FEBRUARY 6, 2006

AUDIT REPORT

OFFICE OF AUDITS

INTEGRATED ENTERPRISE MANAGEMENT PROGRAM CONTRACT OVERSIGHT NEEDS IMPROVEMENT

OFFICE OF INSPECTOR GENERAL

National Aeronautics and
Space Administration

REPORT NO. IG-06-003-REDACTED (ASSIGNMENT NO. A-04-032.01)

Note: This version of the report has been revised to omit privileged/proprietary commercial or financial information not routinely released under the Freedom of Information Act.

Final report released by:

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Acronyms

BPA	Blanket Purchase Agreement
CO	Contracting Officer
COTR	Contracting Officer's Technical Representative
FAR	Federal Acquisition Regulation
GSA	General Services Administration
IEM	Integrated Enterprise Management
IEMP	Integrated Enterprise Management Program
NFS	NASA Federal Acquisition Regulation Supplement
NPR	NASA Procedural Requirements

IN BRIEF

INTEGRATED ENTERPRISE MANAGEMENT PROGRAM CONTRACT OVERSIGHT NEEDS IMPROVEMENT

The Issue

The Office of Inspector General conducted an audit of NASA's oversight of its Integrated Enterprise Management Program (IEMP)[1] contracts as part of an overall assessment of NASA's IEMP. The objective of the audit was to determine whether NASA performed sufficient oversight of contractor activities to ensure that IEMP products and services were procured in a satisfactory, cost-effective manner.

Our Approach

Contractors have played a significant role in developing and implementing IEMP. As of December 31, 2004, NASA had made 82 IEMP-related awards to 29 different contractors with a potential value of about $630 million. We identified and evaluated oversight policies at NASA Headquarters, the Goddard Space Flight Center (Goddard), and the Marshall Space Flight Center (Marshall). In addition, we evaluated oversight practices for five IEMP awards and related tasks issued under those awards, totaling about $213.5 million (34 percent) of the $630 million. We reviewed awards related primarily to the acquisition and implementation of the IEMP Core Financial Module and Budget Formulation Module. Some of the key responsibilities of the contractors included providing the software, converting NASA legacy data to the new systems, providing implementation services, and testing and integrating the new systems.

Our Results

Of the five major contracts we reviewed, NASA's oversight practices for two, with a value of $49.7 million for IEMP services, were satisfactory. However, NASA's oversight and contract modification practices for the remaining three IEMP awards reviewed, valued at about $163.8 million, needed improvement. Specifically, we found that proper oversight was not always conducted because contracting officers (COs) failed to appoint contracting officer's technical representatives (COTRs) or job monitors and failed to ensure that surveillance plans were properly developed. In addition, COs and COTRs did

[1] The Integrated Enterprise Management Program became the official name on June 24, 2005, for what was formerly known as the Integrated Financial Management Program.

not ensure that monitor responsibilities were established or that COTRs and monitors adequately documented key oversight activities. Also, COs[2] allowed one IEMP contractor to continually submit late, inaccurate, incomplete, or unsupported invoices and did not ensure that invoice errors were properly resolved (Finding A). Further, a CO did not properly modify a contract and a CO and a COTR allowed a contractor to perform work without a contract (Finding B).

Those conditions occurred because COs did not adequately adjust oversight procedures to adapt to regulatory requirements and significant contractual changes, because of human error, and because of the lack of consistent and coordinated oversight policies and procedures at NASA Headquarters, Goddard, and Marshall. As a result, NASA lacked assurance that the IEMP services and products received were of the best quality and use to NASA and that the $163.8 million paid for those services and products was reasonable.

Management Action

We recommended that NASA develop and implement centralized policy initiatives to ensure that oversight practices, surveillance approaches, plans, and monitoring practices are consistent and coordinated among Centers administering ongoing and future IEMP contracts. In addition, we recommended that the procurement directors at Marshall and Goddard ensure that COTRs and monitors are formally appointed and properly instructed on their duties and that oversight personnel meet documentation requirements.

The NASA Chief Financial Officer, with input from the Assistant Administrator for Procurement, the Executive Officer for the IEMP, and the Directors of Goddard and Marshall, concurred or partially concurred with all of our recommendations (see Appendix B). However, the Assistant Administrator for Procurement's input into the Chief Financial Officer's comments were generally not responsive to our recommendations and the proposed actions would not correct many of the deficiencies noted in this report.

We request that NASA provide additional comments on Recommendations 1.a, 2.a, 2.d, 3.a, 3.b, and 3.c. The additional comments should provide details for more specific procedures for monitoring, oversight, and surveillance practices for IEMP contracts, as discussed in our evaluation of management's response to each recommendation. We request that management provide those additional comments by March 8, 2006.

[2] Since award inception in June 2000, Marshall had assigned three COs and a contract specialist to administer the contract (SAP task/delivery order H-32946D).

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INTRODUCTION

Background

Overview of IEMP. IEMP is NASA's ongoing Agencywide transformation of its business systems and processes to improve fiscal and management accountability. NASA adopted a "best-of-suite" architecture strategy to implement IEMP with software produced by SAP Public Sector and Education, Inc. (SAP). The Core Financial Module is NASA's Agencywide financial system and is one of a series of 14 IEMP projects aimed at improving the Agency's financial, physical, and human resources management and systems. NASA has completed implementation of seven projects, canceled work on one project, delayed work on one project, and begun implementing several other related projects. The IEM Program Office, headed by the IEM Program Executive Officer, manages the IEMP. Center IEMP Implementation Teams implement the various IEMP projects.

This report addresses the oversight of contracts primarily related to the Core Financial Module and the Budget Formulation Module. SAP and Accenture LLP (Accenture) are the two primary contractors that provided services and products to the Core Financial Module and the Budget Formulation Module. NASA implemented the Core Financial Module in June 2003. The Budget Formulation Module was planned to complement the Core Financial Module and to support NASA's full-cost initiative,[3] a primary objective of IEMP. However, NASA canceled work on the Budget Formulation Module in November 2004 after spending about $25.7 million over a 3-year period. As of June 2005, IEMP was scheduled for completion in Fiscal Year 2011, with an estimated cost of about $1.1 billion. As of December 31, 2004, NASA had made 82 IEMP-related awards[4] to 29 different contractors with a potential value of about $630 million.

NASA structured the scope of work for the IEMP project into four major segments: project management, Agency design, pilot Center implementation, and Agency rollout. Each segment contained tasks for services and products that included providing software, data conversion, change management activities, and testing support. NASA developed individual, detailed statements of work and deliverables for each task, and the contractors were to complete each task under either a task/delivery order with SAP or a Blanket

[3] The full-cost initiative consists of three components: full-cost accounting, cost-based budgeting, and full-cost management. The Core Financial Module supports full-cost accounting, and the Budget Formulation Module was to support cost-based budgeting. Full-cost management will allow NASA to optimize the cost-effective performance of its programs and projects and can only be achieved if full-cost accounting and cost-based budgeting is successfully implemented.

[4] The awards included contracts, Blanket Purchase Agreements, and task/delivery orders.

Purchase Agreement (BPA)[5] with Accenture. Marshall was primarily responsible for the Core Financial Module and Goddard was primarily responsible for the Budget Formulation Module.

Contractor Oversight. Overseeing contractor performance involves contract administration activities that contracting officers (COs), contract specialists, contracting officer's technical representatives (COTRs), and task monitors (monitors) engage in to ensure services acquired under contracts conform to prescribed requirements. The CO has the authority to enter into, administer, change, and terminate Government contracts. A contract specialist has specialized training in procurement and assists the CO as necessary. A COTR is a qualified Government employee, appointed by the CO, whose main function is to serve as a technical liaison between the contractor and the CO. A monitor is a person appointed to provide continuous evaluation of a contractor's performance in specifically assigned areas of responsibility. Robust oversight practices help ensure that contract objectives are achieved in an effective and efficient manner. To evaluate NASA's oversight of contractor performance, we reviewed the following five contract awards for the acquisition and implementation of the Core Financial Module and the Budget Formulation Module.

SAP Task/Delivery Order H-32946D. Marshall awarded SAP this task/delivery order under General Services Administration (GSA) contract GS-35F-5891H in June 2000. As of March 2005, the task/delivery order was valued at about $— million. The task/delivery order was for Agency software licenses, annual software maintenance, and consulting services. Marshall procured the software licenses and annual software maintenance under a firm-fixed-price arrangement. The consulting services portion of the task/delivery order resulted in 14 separate labor hour tasks, which Marshall referred to as jobs. We reviewed 5 of the 14 jobs, valued at approximately $— million. NASA developed statements of work and deliverables for each of those jobs, with labor rates based on the GSA contract.

Accenture BPA NAS8-01044. Marshall awarded Accenture this BPA, valued at about $— million, in November 2000. Under the BPA, Accenture provided management, personnel, equipment, and supplies to perform Core Financial Module implementation services, including data conversion and system testing. Marshall issued individual task orders under the BPA using a firm-fixed-price arrangement with incentive fee provisions. Each NASA Center also had the ability to issue Center-funded task orders under the BPA to implement the Core Financial Module. In addition, Marshall procured services under this BPA for the prototyping and implementation of SAP's Budget Formulation Module.

[5] A BPA is a simplified method of filling anticipated repetitive needs for supplies or services by establishing "charge accounts" with qualified supply sources.

Accenture BPA NNM04AA17Z. Marshall awarded Accenture this BPA in May 2004. The BPA has a ceiling of $200 million; as of March 31, 2005, about $— million in tasks had been awarded. Under the BPA, Accenture has performed IEMP administrative systems implementation services in project management and tasks related to the Core Financial and Budget Formation Modules. Work performed under the BPA included the creation of the Business Blueprint for NASA's Integrated Asset Management Module.

Science Applications International Corporation Contract NNM04AA02C. Marshall awarded Science Applications International Corporation this contract in January 2004 for Agencywide information technology services, IEMP integration services, and information technology systems support at Marshall. The contract is a cost-plus-award-fee contract with a base term of 3 years and two 1-year priced options. As of March 31, 2005, approximately $— million of the $— million contract was for IEMP integration services, of which about $— million in IEMP costs had been incurred. The CO implemented several internal control measures for effective contract oversight, such as holding a post-award conference, requesting periodic floor checks, and requesting an annual incurred cost audit. In addition, the award-fee plan, invoice data, and award-fee evaluation information for the contract were all adequately prepared.

SGT Inc. Contract NAS5-03079. Goddard awarded SGT Inc. this contract in February 2003 to provide program analysis and control services in support of Goddard's Flight Programs and Project Directorate. In April 2003, Goddard issued Task Order 68 to SGT Inc. to provide project support to the Budget Formulation Module and to other IEMP modules at Goddard. As of March 31, 2005, SGT Task Order 68 was valued at about $— million.

See Appendix A for a detailed list of the contracts, BPAs, task/delivery orders, and the individual jobs and tasks under those BPAs and task/delivery orders that we reviewed.

Objectives

The objective of the audit was to determine whether NASA performed sufficient oversight of contractor activities to ensure that IEMP products and services were procured in a satisfactory, cost-effective manner. See Appendix A for a discussion of the audit scope and methodology and our review of internal controls related to the objective.

FINDING A: CONTRACTOR OVERSIGHT PRACTICES NEED IMPROVEMENT

NASA's oversight practices for two of the five major contracts we reviewed, Accenture BPA NNM04AA17Z and the Science Applications International Corporation contract NNM04AA02C, were satisfactory. However, NASA did not always adequately plan for and perform oversight of the other three IEMP contracts or tasks for the SAP task/delivery order, Accenture BPA NAS8-01044, and SGT Task Order 68. Specifically, NASA COs did not

- appoint a COTR when appropriate;
- ensure monitors were properly appointed and their responsibilities defined;
- ensure required contractor surveillance plans were properly developed, prepared, and updated;
- ensure oversight personnel adequately documented their monitoring activities; or
- ensure that oversight personnel adequately reviewed and reconciled SAP invoice submissions.

Those conditions occurred because COs did not adequately adjust oversight procedures to adapt to regulatory requirements and significant contractual changes, because of human error, and because of the lack of consistent and coordinated oversight policies and procedures at NASA Headquarters, Goddard, and Marshall. As a result, NASA lacked assurance that the contractual services and products received were of the best quality and use to NASA and that the $163.8 million paid for those services and products was reasonable.

Contract Oversight Requirements and Guidance

The Federal Acquisition Regulation (FAR) and the NASA FAR Supplement (NFS) contain contract oversight requirements. The FAR and NFS require Government oversight of contractors to ensure that the contractor complies with the terms of the contract and that the products and services conform to the stated requirements. NASA supplemented FAR and NSF guidance with NASA Procedural Requirements (NPR) and interim NASA Headquarters guidance, such as Procurement Information Circulars. Additional guidance includes "best practice" documents from sources such as the Office

of Federal Procurement Policy, which NASA posts on its Agencywide Procurement Library Web Site, and Center-specific guidance.

COTR Not Appointed

The Marshall COs did not appoint a COTR for SAP task/delivery order H-32946D, valued at about $— million as of March 31, 2005. A CO is not required by the FAR to appoint a COTR; however, NFS 1842.270 states that a CO may appoint a qualified Government employee to act as COTR and manage the technical aspects of a contract. We believe that the CO should have appointed a COTR because the work was not of a standard nature and a COTR could have monitored technical activities for all of the jobs and served as a single point of contact for the CO and contractor. A COTR could have also ensured that the services were needed and that the jobs were adequately and consistently evaluated.

The SAP task/delivery order at inception called for Marshall to acquire software licenses, pay an annual fee for software maintenance, and use SAP's consulting services on an as-needed basis. The CO at award inception determined that a COTR was not needed because the predominant portion of award dollars were expected to be for software licenses and maintenance that were fixed-price items and involved acceptance or non-acceptance by Marshall's IEMP Implementation Team and IEMP Integration Project Office before invoices were certified for payment. The CO stated that she did not initially anticipate having a significant need for SAP's consulting services.

Marshall's COs did not adequately adjust oversight processes to accommodate the unanticipated need for consulting services, the significant dollars being expended, or the contract type. Rather than appointing a COTR, the Marshall COs and the contract specialist relied on technical assistance provided by "unofficial monitors." NASA unilaterally awarded 14 jobs for labor hour tasks,[6] valued at about $— million (44 percent of the award). FAR Subpart 16.601(b)(1) states that because a labor hour contract provides no positive incentive to the contractor for cost control or labor efficiency, appropriate Government surveillance is required to provide reasonable assurance that efficient methods and effective cost controls are being used. Despite the significant growth in critical activities performed under labor hour jobs, the CO stated that Marshall's standard practice was to not appoint a COTR for task/delivery orders or purchase orders and that Marshall had no standard procedures for appointing monitors under labor hour awards. Accordingly, Marshall's COs informally assigned and relied upon unofficial monitors for each of the 14 jobs. Marshall's COs stated that the monitors performed adequately and that the lack of a COTR did not impact contractor activity.

[6] The labor hour jobs were established on different dates as needs arose from 2001 through 2004.

We contend a COTR should have been appointed because the work in question was not of a standard nature and included 14 separate jobs. A trained and experienced COTR could have provided a coordinated and consistent oversight approach to the unofficial monitors, as well as acting as the COs' technical representative, thereby eliminating the need for the COs to interact with multiple monitors. In addition, a COTR would have provided the contractor with a single source for technical guidance. In summary, because the COs did not appoint a COTR, NASA lacked assurance that the $[redacted] million of services SAP provided were needed and that the jobs were adequately and consistently evaluated.

Monitors Not Formally Appointed and Responsibilities Not Defined

Marshall and Goddard COs did not formally appoint monitors and define their responsibilities for two of the five major awards reviewed—SAP task/delivery order H-32946D and SGT Task Order 68. NASA Headquarters Office of Procurement personnel stated that there is no NASA-wide policy regarding monitor appointments and responsibilities. Rather, each Center can establish its own policies with respect to monitor appointments and responsibilities and COTRs can be responsible for monitor appointments. However, neither Marshall nor Goddard had a policy for appointing monitors and defining their responsibilities for labor hour awards. As a result, the COs' expectations and the monitors' roles and responsibilities were never documented in the contract administration files and we found inconsistencies in the monitoring performed at the two Centers, which compromised the quality of the oversight.

Marshall and Goddard Monitors for SAP Contract. Marshall's COs did not formally appoint monitors and define duties for any of the 14 labor hour jobs awarded under SAP task/delivery order H-32946D. Marshall guidance with respect to monitor appointments and responsibilities is limited to award-fee contracts. Marshall Work Instruction 5116.1, "Evaluation of Contractor Performance Under Contracts with Award Fee Provisions," Revision E, June 28, 2004, defines a monitor as an individual appointed to provide continuous evaluation of a contractor's performance in specifically assigned areas of responsibility and allows the COTR (with approval of the responsible program manager) to issue appointment letters to as many monitors as necessary. There were no award-fee provisions for the 14 SAP labor hour jobs supporting software implementation. The 14 jobs included significant and critical efforts related to the development of business reports from the Core Financial Module data and strategies for developing and implementing the Budget Formulation Module. The value of the 14 jobs ranged from $11,000 to over $5.2 million. The Marshall COs unofficially designated individuals to oversee the 14 jobs; however, the appointments and responsibilities of those individuals were not formally documented.

The Marshall CO at award inception stated that she did not formally appoint monitors because the SAP award was a task/delivery order and Marshall standard operating procedures do not require a monitor be formally appointed for task/delivery orders or purchase orders. The Marshall CO stated that she initially believed that Marshall's use of the consulting services would be limited to smaller, short-term efforts and that the informally appointed monitors would provide sufficient oversight. The contract specialist added that, although not formally appointed, the unofficial monitors were fully aware of their responsibilities and carried them out effectively. Both the CO and contract specialist stated that oversight was adequate because of the nature and location of the task work, the expertise of the unofficial monitors, and the relationships between the monitors and the program managers.

Goddard Monitor for SGT Contract. Goddard did not formally appoint a monitor or identify the monitor's duties for SGT Task Order 68. Goddard had no policy in place regarding the appointment and duties of monitors. However, as a result of our audit work, Goddard began using appointment letters to assign monitors to recently issued tasks under the SGT contract.

The monitors should have been formally appointed and their duties clearly documented to ensure effectiveness, efficiency, and accountability. The work performed under the SAP labor hour jobs grew significantly over time, which required a greater level of oversight, yet the Marshall COs and the contract specialist did not adjust oversight procedures to reflect the growth and significance of those jobs. All 14 SAP jobs were labor hour awards, which posed an increased risk to NASA of paying contractors for hours not worked or not necessary, thus requiring a higher degree of surveillance, yet the monitors received no guidance advising them of the increased risk or to increase their oversight.

We found the quality and documentation for the monitoring performed to be inconsistent and inadequate, which we attribute to a lack of monitor guidance. For example, we compared the monitoring activities of the unofficial monitors for SAP Job 5-2, "Information Delivery Strategy Study," at Marshall and SAP Job 5-2-BF at Goddard and saw major differences. The monitor for Job 5-2, valued at $— million, told us she did not make a concerted effort to document the contractor's invoice errors and maintained no historical financial records related to invoices. In addition, this monitor did not document any follow-up work to determine how or whether the invoice errors were resolved and did not keep copies of proposals the contractor submitted for new work that required modifying the job. Conversely, the Goddard monitor for Job 5-2-BF, valued at $— million, maintained copies of SAP's proposal submissions and documented invoice errors via e-mails to the CO, but did not follow up to determine how or whether the errors were resolved. This monitor also maintained records of historical invoice information; however, portions of those records were incomplete. We were unable to determine the extent of the invoice errors because of issues associated with NASA's documenting and processing of SAP invoices that we discuss later in this report. Because the COs did not

formally appoint monitors and specifically define their responsibilities, NASA lacked assurance that the quality of the oversight for the five jobs we reviewed was consistent, adequately documented, effective, and efficient.

Surveillance Plans Not Adequately Developed, Prepared, and Updated

NASA COs at Marshall and Goddard did not ensure surveillance plans were adequately developed, prepared, and updated for two of the five major awards reviewed. The Marshall COs did not prepare a contractor surveillance plan for the SAP task/delivery order and did not use an adequate risk-based approach to develop surveillance plans for Accenture BPA NAS8-01044. FAR Subpart 37.6 and FAR Part 46 require agencies to prepare surveillance plans for service contracts to facilitate effective contract surveillance. FAR Part 46 requires that surveillance plans specify all work requiring surveillance and the method of surveillance.

A surveillance plan, which directly corresponds to a contract's specified performance standards, is used to measure contractor performance. Use of a surveillance plan assists the COTR in determining whether the Government receives the quality of services called for under the contract. NFS 1846.401 states that the project office should prepare preliminary surveillance plans in conjunction with the statement of work that reflect the Government's surveillance approach relative to the perceived programmatic risk, and that the preliminary surveillance plan should be written at a general rather than specific level because the risks will not be completely identified at that point in time. After contract award, NFS 1846.401 requires the CO to ensure that the surveillance plan is revised to reflect the risks associated with the successful proposal and to ensure that the surveillance plan is periodically reviewed and kept current.

SAP Task/Delivery Order. The Marshall COs did not prepare a surveillance plan for the SAP task/delivery order. Neither the CO at inception nor the contract specialist through an appropriate authority requested or ensured preparation of a surveillance plan. The SAP task/delivery order labor rates were based on a GSA information technology contract with SAP. The CO stated that she did not believe a surveillance plan was required, citing the integrity of the work performed by GSA prior to the award and the nature of the items (originally software licenses and maintenance, which were commercial items that did not need oversight). However, as previously stated, the award contained an option for consulting services that grew into 14 separate labor hour jobs, valued at about $[redacted] million. Per FAR Subpart 16.601(b)(1), a labor hour contract provides no positive profit incentive to the contractor for cost control or labor efficiency, thereby requiring appropriate Government surveillance of contractor performance to provide reasonable assurance that the contractor used efficient methods and effective cost

controls. Because the five jobs reviewed had no surveillance plan, NASA lacked such reasonable assurance.

Accenture BPA NAS8-01044. Goddard's CO did not ensure that a surveillance plan was prepared and updated for two Goddard-issued time and material task orders under Accenture BPA NAS8-01044. The first task order (S-66328G), valued at $—, was for work performed from June through September 2003. The second task order (NNG04DA18D), valued at $—, was for work performed from February through September 2004. These two task orders were primarily for Core Financial Module stabilization services. The former CO, who has since relocated, stated that she believed a surveillance plan was requested and that, if the plan was not in the contract file, then a waiver should have been prepared, signed, and placed in the contract file. However, we could not locate a surveillance plan or a waiver. Because time and material contracts mirror labor hour tasks, and a surveillance plan was not in place, NASA had no assurance that the contractor used efficient methods and effective cost controls.

In preparing and updating surveillance plans, COs and COTRs should develop a surveillance approach that considers the level of risk and required cost-effectiveness. To help accomplish this, contract oversight personnel should determine the degree to which they can rely on contractor business systems and processes such as purchasing and estimating systems, invoice accuracy and timeliness, and past performance. The COs and COTRs should use this information to determine the level and efficiency of the resources needed and available to perform the surveillance. We found nothing to indicate that the Marshall CO for SAP and the Marshall and Goddard COs for Accenture BPA NAS8-01044 obtained useful information about key contractor systems. In addition, other than changes in the areas of emphasis for evaluation, which is a normal function of any surveillance plan update, there was no documentation to enable us to determine whether surveillance plans were periodically reviewed to ensure that they were current. NASA oversight personnel met consistently on a weekly or monthly basis with the contractors to identify, monitor, and discuss task-related issues. However, due to NASA's weak planning and updating approaches, the absence of a SAP surveillance plan, and other weaknesses cited in this report, we do not consider the quality of surveillance performed to be acceptable.

Inadequate Monitor and COTR Documentation

The monitors and COTRs did not always adequately document and maintain information needed to support their oversight activities, such as invoice reviews, overtime approvals, proposal evaluations, and training sessions. FAR Subpart 4.8, "Government Contract Files," requires official contract file documentation to be adequate to support the actions taken by COs and other personnel. NASA does not have an Agencywide policy on monitor and COTR documentation and leaves that policy to the discretion of the Centers.

Marshall guidance with respect to monitor and COTR documentation is limited to award-fee contracts. Marshall Work Instruction 5116.1 requires that monitors substantiate their review of award-fee contracts with supporting documents. Neither Goddard nor Marshall had policy in place pertaining to documentation for time and material contracts. We found that neither the Goddard nor Marshall monitors adequately substantiated their oversight activities, as shown by the following examples:

- The Goddard monitor for SAP Job 5-2-BF and Job 5-11-BF, cumulatively valued at about $8.8 million, stated that she randomly reviewed SAP invoices and time sheets but did not maintain documentation to support her reviews. This monitor also approved contractor overtime and proposal submissions for contract modifications but did not have support for the overtime approvals.

- The Marshall monitor for SAP Job 5-2, valued at about $— million, stated that she did not make a concerted effort to maintain documentation for invoicing problems she identified. She also did not have an adequate paper trail for other oversight activities she performed.

- The Goddard COTR for two Accenture time and material task orders, S-66328G and NNG04DA18D, valued at about $5.3 million, had copies of Accenture invoices she reviewed, but had no documentation to support the work performed to evaluate the accuracy of the invoices.

- The Goddard COTR for the SGT Inc. contract did not document training sessions held with the task monitors that discussed their roles and responsibilities.

Without adequate documentation, NASA had no assurance that the monitors and COTRs performed needed oversight activities, that oversight activities performed were adequate, that all monitors were properly informed of their roles, or that the contractors were meeting contractual requirements.

Invoice Oversight Processes Inadequate

The Marshall COs and Goddard and Marshall monitors did not adequately coordinate their procedures for reviewing and processing SAP invoices to ensure that SAP was paid only for work performed. SAP continually submitted questionable invoices from award inception in June 2000 through October 2004 for three of the five jobs reviewed, valued at about $14 million.

Specifically, the COs and monitors stated that they found that SAP submitted inaccurate, incomplete, and untimely invoices:

- Inaccurate and incomplete invoices. The invoices did not reflect costs for all consultants who worked on a specific job, lacked support for travel costs or reflected unreasonable travel costs, and contained labor costs for the month in question but not the associated travel costs. SAP also billed labor charges to the wrong job number, billed NASA for more labor hours than actually worked, and did not always adjust for labor rate discounts included in the contract.

- Untimely invoices. SAP invoiced NASA for services provided from August to December 2002 on February 28, 2003, and did not invoice NASA for services provided in June, July, August, and September 2003 until November 30, 2003. One CO told us that SAP sometimes submitted travel invoices as much as 6 months late. The SAP task/delivery order required invoice submissions no later than 30 days from the end of the month that services were provided and identified the format and type of information, such as consultant labor hour charges and associated travel costs, that the invoice should include.

The Marshall contract personnel rejected numerous invoices, particularly with respect to travel costs, and made repeated attempts to obtain corrected information. Specifically, the contract specialist who took over administrative functions in 2003 made an extensive effort to track and reconcile invoices, and reached an agreement with SAP, after prolonged discussions, to use fixed travel rates for billing purposes which simplified both the billing and review processes. We commend the contract specialist's significant efforts. Despite those efforts, the COs and monitors at Goddard and Marshall did not always perform adequate procedures to review, approve, and pay SAP invoices; identify and document errors; determine how questionable billings should be resolved; seek corrective actions; and maintain an adequate historical and auditable set of invoice transactions. Following are some specific examples:

- The Marshall contract specialist told us the financial records she maintained were not official but a rough summary of activity for each of the 14 jobs. Those records did not provide an adequate audit trail because the consultants' names for whom the invoices were submitted were not maintained in an orderly manner nor were the billing dates and periods for the consultants maintained in a traceable, chronological order. Based on the records and information available, we could not determine whether SAP had billed NASA properly for all labor and travel costs for all periods or whether NASA had properly paid SAP for all labor and travel charges for all periods.

- The Marshall monitor for Job 5-2 did not have a complete record of the invoice errors encountered and stated that invoice issues were sometimes verbally discussed with the COs but not documented.

- The Goddard monitor continually identified invoice errors, notified the Marshall CO and the contract specialist via e-mail of the errors, and maintained copies of the numerous e-mails sent to the Marshall CO and contract specialist documenting the invoice errors. However, we could not always determine from the e-mail dialogue or from the financial records whether those errors had been resolved and whether the corrections made were accurate.

- The Marshall COs or the contract specialist approved payment to SAP for the correct portion of invoices and advised SAP why the billed and paid amounts differed. However, as previously indicated neither the COs nor the contract specialist maintained an auditable set of invoice financial records detailing the dates and invoice numbers of the original incorrect submissions, the amounts paid, what errors existed, the correspondence to the contractor, when and if corrected invoices were resubmitted, and whether SAP made the proper corrections.

- COs and monitors did not adequately reconcile their invoice records to ensure that all necessary corrections had been properly addressed.

As a result of the lack of documentation for some errors, inadequate record keeping, and the inability to determine how or whether some errors were corrected, we could not determine the reasonableness of the $14 million that NASA paid to SAP for Jobs 5-2, 5-2-BF, and 5-11-BF. In addition, due to the inaccurate, incomplete, and untimely invoice submissions, COs and the contract specialist could not accurately determine actual job costs, budget for future expenses, and manage the contract effectively and efficiently.

Lack of Standard IEMP Contract Oversight Policy

As of August 2005, NASA did not have a standard policy or procedure for monitoring IEMP contracts. The IEM Program Management Plan states that IEMP will be managed by the IEM Program Office and that the IEM Program Office is responsible for

- setting program objectives and priorities;

- controlling module sequencing and timing;

- approving and allocating funding to projects;

- establishing a framework for conducting program business; and
- assessing program performance (such as establishing metrics, obtaining status feedback, and tracking progress).

NPR 7120.5B, "NASA Program and Project Management Processes and Requirements," November 21, 2002, states that the project manager and the CO should determine and implement the level and type of contract performance monitoring needed.[7] The contracts that we examined involved more than one IEMP module and more than one Center; therefore, the IEM Program Office should have taken an active role in establishing contract monitoring policies. However, the IEM Program Office had little control over Center IEMP contracting processes. The IEM Program manager stated that the IEM Program Office is responsible only for setting requirements for Center-specific implementation activities and that the office was never required nor staffed to exercise direct oversight of each Center's individual IEMP contracts.

The IEM Program Office policy is that Center management is held accountable for, has the responsibility for, and has the authority for the local aspects of the implementation of individual IEMP software applications. It is at the discretion of Center management to determine which local contractors are best able to support the Center. Therefore, the IEM Program Office does not participate in the selection and procurement of Center-specific implementation support services. IEM Program Office personnel stated that they are only interested in a Center's ability to meet requirements and to attain a suitable level of performance against the IEMP implementation schedule. Procurement officials at NASA's Office of Procurement stated that it was NASA Headquarters policy to allow Centers the freedom to manage contracts in a manner that is cost-effective and risk-based. Accordingly, NASA Headquarters generally provides the Centers with only top-level, essential requirements that are usually conveyed in the NFS or an NPR.

The NASA Headquarters Office of Procurement and IEM Program Office policy toward contractor oversight allows each Center to develop its own monitoring policies and procedures. That lack of a standardized Agencywide policy resulted in the following:

- Goddard and Marshall had different policies and procedures for similar activities.
- Goddard did not have any policies for key oversight activities, such as the use of monitor letters and the development of surveillance plans.

[7] NASA revised NPR 7120.5B and replaced it with 7120.5C, effective March 22, 2005. NPR 7120.5C, paragraph 3.4.6.2.d, states that "(1) The Project Manager shall ensure that adequate contract mechanisms are in place to ensure timely and complete receipt of contractor (or grantee) financial and progress reports throughout the contract life cycle[, and] (2) With the aid of the Contracting Officer (or other cognizant acquisition specialist), the Project Manager shall continually assess the performance of each contractor (or grantee). The Project Manager has a responsibility to ensure that the value of items or services received remains commensurate with the plan for funds expended."

- Goddard and Marshall implemented inconsistent contract oversight practices.

NASA's oversight policies and procedures have evolved into multiple disjointed monitoring systems. We found that COs, COTRs, and monitors at Goddard and Marshall applied different contractor oversight practices for the Accenture BPAs, the SAP task/delivery order, and SGT Task Order 68. With about $630 million in potential IEMP contract awards, the IEM Program Office and the NASA Headquarters Office of Procurement need to ensure that contractor oversight policies and procedures are consistent and coordinated among Centers. We believe that the potential for inconsistent oversight policies and practices Agencywide impedes NASA's ability to effectively and efficiently oversee IEMP-related contracts.

Summary

Successful implementation of IEMP is critical to NASA because it is the cornerstone of the Agency's ongoing transformation of its business systems and processes designed to improve fiscal and management accountability. The key to the successful implementation of IEMP is the products and services provided by NASA's two primary business partners—SAP and Accenture. Despite the criticality of IEMP to the Agency, NASA's monitoring of the contracts was informal and inadequate to ensure that IEMP products and services were procured in a satisfactory, cost-effective manner. In addition, minimal contract oversight guidance was provided by the IEM Program Office or the NASA Headquarters Office of Procurement. Formal and consistent contract oversight is essential to ensure that the remainder of IEMP is implemented successfully and economically.

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

The NASA Chief Financial Officer, with input from the Assistant Administrator for Procurement, the Executive Officer for the IEMP, and the Directors of Goddard and Marshall, provided comments on our recommendations.

Added and Revised Recommendations. At management's request, we split the recommendation that was addressed to Goddard and Marshall into two recommendations, resulting in the addition of Recommendation 3. Based on management's response, we also revised Recommendations 2.a and 3.a.

1. **The IEM Program Executive Officer and the NASA Assistant Administrator for Procurement should develop and implement standard policy to**

   a. require that contractor oversight, monitoring, and surveillance plans are consistent and coordinated among Centers administering IEMP contracts, and

Management's Response. Management concurred. The Assistant Administrator for Procurement will inform Centers administering IEMP contracts, via a Procurement Information Circular or other method of communication, that the policies in FAR Parts 37 and 46 requiring contractor oversight, monitoring, and surveillance plans must be consistently applied and coordinated amongst Centers as necessary.

Evaluation of Management's Response. Management's planned action does not meet the intent of our recommendation. The FAR Parts referred to do not contain sufficient details to ensure that Center IEMP contract oversight policies and practices are either consistent or coordinated and will not resolve the problems of Centers lacking oversight policies, having different oversight policies and procedures, or implementing oversight policies and procedures differently. NASA management should identify specific items and practices pertaining to monitoring, oversight, and surveillance of IEMP contracting actions at Goddard and Marshall instead of assuming that all Center policy makers and individuals implementing practices will interpret the FAR in the same manner. We consider the recommendation unresolved, and we request that Assistant Administrator for Procurement reconsider his position and provide additional comments on the final report.

   b. identify the type of documentation to be maintained by COTRs and job monitors and the length of time the documentation is required to be maintained.

Management's Response. Management concurred, stating that the Office of Procurement's Survey Team will review this area to ensure that COs include documentation requirements in the COTR delegation letter. The Survey Team will also ensure that COTRs are informed as to the length of time the documentation is required to be maintained.

Evaluation of Management's Response. The Office of Procurement's planned action meets the intent of the recommendation. We request that the Assistant Administrator for Procurement provide us the guidance developed by the Office of Procurement's Survey Team and the revised COTR delegation letter, once completed. The recommendation is resolved but will remain open pending our receipt and review of the guidance and revised COTR delegation letter.

2. **The Director of Goddard Space Flight Center should ensure that for every IEMP contracting action**

   a. for which the original scope of the contract changes significantly, including greatly increased dollar value or labor hours (such as occurred with SAP task/delivery order H-32946D), a COTR or a monitor is formally appointed and that the appointment letter is maintained in the contract file;

Management's Response. Goddard partially concurred with the original recommendation to appoint a COTR for every IEMP contracting action, stating that it formally appointed COTRs for each IEMP contract and maintained documentation of each appointment. However, Goddard nonconcurred with the recommendation to appoint a COTR for every IEMP contract action, stating that COTRs are not typically appointed on small purchases or delivery and/or task orders issued against GSA indefinite-quantity commercial item contracts awarded under a Federal Supply Schedule. In addition, Goddard stated that appointing a COTR for every procurement action would increase the administrative burden of awarding and documenting procurements that do not currently require COTR appointments.

Evaluation of Management's Response. We do not consider Goddard's planned actions responsive to the recommendation. However, we recognize that appointment of a COTR may not be appropriate for every contract action and, therefore, we revised the recommendation. In addition, because the CO for the GSA contract is at Marshall, not Goddard, we would consider the appointment of either a COTR or a monitor for each individual action issued against an overall contract to be appropriate and included in our revised recommendation the option of appointing a monitor. We consider the recommendation unresolved, and we request that Goddard consider appointing either a COTR or a monitor for each significant IEMP contract action and provide additional comments on the final report.

   b. job monitors, if used, are formally appointed with their duties clearly documented and that all associated documentation is maintained in the contract file;

Management's Response. Goddard partially concurred, citing the lack of Agency policy with respect to formal appointments of job monitors. However, Goddard agreed to use NASA Form 1634, "Contracting Officer Technical Representative (COTR)/Alternate COTR Delegation," to ensure that COTRs advise monitors of their duties and responsibilities.

Evaluation of Management's Response. Goddard's proposed action is responsive, and the recommendation is closed. However, we caution Goddard that COTR duties outlined on NASA Form 1634 are not redelegable; therefore, Goddard needs to ensure that monitors are not performing COTR functions. We agree that there is a lack of Agency

policy with respect to formal appointment of monitors; however, since our audit scope was limited to IEMP contracts, we did not make an Agencywide recommendation for all contracts.

c. surveillance plans are properly developed and tailored to fit the contract type and include a documented risk analysis to facilitate effective contractor surveillance activities; and

Management's Response. Goddard concurred, stating that the Goddard Procurement Officer plans to issue a notice to all procurement personnel to ensure that surveillance plans for IEMP contracts are properly developed and tailored to meet the contract type and include a documented risk analysis.

Evaluation of Management's Response. Goddard's proposed action is responsive. However, we request that Goddard provide a draft copy of the notice before it is issued so that we can determine whether it addresses the issues raised in this report. The recommendation is resolved but will remain open pending our review of the notice.

d. invoice review and documentation procedures are established, to include the requirement for contractors to resubmit invoices correcting erroneous data, that would enable contracting personnel to trace all payments back to the appropriate invoice.

Management's Response. Goddard partially concurred, agreeing that documentation should exist for all erroneous data that explains the errors and any corrective actions taken. However, Goddard did not believe a requirement should exist for contractors to resubmit invoices that contained erroneous data. Goddard did not address the part of the recommendation to establish invoice review and documentation procedures.

Evaluation of Management's Response. Management's comments are partially responsive because Goddard did not comment on the part of the recommendation to establish invoice review and documentation procedures. Therefore, the recommendation is unresolved. We request that Goddard provide additional comments in response to this final report addressing that part of the recommendation. While we understand that NASA does not require its contractors to submit corrected invoices, we believe that it is a prudent business practice and that the Centers should require it.

3. The Director of the Marshall Space Flight Center should ensure that for every IEMP contracting action

a. for which the original scope of the contract changes significantly, including greatly increased dollar value or labor hours (such as occurred with SAP task/delivery order H-32946D), a COTR is formally appointed and that the appointment letter is maintained in the contract file;

Management's Response. Marshall partially concurred, stating that it formally appointed COTRs for each IEMP contract and maintained documentation on each appointment. However, management nonconcurred with the recommendation to appoint a COTR for every IEMP contract action because COTRs are not typically appointed on delivery and/or task orders issued against GSA indefinite-quantity commercial item contracts awarded under a Federal Supply Schedule. Marshall also stated that appointing a COTR for every procurement action would increase the administrative burden of awarding and documenting procurements that do not currently require COTR appointments.

Evaluation of Management's Response. Marshall's comments are not responsive to our recommendation because Marshall did not propose any actions to correct the deficiencies discussed in the report. We agree that COTRs are not typically appointed on delivery and/or task orders issued against GSA indefinite-quantity commercial item contracts and, therefore, we revised the recommendation. In addition, we agree that labor, in and of itself, can typically be considered to be a commercial item. However, the SAP task order unexpectedly grew into 14 unilaterally awarded jobs for labor hour tasks, several of which were for work performed to develop and implement the Budget Formulation Module—not a commercial item. Therefore, we believe that Marshall management should have reviewed the totality of the project before concluding that it was merely purchasing commercial labor. The appointment of a COTR who would take such an action enhances NASA's oversight practices. Based on our revised recommendation, we request that Marshall reconsider its position in regard to future IEMP contracting actions similar to the SAP task order and provide additional comments on the final report.

b. job monitors, if used, are formally appointed with their duties clearly documented and that all associated documentation is maintained in the contract file;

Management's Response. Marshall concurred, stating that it will comply with the recommendation for procurements for which a COTR is appointed. Marshall stated that there is no formal mechanism for formally appointing a monitor unless there is a COTR appointed and a performance plan in place. The CO will ensure that contract monitors fully understand their responsibilities under the contract.

Evaluation of Management's Response. Management's planned actions are not responsive to the intent of our recommendation and will not correct the deficiencies identified in the report. Monitors should be formally appointed and their duties clearly documented to ensure effectiveness, efficiency, and accountability. Marshall's response does not take into account the degree of judgment and latitude that the FAR allows the CO. FAR Subpart 1.102-4, "Role of the Acquisition Team," states:

> If a policy or procedure is in the Government's best interest and is not specifically addressed in the FAR, nor prohibited by law, Executive Order, or other regulation, Government members of the Team should not assume it is prohibited. Rather absence of direction should be interpreted as permitting the use of sound business judgment and/or innovative techniques consistent with the law.

The FAR further states that COs should take the lead with respect to business process innovations and ensuring that business decisions are sound. Therefore, management's contention that a COTR is needed to appoint monitors is inconsistent with the FAR. Management could have exercised better business judgment with respect to oversight practices to ensure it safeguarded the Government's interests with respect to approximately $19 million of labor hour costs. In addition, NASA management should formally develop policy to appoint monitors, advise them of their responsibilities, and provide them with a minimum amount of training. A continuation form to the NASA Form 1634 would provide a formal mechanism for COTRs to formally appoint monitors. The continuation form is available for use on NASA's Virtual Procurement Office Web site; however, the Headquarters Procurement Office has not required that the continuation form be used. That increases the risk to NASA that its monitors will not be held accountable, be aware of their specific duties and responsibilities, or receive some form of training if needed. The recommendation is unresolved, and we request that Marshall reconsider its position and provide additional comments on the final report.

c. surveillance plans are properly developed and tailored to fit the contract type and include a documented risk analysis to facilitate effective contractor surveillance activities; and

Management's Response. Marshall partially concurred, stating that it developed surveillance plans for both Accenture BPAs. Marshall added that the SAP task/delivery order was awarded as a commercial item and, therefore, did not require a surveillance plan. Marshall's position is that it complied with FAR 46.102(f) requirements for commercial items that allowed the Government to rely on a contractor's existing quality assurance system as a substitute for compliance with Government inspection and testing unless customary market practices for the commercial item being purchased permit in-process inspection.

Evaluation of Management's Response. Marshall's comments are not responsive to the intent of our recommendation. The fact that Marshall required more than $19 million of largely unanticipated consulting services to adequately use the SAP "commercial item"

software clearly indicates the product in question was not a ready-to-use "off-the-shelf" commercial item. Moreover, the consulting services were acquired using labor hour contracts that pose a significant risk to the Government. Prudent business practice dictates that, at a minimum, a surveillance plan should have been prepared to address the five largest SAP jobs that totaled $16.7 million. In addition, there was no documented risk analysis performed relative to the consulting services obtained. Marshall should direct procurement personnel to ensure that surveillance plans for IEMP contracts are properly developed and tailored and updated as necessary to meet the contract type and include a documented risk analysis. The recommendation is unresolved. We request that Marshall reconsider its position and provide additional comments on the final report.

d. invoice review and documentation procedures are established, to include the requirement for contractors to resubmit invoices correcting erroneous data, that would enable contracting personnel to trace all payments back to the appropriate invoice.

Management's Response. Marshall partially concurred, stating that existing procedures were sufficient to enable personnel to trace all payments back to the appropriate invoice. Marshall agreed to issue a reminder to COs and contract specialists that the file must include the necessary traceability, particularly when correcting erroneous contractor invoices. In addition, Marshall agreed to advise COTRs to maintain a separate copy of incorrect invoices and corrections through the life of the contract.

Evaluation of Management's Response. Marshall's planned action is responsive to the recommendation. The recommendation is resolved but will remain open pending our review of the reminders sent to the COs and COTRs. However, we disagree with management's assertions that existing procedures for tracing invoice errors and corrections were adequate because we could not determine how or whether some errors were corrected and could not ascertain the validity of the $14 million that NASA paid to SAP.

FINDING B: CONTRACT MODIFICATION PRACTICES NEED IMPROVEMENT

Goddard and Marshall contracting personnel need to improve their IEMP contract modification practices. Specifically, a Goddard COTR did not ensure an existing task order with Accenture was modified or a new task order issued before allowing Accenture to continue providing IEMP services. In addition, the Marshall contract specialist for SAP task/delivery order H-32946D did not follow appropriate procedures for modifying individual jobs issued under the task/delivery order. These conditions occurred because of schedule pressures, funding control problems, and human error. As a result, we found that as of September 28, 2004, at least 5 of the 14 SAP jobs, valued at about $16.5 million, were for services not specifically funded, compromising the COs' ability to effectively manage the contract. In addition, the Goddard Associate Director for Acquisition had to approve a ratification of $1.2 million because a Goddard COTR made an unauthorized commitment to a contractor without a proper contractual instrument.

Requirements for Contract Modifications

The FAR designates the CO as the person with the authority to enter into, administer, and terminate contracts. Specifically, FAR Part 43.102 states:

> Only contracting officers acting within the scope of their authority are empowered to execute contract modifications on behalf of the Government. Other Government personnel shall not . . . (2) Act in such a manner as to cause the contractor to believe that they have authority to bind the Government; or (3) Direct or encourage the contractor to perform work that should be the subject of a contract modification.

Part of the CO's responsibility is to clearly document the final price or estimated cost and fee that have been negotiated and mutually agreed to by NASA and the contractor. NFS 1843 requires that undefinitized contract modifications[8] be issued only on an exception basis. In addition, the NASA COTR appointment letter includes a requirement that the COTR ensure that proper action has been taken to formally modify the existing contract before the contractor proceeds with any change in the services to be performed.

[8] Undefinitized contract modifications are those for which the final price or estimated cost and fee have not been negotiated and mutually agreed to by NASA and the contractor.

Contractor Services Performed Without a Contract

A Goddard COTR for Accenture time and material task order S-66328G allowed Accenture to provide services to Goddard from October 2003 through January 2004, even though the task order expired on September 30, 2003. Goddard's Associate Director for Acquisition had to ratify unauthorized commitments of $1.2 million. The request for ratification stated that issues and workload associated with Core Financial Module stabilization, fiscal year closeout and startup, and a September/October personnel transition led to human error within the Goddard IEMP Implementation Team and a delay in the formal startup of a new purchase requisition for continuation of Accenture's services. Goddard management stated that it took corrective action by establishing "Tiger Teams" to develop standard reporting across the Center and special reporting functionality for improved Centerwide visibility of funds management needed for lower level funds control. Goddard management also required the COTR to enroll in a week-long COTR training class to prevent a reoccurrence of the problem.

Improper Contract Modifications

The contract specialist for the SAP contract modified tasks and increased labor hours for jobs without requiring the contractor to submit a proposal and negotiating an estimated cost mutually agreed to by the CO and the contractor. The CO at award inception stated that the modification process worked as required during the early stages of the jobs. However, as time passed, project schedule changes and pressures to support critical system functions made it impossible to provide the contractor with enough time and information to propose a reasonable firm-fixed-price modification. Instead, the modification process for each job was driven by the amount of funding available. For example, if two of the SAP labor hour jobs required additional work and the available funds were insufficient to cover the needed work, the contract specialist determined the modification amount for each job by allocating the available funding based on the number of workdays, hours, and travel costs from prior invoices.

Effects of Improper Modification Practices

Because Marshall contracting personnel did not always follow standard contract modification procedures, the COs' could not always determine a reasonable projected value for SAP jobs. This problem was compounded because SAP submitted invoices that were often inaccurate and untimely which precluded COs from accurately determining historical costs. As a result of this unreliable financial information, the COs and contract specialist could not effectively and efficiently manage the contract.

In addition, because of the improper contract modifications, NASA allowed SAP to perform more work than the incremental contract funding allowed. As of September 28, 2004, we identified five jobs that had insufficient funds to cover NASA's actual payments to SAP. For example, Job 5-2-BF, "Information Delivery Strategy on Budget Formulation," showed total expenditures of $— million, of which only $— million was funded. The Marshall contract specialist told us that total funding for the entire SAP contract was sufficient to cover all ongoing work and stated that funds set aside for software maintenance were in place to cover the shortages until the funding designated for the specific jobs was received. Nonetheless, by allowing SAP to perform work in excess of what current funding allowed, NASA placed itself under a greater risk than necessary, both financially and contractually.

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

Added and Renumbered Recommendations. At the request of management, we split the recommendations that were addressed to Goddard and Marshall into separate recommendations, which resulted in the addition of Recommendation 3 under Finding A and the renumbering of draft Recommendation 3 under Finding B to Recommendation 4 (to Goddard) and Recommendation 5 (to Marshall).

4. **The Director of the Goddard Space Flight Center should direct contracting officers to ensure that all contract modifications are properly definitized and that all contractor services are covered by a proper contracting action before services are performed.**

Management's Response. Goddard concurred, stating it will issue a notice to all personnel within one month of final report issuance directing COs to ensure that contract personnel properly definitize all contract modifications before contractor services are performed.

Evaluation of Management's Response. Goddard's planned action is responsive to the intent of the recommendation. We request that Goddard provide us a copy of the notice to the COs. The recommendation is resolved but will remain open pending our review of the notice.

5. **The Director of the Marshall Space Flight Center should direct contracting officers to ensure that all contract modifications are properly definitized and that all contractor services are covered by a proper contracting action before services are performed.**

Management's Response. Marshall concurred, stating it will remind all COs to ensure that all contract modifications are properly definitized and all contractor services are covered by appropriate contracting actions.

Evaluation of Management's Response. The action planned by Marshall is responsive to the intent of the recommendation. We request that Marshall provide us evidence of the reminder to the COs. The recommendation is resolved but will remain open pending our review of the evidence.

Appendix A

Scope and Methodology

We conducted fieldwork primarily at Marshall and Goddard. Marshall was the Agency lead for the Core Financial Module and Goddard was the Agency lead for the Budget Formulation Module. We also identified and discussed Agencywide contract oversight policies with NASA Headquarters Office of Procurement staff. As of December 31, 2004, NASA had made 82 IEMP-related awards to 29 different contractors with a potential value of about $630 million. We evaluated NASA's contract oversight and contract administration practices for five IEMP contracts, totaling about $213.5 million (34 percent) of the $630 million. The following table shows the five contracts we reviewed and their IEMP value.

Contracts Reviewed

Contract	IEMP Value (as of March 31, 2005)
SAP task/delivery order H-32946D	$ — million
Accenture BPA NAS8-01044	— million
Accenture BPA NNM04AA17Z	— million
Science Applications International Corporation NNM04AA02C	— million
Task Order 68 for SGT Inc. Contract NAS5-03079	— million
Total	**$213.5 million**

We performed a more detailed analysis of specific jobs and tasks issued under the five contracts. To evaluate oversight controls for these jobs and tasks, we determined whether monitors were formally appointed, received guidance, and were informed of their roles and responsibilities. We also reviewed documentation supporting monitors' technical evaluations of contractor proposals and reviewed the documentation monitors used to support award-fee determinations. We also reviewed monitor practices and documentation related to the review and payment of contractor invoices.

The following is a detailed list of the specific individual jobs and tasks that we reviewed. Values shown are as of March 2005.

SAP Task/Delivery Order H-32946D

- Job 5-2, "Information Delivery Strategy Study," valued at $—, for work performed at Marshall.
- Job 5-2-BF, "Information Delivery Strategy on Budget Formulation," valued at $—, for work performed at Goddard.
- Job 5-2-BF-Global, "Information Delivery Strategy on Budget Formulation Global," valued at $—, for work performed at Marshall.
- Job 5-7, "IEMP SAP Global Support Manager," valued at $—, for work performed at Marshall.
- Job 5-11-BF, "Strategic Enterprise Management Support for Budget Formulation," valued at $—, for work performed at Goddard.

Accenture BPA NAS8-01044

- Marshall issued Task Order H-35064D for SAP Budget Formulation Implementation work that was valued at $—. Goddard was the primary location for this work, with some performance taking place at Marshall.
- Goddard Task Order S-66328G (Task Order 001) issued for Core Financial Module stabilization support at Goddard, valued at $—.
- Goddard Task Order NNG04DA18D (Task Order 002) issued for Core Financial Module and Budget Formulation Module Operations Support at Goddard, valued at $—.
- Goddard's March 24, 2004, Ratification of Unauthorized Commitments, valued at $—.

Accenture BPA NNM04AA17Z

- Task Order NNM04AA24T for work done at Marshall for the Integrated Asset Management Module Blueprinting Phase, valued at $—.

Science Applications International Corporation Contract NNM04AA02C, awarded for IEMP work done at Marshall. We limited the scope of our work for this contract because we determined that the internal controls in place as of December 2004 were satisfactory.

SGT Inc. Contract NAS5-03079. We reviewed one task order (SGT Task Order 68), valued at $— million. Goddard management initially told us that more significant IEMP work was planned for under this contract, but those plans were later canceled due to budget limitations.

To evaluate contract oversight, we met with COs, contract specialists, COTRs, and monitors for the awards selected for review and for the jobs and task orders issued under the major awards. We reviewed contract and task order documentation on file, including award modifications, contractor proposal submissions, and technical evaluations of contractor proposals. In addition, we reviewed COTR appointment letters to identify the COTRs' primary duties and responsibilities. We also reviewed monitor appointment letters and identified their roles and responsibilities. We examined the COTR and monitor procedures for invoice reviews, file documentation and maintenance of key correspondence, performance monitoring, surveillance plan development and implementation, and award-fee evaluations.

We reviewed COTR and monitor records and files to determine whether oversight actions were adequately documented. Lastly, we discussed oversight policies and procedures with Goddard, Marshall, and Headquarters procurement and acquisition personnel. The documentation we reviewed was dated from June 2000 through March 2005.

We familiarized ourselves with oversight clauses associated with the GSA contracts that NASA used to determine labor rates for the SAP task/delivery order and the Accenture BPAs. We did this in order to determine how and whether those GSA requirements impacted NASA's oversight actions.

We performed audit work from June 2004 through October 2005 in accordance with generally accepted government auditing standards. Although our initial fieldwork was completed in March 2005, discussions continued on the issues our initial work revealed.

Use of Computer-Processed Data. To assess the reliability of those data elements needed for this audit, we began by attempting to obtain a universe of IEMP contracts. The IEM Program Office advised us that a universe of contracts did not exist but did provide points of contact at each Center to enable us to develop our own universe. Because of time and resource limitations, and readily apparent deficiencies in some of the contract data we received, in some instances we developed our information using estimated and projected data. In addition, during our review of SAP invoice billings, we reviewed related documentation and interviewed Marshall procurement officials and monitors knowledgeable about the data. Due to control activity weaknesses that included a flawed record keeping process, lack of appropriate documentation, and lack of an adequate audit trail for all transactions, we could not ascertain without significant reconstruction whether all invoices were properly submitted and paid. Therefore, we determined that the data were not sufficiently reliable for the purposes of this report and we reported on this unreliability in the body of the report.

Review of Internal Controls

We identified and tested compliance with key FAR and NFS policies and procedures related to NASA's contract administration. For instance, controls reviewed and tested included the identification of CO, COTR, and monitor responsibilities; the use of monitor appointment letters; and policies and procedures related to developing and updating surveillance plans. In addition, we identified and tested management controls for review, approval, and payment of invoices as well as controls for contract modifications. We also identified and tested for requirements related to contract administration, such as the documentation needed by COs, contract specialists, COTRs, and monitors to support their oversight activities.

We identified management control weaknesses with respect to COTR and monitor appointments and responsibilities, invoice submission and resolution processes, Agencywide oversight policies, oversight documentation, and modification practices, as discussed in this report. Management's implementation of the recommendations made in this report will correct those weaknesses.

Prior Coverage

During the last 5 years, the Government Accountability Office (GAO) and the NASA Office of Inspector General (OIG) have issued many reports related to NASA's IEMP; however, none of those reports addressed contract oversight. Unrestricted GAO reports can be accessed over the Internet at http://www.gao.gov. Unrestricted NASA OIG reports can be accessed at http://www.hq.nasa.gov/office/oig/hq/audits/reports/FY06/index.html.

Management Comments

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

December 8, 2005

Reply to Attn of: Office of the Chief Financial Officer

TO: Assistant Inspector General for Auditing

FROM: Chief Financial Officer

SUBJECT: Management Response to Draft Audit Report, "Integrated Enterprise Management Program Contract Oversight Needs Improvement," (Assignment Number: A-04-032-01)

Thank you for the opportunity to respond to your letter of November 1, 2005, which transmitted subject report. Enclosed you will find management's response to each of the recommendations set forth in this report. Inputs have been provided by the Assistant Administrator for Procurement, the Executive Officer for Integrated Enterprise Management Program (IEMP), and the NASA Center Directors from Marshall Space Flight Center (MSFC) and, for Goddard Space Flight Center (GSFC). For tracking purposes, GSFC and MSFC have requested that each recommendation be separated by Center, to facilitate the independent closure of these recommendations.

Separated and renumbered.

Recommendation 1:

The IEMP Executive Officer and the NASA Assistant Administrator for Procurement should develop and implement standard policy to:

A. Require that contractor oversight, monitoring and surveillance plans are consistent and coordinated among Centers administering IEMP contracts.

Concur. Policy requiring contractor oversight, monitoring and surveillance plans currently exists in FAR Parts 37 and 46. The Headquarters Office of Procurement will ensure via Procurement Information Circular (PIC) or other method of communication that this process is consistent and coordinated among Centers administering IEMP contracts. The PIC (or other method of communication) will be transmitted NLT January 31, 2006.

Corrective Action Official: LH000/Thomas Luedtke
Projected Closure Date: January 31, 2006

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B. Identify the type of documentation to be maintained by COTRs and job monitors and the length of time the documentation is required to be maintained.

Concur. In accordance with NFS 1842.270, contracting officers may appoint a qualified Government employee to act as their representative in managing the technical aspects of a particular contract. Specific documentation requirements that may be delegated to the Contracting Officer's Technical Representative (COTR) vary from contract to contract depending upon the complexity, terms and conditions. COTRs and job monitors are appraised of their responsibilities upon receipt and acceptance of the NASA Form 1634, Contracting Officer Technical Representative (COTR) Delegation. This delegation provides a detailed listing of the required duties and responsibilities. Further, COTRs and job monitors must document contractor performance on a regular basis for purposes of past performance evaluation and when applicable, award/incentive fee evaluations. The Office of Procurement Survey Team will review this area to insure that when the contracting officer identifies a COTR on a contract, they include documentation requirements with their delegation. Additionally, they will check to verify the COTRs are informed as to the length of time the documentation is required to be maintained. **Request this recommendation be considered closed for reporting purposes.**

Separated and renumbered (2 to Goddard, 3 to Marshall).

Recommendation 2:

The Directors of the Goddard Space Flight Center and the Marshall Space Flight Center should ensure that for every IEMP contracting action:

A. A COTR is formally appointed and that the appointment letter is maintained in the contract file.

MSFC Response: We concur to formally appoint a COTR and maintain the official appointment letter in the contract file for procurements for which the appointment of a COTR is appropriate. A COTR was appointed on both Accenture Blanket Purchasing Agreements (BPAs) awards, with monitors officially appointed by the COTR, in accordance with ISO 9000-approved Marshal Work Instruction (MWI) 5116.1. We will ensure that a copy of the appointment letter is maintained in the official file.

We non-concur in the appointment of a COTR for every IEMP contract action. Separate jobs and individual task orders awarded against BPAs should not require individual COTR appointments (the COTR appointments occur at the BPA level). Further, COTRs are not typically appointed on small purchases or delivery and/or task orders issued against General Services Administration (GSA) Indefinite Quantity commercial item contracts awarded under the Federal Supply Schedule (FSS), Multiple Award Schedule (MAS) program. A requirement to appoint a COTR for every procurement action would significantly increase the administrative burden of awarding and documenting procurements that do not presently require COTR appointments.

Corrective Action Official: PS01/Stephen Beale
Corrective Action Closure Official: DE01/Robin Henderson
Projected Closure Date: February 28, 2006

GSFC Response: Partially Concur. GSFC has formally appointed COTRs for each IEMP contract and documented the files with the official appointment letters and will ensure that future IEMP contracts are documented. We do not concur with appointing a COTR for every IEMP contract action. Separate jobs and individual task orders awarded against BPAs should not require individual COTR appointments (the COTR appointments occur at the BPAs level). Further, COTRs are not typically appointed on small purchases or delivery order and/or task orders issued against GSA Indefinite Quantity commercial item contracts awarded under the FSS, MAS program. A requirement to appoint a COTR for every procurement action would significantly increase the administrative burden of awarding and documenting procurements that do not presently require COTR appointments. **We consider this recommendation closed for reporting purposes.**

B. **Job monitors, if used, are formally appointed with their duties clearly documented and that all associated documentation is maintained in the contract file.**

MSFC Response: We concur with this recommendation for procurements where a COTR will be appointed. There is, at this time, no mechanism for "formally" appointing a monitor unless there is a COTR appointed and there is a performance plan in place. Monitors were officially appointed by the COTR, in accordance with ISO 9000-approved MWI 5116.1. The Contracting Officer will ensure that contract monitors fully understand their responsibilities under the contract. The Procurement Officer will also advise contracting officers that a copy of the monitor's appointment letters, as defined in MWI 5116.1, be maintained in the official contract file.

Corrective Action Official: PS01/Stephen Beale
Corrective Action Closure Official: DE01/Robin Henderson
Projected Closure Date: February 28, 2006

GSFC Response: Partially Concur. NASA currently has no Agency policy to formally appoint job monitors. Job monitors are appointed at the discretion of the Contracting Officer's Technical Representative (COTR). The COTR ensures that the job monitors fully understand their duties and responsibilities under the contract. We will ensure that the COTR has, in fact, advised job monitors of their duties and responsibilities by placing NF1634 Continuation Forms in the contract file.

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The GSFC Procurement Officer will notify all procurement personnel within 1 month of final report issuance advising them to place these forms in the contract file. We do not concur with formally appointing job monitors for every IEMP contracting action.

Corrective Action Official: Code 200.0/Valorie Burr
Projected Closure Date: January 31, 2006

C. **Surveillance plans are properly developed and tailored to fit the contract type and include a documented risk analysis to facilitate effective contractor surveillance activities.**

MSFC Response: We partially concur with this recommendation. Performance evaluation plans were prepared for both Accenture BPAs since the performance incentive provision of the GSA contract was invoked against all firm-fixed price task orders issued against the BPAs. Performance evaluation plans will be updated as necessary in accordance with ISO 9000-certified MWI 5116.1, "Evaluation of Contractor Performance under Contracts with Award Fee Provisions." We feel like this provides NASA with a sufficient amount of oversight.

We do not agree, however, that the Systems, Applications, and Products task/delivery order requires a surveillance plan. Because this contract was awarded as a commercial item under the GSA Federal Schedule and included all appropriate contract clauses, the need for a surveillance plan is disputed. FAR 46.102 (f), states that contracts for commercial items shall rely on a contractor's existing quality assurance system as a substitute for compliance with Government inspection and testing before tender for acceptance unless customary market practices for the commercial item being acquired permit in-process inspection.

Corrective Action Official: PS01/Stephen Beale
Corrective Action Closure Official: DE01/Robin Henderson
Projected Closure Date: February 28, 2006

GSFC Response: Concur. The GSFC Procurement Officer will issue a notice to all procurement personnel within 1 month of final report issuance to ensure that surveillance plans for IEMP contracts are properly developed and tailored to fit the contract type and include a documented risk analysis.

Corrective Action Official: Code 200.0/Valorie Burr
Projected Closure Date: January 31, 2006

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D. Invoice review and documentation procedures are established to include the requirement for contractors to resubmit invoices correcting erroneous data that would enable contracting personnel to trace all payments back to the appropriate invoice.

MSFC Response: We partially concur with this recommendation. We believe that our existing procedures are sufficient to enable personnel to trace all payments back to the appropriate invoice. However, we agree to issue a reminder to contracting officers and contract specialists that the file should provide clear traceability of all invoice approvals/disapprovals, particularly when making corrections to invoices erroneously submitted by contractors. Even though all official documentation will be maintained in the official contract file, we further agree to advise COTRs that it would be to their benefit to maintain a separate copy of this documentation until the contract period of performance has ended, specifically on invoices that are disapproved.

Corrective Action Official: PS01/Stephen Beale
Corrective Action Closure Official: DE01/Robin Henderson
Projected Closure Date: February 28, 2006

GSFC Response: Partially Concur. GSFC concurs that there should be documentation for all invoices containing erroneous data that explains the errors and any corrective action taken. We do not concur that contractors be required to resubmit invoices correcting erroneous data. The GSFC Procurement Officer will issue a notice to all procurement personnel within 1 month of final report issuance reminding them to maintain

Corrective Action Official: Code 200.0/Valorie Burr
Projected Closure Date: January 31, 2006

Recommendation 3:

The Directors of the Goddard Space Flight Center and the Marshall Space Flight Center should direct contracting officers to ensure that all contract modifications are properly definitized and that all contractor services are covered by a proper contracting action before services are performed.

Separated and renumbered (4 to Goddard, 5 to Marshall).

MSFC Response: Concur. The Procurement Officer will remind all contracting officers that they should ensure that all contract modifications are properly definitized and contracting services are covered by the appropriate contracting action.

Corrective Action Official: PS01/Stephen Beale
Corrective Action Closure Official: DE01/Robin Henderson
Projected Closure Date: February 28, 2006

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GSFC Response: Concur. The GSFC Procurement Officer will issue a notice to all procurement personnel within 1 month of final report issuance reminding them that they should ensure that all contract modifications are properly definitized before contractor services are performed.

Corrective Action Official: Code 200.0/Valorie Burr
Projected Closure Date: January 31, 2006

The enclosed information is provided as a back up and represents MSFC's full text response to this report. If you have any questions regarding this letter, please contact Ms. Ermerdene Lee, the Director for Office of Quality Assurance, at (202) 358-4529 or Mr. Thomas Green, the OCFO's Audit Liaison Representative, at (202) 358-5147.

Gwendolyn Sykes

* Enclosure

cc:
Office of the Chief Financial Officer/Mr. Bowie
Integrated Enterprise Management Program/Mr. German
Assistant Administrator for Procurement/Mr. Luedtke

Directors, NASA Centers
Goddard Space Flight Center/Dr. Weiler
Marshall Space Flight Center/Mr. King

*Enclosure omitted because of length. Contact NASA OIG for full text of comments.

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FEBRUARY 6, 2006

AUDIT REPORT NO. IG-06-003-R

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