP Compliant. Because of the further development of the proposed core financial software,

there is a risk that the completed version of the software may no longer meet the JFMIP requirements for critical areas such as Agency reporting, Standard General Ledger requirements, and System Management, as were agreed to in the contract. The Department of the Treasury had benchmarked KPMG's core financial software so that it could be listed on the General Services Administration Financial Management Software Schedule as being JFMIP compliant.⁵ However, after that certification, the software was subject to more extensive development, creating a risk that it may no longer meet the benchmarked JFMIP requirements. The JFMIP recommends that agencies conduct independent validation testing of the software, by parties either internal or external to the agency, to ensure that the software meets all JFMIP requirements.

The IFMP Director and COTR acknowledged the risk that the core financial module, when complete, may no longer meet the JFMIP requirements as contracted for. NASA is planning extensive testing to ensure that the software will meet all the JFMIP requirements agreed to in the contract.

All JFMIP requirements for financial systems should be clearly accounted for in the process of implementing IFMP and mapped to the contract requirements or compensating controls that will meet the applicable requirements. Such an accounting provides assurance that IFMP will fulfill JFMIP requirements.

RECOMMENDATION 1

The IFMP Director should take necessary steps to ensure NASA receives reasonable consideration due to KPMG's nonperformance, including requesting the CO to perform an assessment of the cost to NASA for use in evaluating the consideration proposed by KPMG.

Management's Response

Concur. The Contracting Officer will take all necessary steps to ensure that NASA receives reasonable consideration from KPMG for its nonperformance. The IFMP Project Office has completed a cost analysis of the budgetary impact to NASA for the delay. The complete text of the comments is in Appendix F.

Evaluation of Management's Response

Management's actions are responsive to the recommendation.

⁵ We identified a weakness in the Federal Government process for certifying COTS financial management software as being JFMIP compliant and have referred the issue to Executive Director of the JFMIP for further evaluation.

RECOMMENDATION 2

The IFMP Director should perform the validation testing recommended by the JFMIP to ensure that the IFMP core financial module meets the JFMIP requirements; disclose those JFMIP requirements that will not be met through IFMP; and if necessary, implement compensating controls and procedures to fulfill JFMIP requirements.

Management's Response

Concur. The IFMP Project Office has put in place a comprehensive test plan for validating all JFMIP requirements. By May 15, 1999, the IFMP Project Office will provide documentation showing that NASA has accounted for every JFMIP requirement.

Evaluation of Management's Response

Management's actions are responsive to the recommendation.

**ACTIONS TAKEN BY
NASA UPON
CONTRACTOR'S
NONPERFORMANCE**

Upon notice that KPMG would not meet the contract delivery schedule, NASA agreed to a restructuring of the delivery schedule in return for some consideration from KPMG. NASA did not issue a cure notice.⁶ The Agency based its decision not to issue a cure notice on numerous actions it took to ensure KPMG's commitment to the program and performance under the contract. Those actions and the resulting agreements reached between NASA and KPMG are critical to negotiation of consideration due NASA for KPMG's nonperformance on the contract.

Federal Acquisition Regulation, Section 49.402-3(d) states:

If the contractor fails to make progress so as to endanger performance, the CO shall give the contractor written notice specifying the failure and providing 10 days (or longer period as necessary) in which to cure the failure.

In January 1998, the contractor's noncompliance with the contract terms and potential default became apparent. In February 1998, KPMG notified the Agency about not meeting the May 1, 1998, delivery of the IITF and the probability of not meeting the rest of the contract delivery schedule. However,

⁶ The Federal Acquisition Regulation provides that a cure notice can be issued when a contractor fails to perform or so fails to make progress as to endanger performance of the contract. The objective of the cure notice is to "cure" the condition, which can include a plan of corrective action on the part of the contractor.

NASA did not, by way of a cure notice: (1) notify KPMG of the Agency's intent to enforce the terms and conditions of the contract and (2) require KPMG to submit a corrective action plan.

The NASA IFMP procurement staff, consisting of the CO, Procurement Specialist, and legal counsel, initially believed that a cure notice would not have been appropriate because NASA was not prepared to terminate the contract and did not want to antagonize KPMG. Rather, on March 5, 1998, NASA notified KPMG that it would consider a one-time restructuring of the delivery schedule and expected consideration from KPMG. According to the CO and the IFMP Director, in May 1998, the Agency was prepared to issue a cure notice pending a meeting between the NASA Administrator and KPMG's Chief Executive Officer. The IFMP Director stated that the KPMG Chief Executive Officer assured the Administrator of KPMG's commitment to successfully deliver IFMP under the revised schedule; therefore, NASA did not issue the cure notice.

The actions NASA took during that period (February through May 1998) that resulted in its decision not to enforce the delivery schedule through issuance of a cure notice are critical to future negotiations regarding consideration due the Government. The CO's reasons for taking such action should be documented as required by the Federal Acquisition Regulation section 49.402-5 which states:

When a contract is terminated for default or a procedure in lieu of default is followed, the contracting officer shall prepare a memorandum for the contract file explaining the reasons for the action taken.

On December 1, 1998, KPMG provided NASA an incomplete delivery of the IFMP to the IITF that will likely result in additional schedule slippage. In that case NASA decided against issuing a cure notice pending the results of NASA's testing of the software that was delivered. The CO prepared a memorandum for the contract file explaining NASA's reasons for its action. The same type of memorandum should be prepared documenting the reasons for NASA's decisions based on KPMG's failure to meet the May 1, 1998, delivery of the IITF, as well as any future material instances of nonperformance.

While we do not question the CO's decisions in any of these matters, we recommend that the reasons for the CO's decisions be clearly and fully documented in the contract file. This action will help to protect NASA's interest should it result in litigation with the contractor, which IFMP personnel stated was a possibility.

RECOMMENDATION 3

The IFMP Director should request that the IFMP CO document the contract file, in accordance with Federal Acquisition Regulation, section 49.402-5, as to the decisions made concerning issuance of a cure notice for KPMG's nonperformance regarding the May 1, 1998, scheduled delivery of the IITF and for future material instances of nonperformance.

Management's Response

Concur. The IFMP Project Office will document its decisions with regard to the contractor's performance, and the contract file will be maintained in a current status to document all deliberations and conclusions.

Evaluation of Management Response

Management's actions are responsive to the recommendation.

Scope and Methodology

SCOPE

We reviewed the documented performance of the contractor, KPMG Peat Marwick, on IFMP contract NAS5-97237. We also reviewed the contract administration and monitoring procedures of the NASA CO and COTR. The IFMP CO and COTR report functionally to the IFMP Project Director (who reports to the NASA Chief Financial Officer) and administratively to the Goddard Space Flight Center Flight Projects Directorate.

METHODOLOGY

Our audit approach consisted of:

- Review of applicable criteria such as the Federal Acquisition Regulation, Office of Management and Budget Circular A-127, “Financial Management Systems,” dated July 23, 1993; various Federal procurement guidelines; and various General Accounting Office reports.
- Review of the September 1997 IFMP contract and all associated files dating from February 1995 through August 1998.
- Review of applicable correspondence between NASA and the contractor.
- Discussions with various NASA IFMP personnel including: the Project Director, Deputy Director/Functional Manager, Contracting Officer, Contracting Officer’s Technical Representative, procurement staff and legal staff.
- Attendance at IFMP Council meetings and IFMP conferences.
- Discussions with the Director, NASA Automated Data Processing Consolidation Center.
- Survey of the NASA IFMP Process Team Leaders.
- Discussions with KPMG personnel.

Scope and Methodology

- Discussions with the NASA Office of Inspector General Procurement Specialist and Legal Counsel.
- Discussions with JFMIP staff.
- Discussions with the General Services Administration Financial Management Software System Program Procurement Staff.

AUDIT FIELD WORK

We conducted the audit field work from March through December 1998 at the following locations.

- NASA Headquarters,
- IFMP Technical and Contracts Office at the Goddard Space Flight Center, and
- KPMG's office in Washington, D.C.

The audit was conducted in accordance with generally accepted government auditing standards.

Federal Financial Management System Requirements

***LEGISLATION RELATED
TO IFMP***

Chief Financial Officers Act of 1990. The Act assigned clear financial management responsibilities to senior officials and required new financial organizations, enhanced financial systems, audited financial statements, and improved planning. The Act called for the establishment of a Chief Financial Officer in each Agency, responsible for developing and maintaining an integrated Agency accounting and financial management system.

Federal Financial Management Improvement Act of 1996. The Federal Financial Management Improvement Act of 1996 stipulates that each agency shall implement and maintain financial management systems that comply substantially with Federal financial management system requirements, applicable Federal accounting standards, and the United States Government Standards General Ledger at the transaction level.

***OFFICE OF
MANAGEMENT AND
BUDGET CIRCULARS
RELATED TO IFMP***

Circular A-123, “Management Accountability and Control.” This Circular provides guidance to Federal managers on improving the accountability and effectiveness of Federal programs and operations by establishing, assessing, correcting, and reporting on management controls.

Circular A-127, “Financial Management Systems.” This circular sets forth general policies for Federal financial management systems. In support of these policies, each agency is required to establish and maintain a single, integrated financial management system.

Circular A-130, “Management of Federal Information Resources.” This circular provides policies on uniform Government-wide information resources management.

Circular A-134, “Financial Accounting Principles and Standards.” This circular establishes the policies and procedures for approving and publishing financial accounting principles and standards.

Federal Financial Management System Requirements

JFMIP REQUIREMENTS The JFMIP has developed a framework for financial management in the Federal Government. This framework requires each Government agency to establish and maintain a single, integrated financial management system with the following capabilities:

- Collect complete, reliable, consistent, useful, and timely information.
- Provide adequate agency management reporting.
- Provide support for Government-wide and agency level policy decisions.
- Facilitate the preparation of financial statements and other financial reports in accordance with Federal accounting and reporting standards.
- Provide information to central agencies for analysis and Government-wide reporting, including consolidated financial statements.

In addition, JFMIP has developed system requirements for the following:

- core financial systems,
- direct loans,
- guaranteed loans,
- inventory systems,
- managerial cost accounting systems,
- personnel and payroll systems, and
- travel systems.

NASA'S IFMP Procurement Methodology

The IFMP procurement methodology basically consisted of a requirements definition, issuance of a Request for Information, an Acquisition Strategy Meeting, issuance of the Request for Proposal, evaluation of proposals in two phases, and award of the contract.

Requirements Definition (February 1995 through June 1996)

The IFMP contractual requirements developed by NASA consisted of functional requirements, data requirements, and technical requirements as follows:

- NASA based its *functional requirements* on the Agency-level reengineered process designs that several NASA Core Process Teams developed.
- NASA based its *data requirements* on the above functional requirements and reengineered business processes. Since NASA was buying commercial software, it defined its data requirements at a relatively high level.
- A team of system engineers from several Centers, under the guidance of the IFMP System Implementation Manager, developed the *technical requirements*. NASA placed high value on new technology, such as World Wide Web access, and client/server architecture.

Request For Information (November 1995)

NASA issued a Request for Information in April 1995 and tabulated and analyzed the results in November 1995. The Request for Information was a call to vendors to submit documentation describing the products they had available or planned to have available to support the proposed IFMP processes. The Request for Information stipulated that software products had to comply with the requirements identified by JFMIP. NASA invited nine vendors, whose products appeared to be promising, to give a technical briefing to the IFMP staff.

NASA used the Request for Information to obtain data regarding 1) the maturity of Federal financial management systems, 2) supported architectures and platforms, 3) the complexities of integration and implementation, and 4) the

NASA'S IFMP Procurement Methodology

capability of vendors to provide an integrated suite of financial management software. NASA used the results of the Request for Information to further develop its requirements.

Acquisition Strategy Meeting (December 14, 1995)

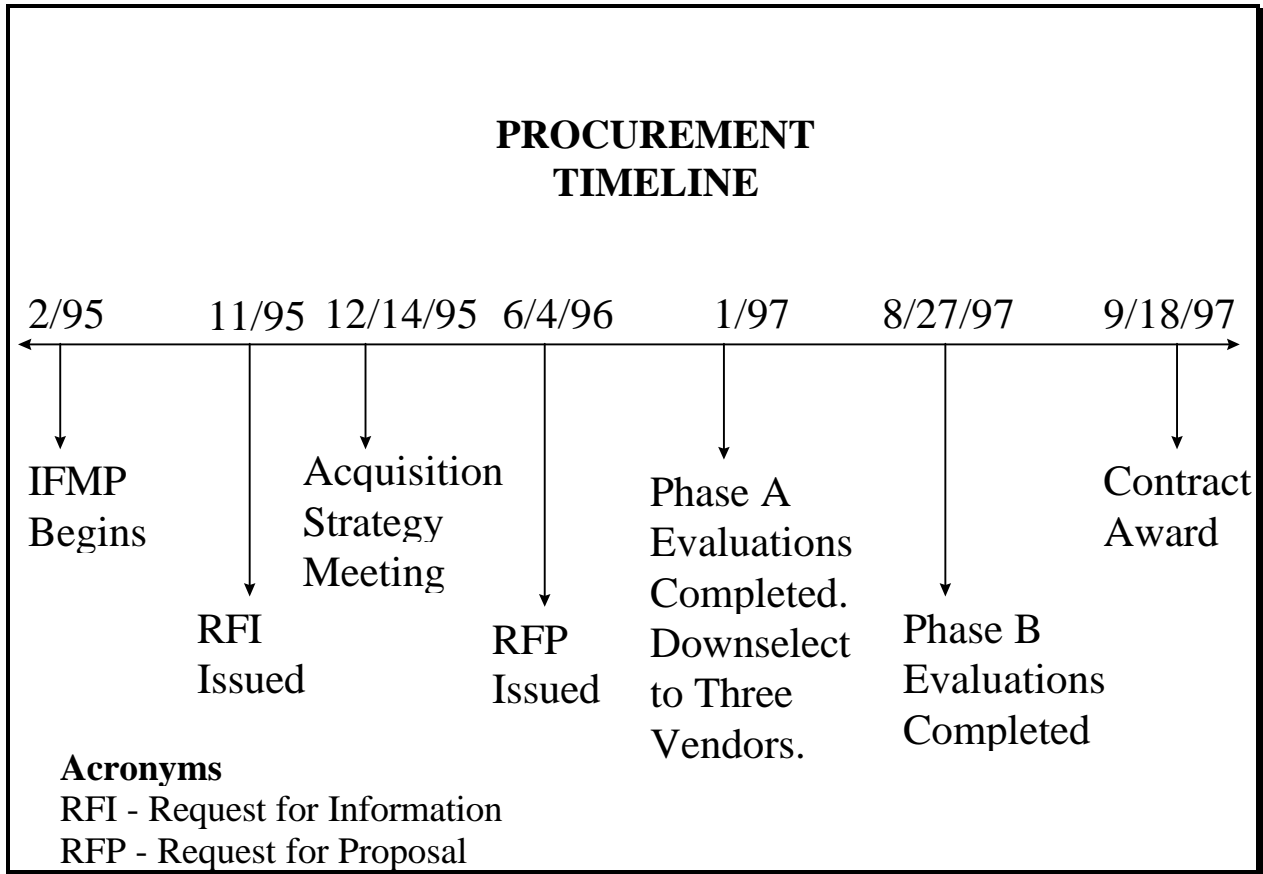
NASA held the IFMP Acquisition Strategy Meeting to discuss the proposed acquisition methodology. Before the meeting, NASA had already determined the IFMP delivery schedule and had already decided that the IFMP system would be procured by way of a firm-fixed-price contract from a single source. The Agency did not have a written acquisition plan, as required by the Federal Acquisition Regulation, or any other documentation to support either how it established the contract schedule or how it selected the contract type.

Request for Proposal/Evaluation Procedure (June 4, 1996, through August 1997)

NASA issued the IFMP Request for Proposal on June 4, 1996, with responses due from vendors by August 4, 1996. NASA conducted a two-phased proposal evaluation process. Phase A focused on (1) the ability of the proposed software to meet the requirements and (2) the offerors' past performance. Offerors did not submit cost proposals in this first phase. NASA completed its evaluation of the Phase A proposals in January 1997.

Following the initial proposal evaluation, NASA selected three offerors to continue into the next phase. One offeror eventually withdrew, citing the risks associated with the tight implementation schedule and the contract type. For Phase B, each offeror was requested to propose an implementation approach and a cost proposal. The offerors selected to advance into the second phase of the competition participated in Operational Capabilities Demonstrations and Usability Testing. The NASA evaluation team provided the offerors with scripts, which the offerors used to demonstrate the functionality of each software module offered. In addition, a select group of NASA employees conducted transaction-based usability tests of the software. These tests assisted the Agency in the selection of software products that best fit the Agency's reengineered business processes. The following timeline depicts the IFMP procurement actions.

NASA'S IFMP Procurement Methodology



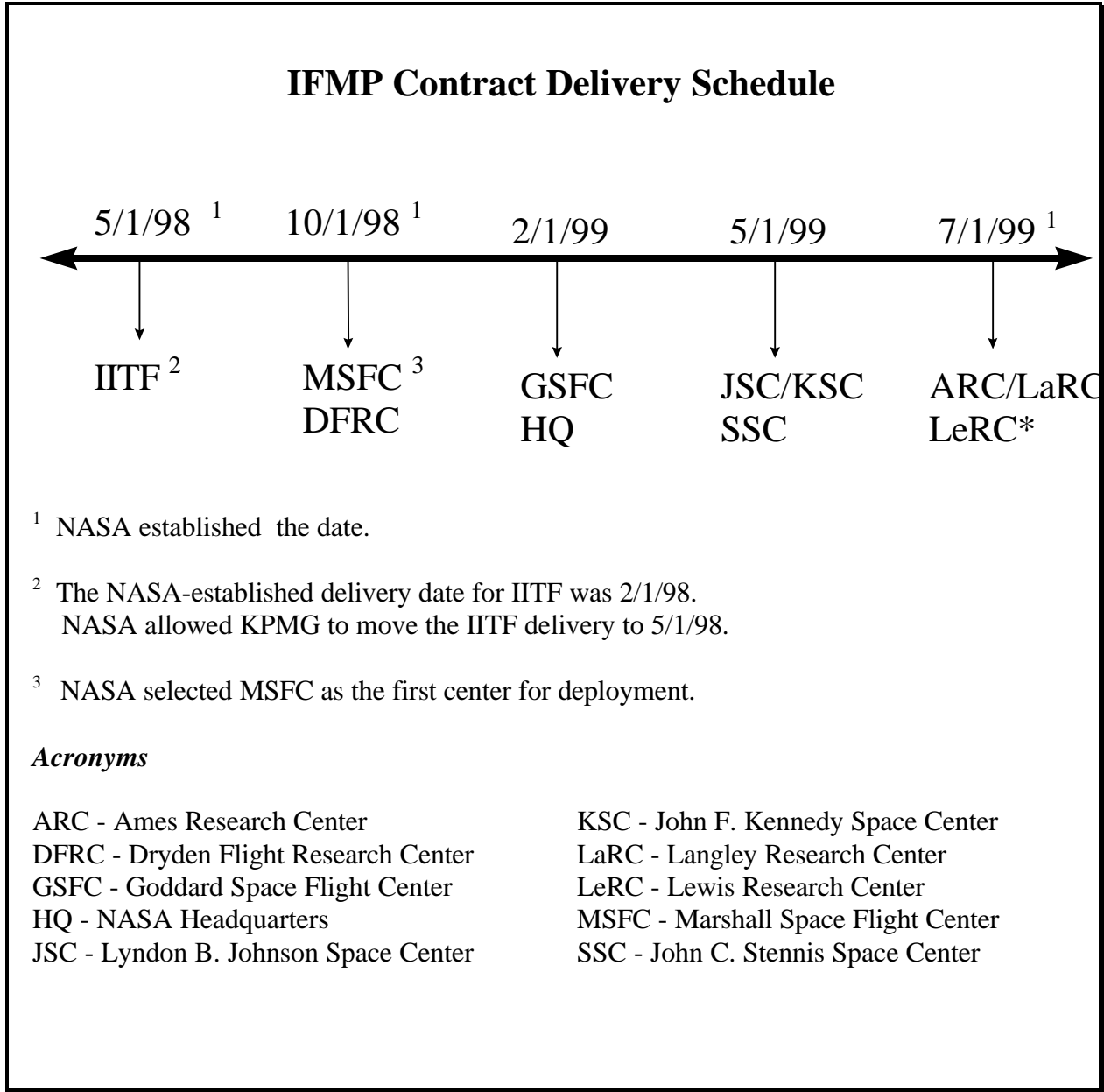
Key Elements of KPMG's Proposal

As part of its proposal, KPMG provided NASA a work plan for implementing IFMP at the IITF by May 1, 1998, with full, Agency-wide implementation by July 1, 1999. NASA incorporated this plan into the contract. Some of the key element's of the plan were that KPMG would:

- Have available, federally compliant COTS packages for a client/server architecture - the proposed platform for the IFMP system. KPMG further proposed that its COTS software would need only enhancements to meet all of NASA's requirements. NASA defined COTS software in the contract as software that is fully programmed, tested, and maintained by the software developer.
- Deploy browser software so that a number of Web-based components of IFMP (for example, time sheets, purchase requests, travel vouchers) would be available to all NASA users in a secure environment.
- Make its software compatible with both personal computers and Apple Macintosh computers.
- Staff the project at the NASA Centers in order to implement the COTS software in preparation of the IITF.

KPMG proposed the delivery schedule for the NASA Centers as follows.

Key Elements of KPMG’s Proposal



* - The Lewis Research Center’s name has since been changed to the John H. Glenn Research Center at Lewis Field.

Legacy Systems Requiring Interface with IFMP

<u>CENTER</u>	<u>SYSTEMS REQUIRING INTERFACE WITH IFMP*</u>
<i>All Centers</i>	NASA Personnel/Payroll System (NPPS) NASA Equipment Management System (NEMS) NASA Property Disposal Management System (NPDMS) NASA Supply Management Systems (NSMS)
<i>AMES RESEARCH CENTER</i>	ARC Supply Management System Transaction Validation (ASMS-TV) Commitments, Obligations, Accruals and Disbursements (COAD) Financial Management Information System Transaction Validation (FMIS-TV)
<i>Dryden Flight Research Center</i>	None.
<i>Goddard Space Flight Center</i>	Contractor Cost Tracking System (CCTS) Contractor Resource Tracking System (CORTS) Fabrication Engineering Management System (FEMS) Integration and Test (IAT) Management Information Cost Tracking System (MICTS) Product Assurance Re-engineered Management Information Cost Tracking System (REMIX) Supply Access Terminal System/Auto Logistics System (SAT/ALS)
<i>Headquarters</i>	Financial and Contractual Status System, Financial (FACF) Financial and Contractual Status System, Procurement (FACP)
<i>Johnson Space Center</i>	Aircraft Spare Parts System
<i>Langley Research Center</i>	Fabrication (FAB) Bank Card System Financial Management System (FMS)

Legacy Systems Requiring Interface with IFMP

CENTER

SYSTEMS REQUIRING INTERFACE WITH IFMP*

*John H. Glenn Research
Center*

Computer Usage System (COMPUSG)
Engineering Directorate Work Tracking and Reporting
System (ED-JOBS)
Imaging Technology Work Order System (IMAGING)
FSB Outside FAB Procurement System (OUTFAB)
FSD Inside FAB Procurement System (SHOPJOB)

*Marshall Space Flight
Center*

Electronic 533

Stennis Space Center

Electronic 533
Procurement - Work Order System

* We obtained this information from Attachment L of Addendum 2 of the IFMP contract, and appropriate personnel from each Center confirmed the information through the IFMP office.

Management's Response

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



APR 20 1999

Reply to Attn of: B

TO: W/Assistant Inspector General for Auditing
FROM: B/Associate CFO, Integrated Financial Management Project
SUBJECT: Final Report on the Audit of the Implementation of NASA's Integrated
Financial Management Project (IFMP) Assignment Number A-HA-98-030
Report Number IG-99-xxx

Thank you for your comments and advice to this project. I have reviewed the subject report and concur on all three recommendations. Our specific response and planned course of action is as follows.

Recommendation 1

Concur. This project, through its Contracting Officer will take all necessary steps to ensure reasonable consideration is received from KPMG for their nonperformance. NASA has already received some consideration for the schedule slip. In addition, this office has completed a cost analysis of the budgetary impact to NASA for the delay (including the costs of maintaining legacy systems) and will immediately provide this to the Contracting Officer to aid in evaluating the reasonableness of KPMG's proposed additional consideration.

Recommendation 2

Concur. The project already has in place a comprehensive Test Plan and approach for validating all requirements, including JFMIP requirements. Passing this validation is one of the prime criteria for payment to KPMG. By May 15, this project will deliver to you documentation verifying that we have included every JFMIP requirement that is appropriate. This will demonstrate that when we accept the IFM system from KPMG on November 15, 1999, we will have a fully JFMIP compliant system.

Recommendation 3

Concur. The project has and will continue to document our decisions with regard to the contractor's performance. These issues are complex and require broad consideration of

Management's Response

2

all of the consequences of nonperformance as well as alternatives. The contract file will be maintained in a current status to document our deliberations and conclusions.

If you have any further comments or questions, please contact me directly at 202-358-2506.



David R. Howell

Cc:
B/A. Holz
G/D. Forbes
H/T. Luedtke

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House Committee on Government Reform and Oversight
House Subcommittee on Space and Aeronautics
House Committee on Science

Congressional Member

Honorable Pete Sessions, U.S. House of Representatives

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