

# Procurement Management Survey Report

# NASA MANAGEMENT OFFICE

# for the

# JET PROPULSION LABORATORY

and the

# APPLIED PHYSICS LABORATORY

August 4 - 8, 2008

OFFICE OF PROCUREMENT HEADQUARTERS

# WASHINGTON, D.C.

## PREFACE

The NASA Headquarters Office of Procurement conducted the Procurement Management Survey at the NASA Management Office for the Jet Propulsion Laboratory and the Applied Physics Laboratory under the authority of NASA Procedures and Guidelines 1000.3, The NASA Organization. The survey was conducted from August 4 through 8, 2008. The report contains the strengths, weaknesses, and considerations identified during the survey.

An exit briefing was held on August 8, 2008, to discuss the survey findings.

This report serves as a basis, in part, for fulfilling internal control requirements in accordance with the Federal Manager's Financial Integrity Act of 1982 (P.L. 97-255).

Ronald W. Backes, Manager Procurement Management Survey Program Office of Procurement Analysis Division

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# SECTION I OVERVIEW

#### 1. General

The NASA Management Office (NMO) is a NASA Headquarters resident organization whose mission is to optimize the capabilities of the Jet Propulsion Laboratory (JPL), Applied Physics Laboratory (APL), and Deep Space Network (DSN) to enable scientific discovery and space exploration. The NMO Contract Management Section (CMS) provides contract management, oversight, and liaison support for NASA Headquarters.

The Jet Propulsion Laboratory is a Government-Owned Contractor-Operated (GOCO) facility that is a Federally Funded Research and Development Center (FFRDC). JPL is operated by the California Institute of Technology (CalTech) pursuant to the terms of a contract administered by the NMO. JPL missions include a Mars program, a solar system program, two space telescopes, nine spacecraft, and seven instruments in operation across the solar system, supported by the Deep Space Network, which provides the communication link between spacecraft and the ground. JPL also conducts research on global warming and the physics of global change including a search for novel energy sources to replace fossil fuels. Additional technologies are developed for non-NASA sponsors. JPL performs research and analyses funded by NASA Mission Directorates and other governmental and commercial reimbursable customers. Work performed by JPL is ordered through one indefinite delivery indefinite quantity (IDIQ) cost-plus award fee contract.

The APL is a University Affiliated Research Center (UARC) sponsored by the U.S. Navy. As a not-for-profit Research and Development division of the Johns Hopkins University, APL's vision is to advance the knowledge and use of space for the benefit of all humankind. APL supports NASA planetary missions including Living with a Star, Mercury Surface, Space Environment, Geochemistry and Ranging, Solar Terrestrial Relations Observatory, Pluto-Kuiper Belt/New Horizons, and Cassini/Magnetometer Imaging Instrument. The NASA Management Office established a presence at the APL in November 2005 to administer all contracts between NASA and the APL. In May 2006, the NMO at APL and the NMO at JPL were integrated into one office. The NMO at APL is responsible for administering three existing contracts transferred from the Goddard Space Flight Center in addition to the Aerospace Research, Development, and Engineering Support (ARDES) contract awarded in September 2006.

The Deep Space Network provides the two-way communications link that guides and controls spacecraft and brings back images and other scientific data they collect. The DSN consists of facilities strategically placed on three continents. It is managed and operated for NASA by JPL. The NMO CMS administers the international agreements supporting the operation of the DSN.

#### 2. Survey Process and Results

The NASA Management Office is providing meaningful support to its technical and program customers. Within this office, the Contract Management Section oversees all procurement activity. The Procurement Management Survey team interviewed a randomly-selected group of representatives from the technical community to obtain feedback and identify issues or concerns regarding the effectiveness of the NMO CMS. The individuals interviewed generally expressed satisfaction with the procurement process. Additionally, interviews were conducted with various members of the NMO CMS to determine the internal perception of the effectiveness of the organization. Individuals interviewed represented all grade levels with a wide range of tenure. The general perception from members of the NMO CMS was that things are going well. There is a remarkable uptick with the announcement of a permanent Procurement Officer in lieu of rotational assignments. Some concern was evident regarding the relationship of JPL personnel with Headquarters personnel and of the potential for conflicts of interest.

The Procurement Management Survey consists of two primary components 1) interviews with technical, procurement, and legal personnel regarding the effectiveness of the NMO CMS and 2) compliance reviews of contracting actions with a focus on adherence to procurement statutes, regulations, and procedures. The compliance portion of the survey emphasizes systemic procurement processes rather than individual file anomalies. Current procurement innovations, both Agency-wide and Center-specific, are also reviewed.

The results of both the interviews and the compliance reviews are compiled into narrative summaries that identify strengths, weaknesses, and areas of consideration. Strengths are defined as best practices utilized in support of the procurement system. Weaknesses are defined as problems, usually systemic, that require actions to improve processes and/or procedures. Considerations are defined as issues that if not addressed could turn into problems that are not necessarily systemic but should be addressed or would result in better business practices if addressed.

The exit conference at the conclusion of the survey consisted of a direct exchange of observations and ideas between the survey team members and the NMO leadership. To emphasize Center ownership of the resolution of any identified weaknesses or considerations, the survey follow-up process focuses on actions or initiatives undertaken by the Center to address survey findings. At an appropriate interval (approximately six months after this report is issued) the NASA Management Office Procurement Officer will brief the Assistant Administrator for Procurement and the survey manager on Center achievements in these areas.

The NMO CMS strengths are summarized below:

- employee professional development
- managing contract-level deliverables
- subcontract review, consent, and oversight
- collection and presentation of contract performance information
- managing contract scope
- resolving audits

- managing task order costs
- awarding international agreements in support of the DSN
- effectively implementing the Contract Management Module (CMM)
- overall high quality of file documentation in support of the APL

NMO CMS needs improvement in the following areas:

- maintaining complete procurement training files
- ensuring effective technical monitor controls
- submitting self-assessment reports to NASA Headquarters
- tracking task-level deliverables
- completing contractor performance evaluations in PPDB
- providing timely award fee determinations
- submitting A-133 audit resolution to the Headquarters Office of Procurement and the Headquarters Office of the Inspector General (OIG)
- exercising task order options, and
- obtaining approval for continued use and need for the FFRDC

The NMO must implement a corrective action plan to remedy each of these weaknesses as part of the self-assessment process. In addition, a brief status on the corrective actions for significant and/or systemic weaknesses must be included in the annual one-on-one presentation scheduled approximately six months following the publication of this report.

To promote the exchange of successful lessons learned and innovative procurement methodologies between Centers, the team sought to identify NMO processes and initiatives that may be beneficial to procurement personnel throughout NASA. The survey team also sought to identify suggested approaches utilized by other Centers that may be beneficial to the NMO CMS.

The following item was identified as an Agency model or best practice:

• Aerospace Research, Development, and Engineering Support (ARDES) justification and approval for other than full and open competition (JOFOC)

The exit conference at the conclusion of the survey consisted of a direct exchange of observations and ideas among the survey team members, the NMO leadership, and the NMO CMS personnel.

#### 3. Survey Team Membership

Below is a list of team members and the areas they reviewed:

#### RON BACKES, HQ, Manager

Organization Structure and Staffing, Personnel Interviews (1102 and Technical), COTR Delegation and Training, Contract Management Module

#### YOLANDE HARDEN, HQ

Applied Physics Laboratory Review (Lead)

#### MAXINE BATINA, LaRC

Self-Assessment Program, Award Fee and Incentive Fee Administration, Exercise of Options, Interagency Agreements

#### JERRY EDMONDS, HQ

Applied Physics Laboratory review

#### RACHEL KHATTAB, ARC

1102 Career Development and Training, Deviations and Waiver, Tracking Data Requirements List Items, International Agreements

#### **ROBERT LISY, GRC**

Financial Management Reporting – NF-533, Cost/Price Analysis and NF-634 Structured Fee Approach, Technical Evaluations, Audit Follow-Up

#### DON MOSES, HQ

Metrics Review and Documentation, Internal Policies and Procedures, Master Buy Plan Actions, JPL Task Order Administration, FFRDC Continued Use and Need

#### MARIANNE SHELLEY, ARC

Contractor Safety Requirements, Contractor Performance Evaluation – NF-1680, Subcontracting Plan Administration and Subcontract Consent, Contract Closeout

#### 4. Survey Support

The survey could not have been accomplished successfully without the support of **Cheryll Williams.** 

## **SECTION II**

# **ORGANIZATION – MANAGEMENT**

#### 1. Organization Structure and Staffing

The NMO is staffed by NASA Headquarters civil servants responsible for award and administration of NASA's JPL contract with CalTech, APL contracts with Johns Hopkins University, and several international agreements for operation of the Deep Space Network. The 28 NMO staff members are sited at two locations: 25 at JPL and 3 at APL. The NMO includes a mix of technical personnel, environmental specialists, property managers, legal staff, contracting officers, and analysts.

The NMO CMS comprises half of the NMO staff, and is made up of a Procurement Officer, ten warranted contracting officers, four analysts, and a secretary. The NMO CMS is organized into four offices. Three of the offices Contract Management, Task Order Management, and Policy and Analysis are in close proximity to JPL, which is located in Pasadena, California. A fourth office, the APL Contract Management Office, is located in close proximity to the APL located in Laurel, Maryland. The NMO CMS has experienced some turnover since the previous survey in July 2005 including three rotational Procurement Officers and several retirements and new hires. In July 2008, the Procurement Officer position was filled on a permanent basis. This is reported as having a positive impact on staff and customers alike.

#### 2. Personnel Interviews

#### **Procurement Staff Interviews**

Interviews were conducted with the majority of the NMO procurement workforce to gain insight into the effectiveness of the procurement organization. Interviewees varied from the most junior levels to senior personnel with more than 30 years of procurement experience. They included contract specialists, contracting officers, policy analysts, team leads, and office chiefs.

During the previous survey, employees expressed concern that as new employees are hired or people leave the organization knowledge sharing and transfer and the ability to fluently transition workload in a meaningful way was not managed well. Interviewees during the current survey indicate increased knowledge sharing and better managed workload transitions.

The general perception within the procurement organization is that things are going well and that they are getting better. The selection of a permanent Procurement Officer has brought a sense of stability and has lent more credibility to the NMO CMS. There is some lingering concern about a lack of discipline in the process in dealing with JPL, but this is improving.

Morale is reported as average to good and getting better. Off-site teaming exercises, improved communication between management and the workforce, recent promotion opportunities, and social events are reported as having a positive impact. The hands-on management style of NMO

leadership is perceived as positive. There is a sense of pressure to support CalTech in JPL operations, and some employees report feeling marginalized. There is a sense of a lack of support from NASA Headquarters to support decisions made by NMO personnel.

Workload is reported as heavy but manageable. There is a sense that workload is distributed unevenly across the organization. A lack of recent workload reviews contributes to this perception. Workload at the NMO consists of contract and task order administration, policy, and training as well as planning activities for the next contract. A process change from JPLperformed contracting functions (e.g., preparing modifications, conducting negotiations) to NMO-performed contracting functions has added a level of complexity to the work. A number of employees expressed frustration at obtaining technical evaluations from program executives at NASA Headquarters and reported that some were non-responsive to efforts at communication. Several employees expressed that they lack insight into the work for long-range planning. Most actions are accomplished in a reactive mode with minimal foresight into actions forecast longer than three months. Work is seen as routine and transactional.

Communication within the NMO is a challenge in the relatively small office. Employees report a sense of being autonomous with knowledge sharing occurring when one contracting officer transfers work to another. New employees tend to be baptized by fire. Communications with management are reported as highly effective. Staff meetings and brown bags are used to share information within the organization to some success. The limited number of personnel and specialized areas of expertise limits availability of back-up support. Different leadership styles of rotational Procurement Officers have resulted in inconsistent levels of internal communication within the CMS. The NMO leadership is reported as providing outstanding communications.

Customer relations are reported as good. Interaction with Headquarters Exploration Systems Mission Directorate program executives could be improved. Interviewees reported that customers tend to interact with JPL directly rather than with NMO personnel. NMO tends to work with resource managers for funding and with program executives on obtaining technical evaluations on the projects that the program executive worked with JPL personnel to develop. Several NMO CMS personnel reported feeling disengaged from the projects they support. They feel they provide a clerical or administrative service but are not really involved in projects. A common complaint is that NASA Headquarters treats JPL employees as if they were Government employees, not maintaining the arms-length relationship. NMO CMS personnel feel they are perceived as obstacles, rather than as members of the project team. JPL tends to be engaged directly in lieu of NMO personnel. Reimbursable work performed by JPL on behalf of non-NASA customers is also perceived as creating risk of undermining the arms-length relationship.

Relations with the legal office are reported as good. NMO staff attorneys are very good about following-up, conducting extensive and thorough legal research, and providing contracting personnel with options.

Interfaces with JPL are reported as congenial. Contentious issues arise from time to time but are worked through professionally. The relationship is characterized as fair but firm and always arms length. There are concerns that JPL personnel leverage their positions as part of an outside

entity so that they can avoid NMO CMS management oversight and activities. JPL personnel's close relations with NASA customers have a tendency to undermine NMO-JPL relations. This is more pronounced at the working level. Mid-level management through senior leadership report good relations with their peers at JPL.

Training opportunities are reported as adequate; limited by the small size of the staff and unavailability of back-up. Some personnel expressed a desire for more local courses. NMO leadership is highly supportive of training. Most employees report developing Individual Development Plans (IDPs) with the Procurement Officer but were not sure if the plans were up to date.

NMO CMS management is seen as providing meaningful feedback and support. Awards are seen as fair, and employees report feeling appreciated. NMO leadership is perceived as creating a highly-supportive work environment.

Communications with the Headquarters Office of Procurement are reported as effective and improved. There are no reported barriers to communication. There is a sense of having an advocate for the NMO CMS with the assignment of a policy analyst. Some communication challenges are reported with the Office of Small Business Programs. Improved coordination with Headquarters customers is needed.

#### **Technical and Customer Interviews**

The survey team interviewed representatives from technical organizations within NASA Headquarters regarding the effectiveness of, and their level of satisfaction with, the NMO CMS. Interviewees represented various programs and projects at the Agency and included representatives from mission support organizations and major projects. Interviewees ranged from 16 to 21 years of experience working with NASA and the NMO. During the survey window, the NMO was realigned from the Science Mission Directorate to the Office of Program and Institutional Integration. Several interviewees touched on some disruption caused by the organizational transition.

Customer relationships with the NMO CMS are reported as good to outstanding. Frequent interactions on major issues are effective. Regular communications between program executives, project managers, contracting officers, and others keep information flowing smoothly. Some interviewees would like to see closer NMO involvement with APL-related issues.

The NMO CMS involvement in acquisition planning is reported as "hit-and-miss." There are real challenges for the relatively small number of NMO CMS employees to oversee JPL processes. JPL personnel work closely with end-users, often pre-empting NMO CMS participation. There is a sense that the NMO CMS is not equipped to maintain an effective arms-length relationship. Program executive training conducted by NMO CMS was well received and effective at communicating important points in managing JPL-NASA relationships.

The NMO CMS is perceived as responsive, providing timely support. Customers report some delays in processing actions with APL; however, the perception of "in Procurement's in-box" is generally not borne out. Most problems trace back to incomplete requirements and evaluation documentation. The relationship between the APL and NASA leadership is reported as challenging because APL tends to call directly upon NASA leadership rather than work through issues at the contracting officer or Procurement Officer level. Leadership changes have not impacted the customers' experience. There is a sense that previously strained relations with JPL on budget and resource issues have been largely resolved and that JPL management is more open with information and willing to work with the NMO CMS in a partnership-style of relationship.

The JPL contract is seen as an effective contract vehicle resulting in high-quality performance. The evaluation process for award fee assessments is perceived as producing a high volume of meaningful data that grants significant insight into performance issues. Problems identified through the award fee process, particularly at the interim evaluation stage, receive prompt attention by JPL. Several customers, however, expressed concern about the degree of input they have into the process and their limited ability to impact fee because of a dilution of their input.

Several areas suggested for the NMO CMS to focus on improving future performance include the need to scrub requirements for the new contract to ensure the contract has the proper scope, to enhance communication between the NMO and the JPL management team, and to increase communication with customers regarding on-going tasks. Several interviewees recommended expanding that initiative and providing more in-depth training about how to manage procurement actions. A number of interviewees recommended hiring additional staff at APL.

Overall, the NMO CMS is viewed as very effective. Short-term leadership rotations have been disruptive, but the individuals in those positions performed well in the time they were at the NMO. The selection of a permanent Procurement Officer is seen as a positive development.

#### 3. Metrics Review and Documentation

The NMO CMS provided metrics to the survey team for review, which included awards pending release in CMM, purchase requests with expiring funds, uncosted and undistributed obligations, purchase request status, and end of year actions with final action completion dates before the end of the fiscal year. These metrics, of which most of the data was originally extrapolated from the NASA Business Warehouse, help to ensure that JPL and the NMO operate at low risk. The NMO CMS also has the necessary metric in place to better ensure that it meets the NASA target of costing current year funds within twenty-four months.

The NMO CMS did not provide workload or performance metrics. The CMS lead analysts and the Headquarters Office of Procurement agreed to examine metrics used by other Centers to determine their applicability to the unique operation of the NMO CMS and to identify other metrics that may be useful to assess workload and performance.

#### 4. Contracting Officer Technical Representative Delegation and Training

The NMO JPL contract has one delegated COTR. The COTR maintains a current certification, has completed the required basic and refresher training, and has received a letter of delegation from the contracting officer establishing his authority under the contract. Because of the size, complexity, and visibility of the JPL contract, the COTR is in a senior leadership position within the NMO organizational structure. The Procurement Officer reports directly to the COTR within the NMO chain of command. Although there was no indication of actual improper influence, there is a potential risk of undermining the independence of the contracting officer's judgment and an appearance of an organizational conflict of interest.

Additionally, under the delegation, and pursuant to NFS 1842.270, the COTR manages technical aspects of the contract. As of the date of the survey, the JPL contract consists of 246 active task orders with a potential value of \$4.1 billion. The NFS prohibits the re-delegation of COTR responsibilities, but permits the COTR to receive assistance for the purpose of monitoring contractor performance and gathering information. Under the circumstances, the COTR on the JPL contract must rely extensively on assistance from the project office for which task orders are awarded. There is no standard process in place for technical assistance responsibilities performed at the project level.

A number of task orders reviewed identified an individual other than the COTR as authorized to provide technical direction to JPL. Contract section C-1(d), "Technical Direction and Guidance," states, "Technical direction shall be provided in accordance with NFS clause 1852.242-70, 'Technical Direction.' Technical monitors may also be designated by NASA for specific tasks placed under the Contract." Contract clause 1852.242-70, "Technical Direction," states, "Performance of the work under this contract is subject to the written technical direction of the Contracting Officer Technical Representative (COTR), who shall be specifically appointed by the contracting officer in writing …" The clause defines the term "technical direction," bounds the authority of the COTR to provide technical direction. COTR authority is delegated using NASA Form (NF)-1634, which states in paragraph 2, "The duties of this letter are not redelegable." The delegation by the contracting officer through task order or modification represents a delegation of a COTR function to an individual other than the COTR with no evident controls for the qualifications of the individual to perform the functions and no clear bounds of contractual authority.

#### **CONSIDERATION:**

The NMO should re-assess the assignment of COTR responsibilities and consider delegating authority to more than one COTR to focus on the day-to-day management of the contracted effort.

#### WEAKNESS:

The NMO, in coordination with the Headquarters Office of Procurement, shall assess the effectiveness of the current COTR and technical monitor delegation roles and

responsibilities. The NMO CMS shall implement a plan to standardize performance monitoring and to manage technical monitors at the task order level.

#### 5. 1102 Career Development and Training

The survey team examined NMO CMS training files and conducted interviews with procurement personnel and the NMO CMS training coordinator. The training coordinator is responsible for overseeing the 1102 training program. She maintains a database containing the Federal Acquisition Certification in Contracting (FAC-C) certifications, CON courses completed, and Continuous Learning Points (CLP) earned for the 1102 workforce at the NMO CMS. This database indicates that all of the 1102 personnel at the NMO have received their FAC-Cs at the appropriate certification levels for their grade and length of service. A review of the backup documentation revealed that the training coordinator does not have copies of each employee's FAC-C certification in the training files.

The training coordinator is working closely with each 1102 to document CLPs. While some employees may easily earn the required 80 CLPs during the required two-year period, for others it is harder to achieve. Classroom training, participation in procurement surveys, and attendance at procurement conferences and National Contract Management Association meetings are good ways to earn CLPs. The training coordinator is exploring alternatives for those unable to travel. For example, the NMO CMS has developed a standard operating procedure for employee mentoring. On-line courses are another alternative to resident courses. The training coordinator is also working on documenting employee rotational assignments at APL for CLP credit. She is working to ensure training gets recorded appropriately in the Satern system.

Individual Development Plans are maintained in the personnel files in the NMO Director's office. The personnel files contain most employees' IDPs; however, they are not all current. Training needs and plans are discussed with NMO supervisors during the performance evaluation process. NMO CMS employees are generally satisfied with the availability and applicability of training opportunities offered; they report full management support to pursue those opportunities within the available budget.

#### **STRENGTH:**

The NMO CMS is commended for having an effective system to manage the FAC-C and continuous learning programs. The NMO CMS is especially commended for ensuring that all 1102 personnel have received FAC-C certification.

#### WEAKNESS:

The NMO CMS shall ensure that copies of course completion certificates, Individual Development Plans, and FAC-C certificates issued are maintained in the Center procurement training coordinator files.

#### 6. Self-Assessment Program

The NMO CMS conducts self-assessment reviews on a semi-annual basis. The procedures in the NASA Self-Assessment Guide are used to review functions performed in the organization and to review the effectiveness of corrective actions implemented as a result of the previous Procurement Management Surveys. The NASA Management Office self-assessment review process reflects the importance of identifying weaknesses and implementing actions to correct the weakness. After a self-assessment review has been conducted, the Procurement Officer meets with management staff to discuss the findings and to determine if corrective action is needed. The findings are sent by email to the staff for review. A staff meeting is conducted to discuss the self-assessment findings and gather input for corrective action and a disposition report is prepared to document the corrective action.

The self-assessment reports for the survey period are thorough and well organized. They include sections covering organization and management, the JPL prime contract, and other issues. The self-assessment reports identify strengths, weaknesses, and considerations. The self-assessment reports are maintained by the NMO CMS in a file that has all of the reviews beginning with January 2005, has disposition reports of self-assessment findings, and has a copy of the previous Procurement Management Survey with the NMO CMS response to the findings. Since the last Procurement Management Survey in July 2005, two self-assessment reviews were not conducted. The self-assessment file contains a waiver, signed by the Procurement Officer, to delay the self-assessment review in order to focus on the conversion to the Contract Management Module and to provide additional contracting support that was needed at NMO APL location. The self-assessment review process has been expanded to include a March 2008 self-assessment baseline review at the NMO APL. Self-assessment reports have not been transmitted to the Headquarters Office of Procurement as required by the Self-Assessment Guide.

#### WEAKNESS:

The NMO CMS shall provide self-assessment reports to NASA Headquarters pursuant to the NASA Self-Assessment Guide.

#### 7. Internal Policies and Procedures

The survey team reviewed NMO CMS Internal Policy and Procedures for compliance with FAR 1.3. This topic was not reviewed during the 2005 survey. The NMO CMS established its Policy and Analysis Division on or about September 2007. The survey team reviewed the 12 NMO CMS standard operating procedures (SOPs) posted on the NMO Intranet.

In general, the SOPs are comprehensive and consistent with the FAR and the NFS. The SOPs do not unnecessarily duplicate FAR or NFS language and are assessable to all NMO CMS staff via the NMO Intranet. The "Processing Direct Task Order on the JPL Contract" SOP is very comprehensive and quite effective when followed. The SOP requires that contracting officers conduct a work scope review and ensure the task plan falls within one of the 11 disciplines cited in the prime contract work statement. An interview with NMO CMS staff revealed that contracting officers, when necessary, have challenged JPL on task plan work scope compliance.

The survey team review of the task order files indicated that all task plans awarded fall within the general scope of the contract.

NMO CMS has not established screening or review procedures for SOPs to ensure continuous consistency and compliance with FAR Part 1. NMO CMS staff plan to implement annual reviews of SOPs to meet the FAR 1.304 requirement.

#### **STRENGTH:**

The Processing Direct Task Orders SOP is very comprehensive and provides NMO CMS contracting officers with extensive step-by-step instructions on how to effectively process new task plans and task plan revisions involving changes in work scope.

#### **CONSIDERATIONS:**

- 1. For the Reimbursable Process SOP, the NMO CMS should specify that there are annual changes to the Direct Research and Discretionary Fund (DRDF) fee rate and the rate for contributions to the award fee pool charged to co-sponsors for reimbursable work in excess of \$250,000. It should also specify a web site or other source where the most up-to-date rates can be found (e.g., http://webdev4/fee as used to determine G&A charge).
- 2. The NMO CMS should consider setting up periodic reviews of SOPs to ensure compliance with FAR 1.304 formal review procedures.

## **SECTION III**

# PRE-AWARD PROCESSES AND DOCUMENTATION

#### 1. Master Buy Plan and Baseline Performance Review

NMO CMS did not award a prime contract after the 2005 survey. As a result, the NMO CMS have no new Master Buy Plan (MBP) procurement actions for review. All NMO CMS procurement actions contained in the MBP database are completed actions that have been archived, and therefore, do not require updates.

The NMO CMS issues task orders under the prime JPL and APL contracts. The NMO CMS reports data on task orders greater than \$50 million in the monthly Baseline Performance Review (BPR) submission to the Headquarters Office of Procurement. The survey team reviewed a sample of JPL task order files that were reported in the monthly BPR. In most instances, the data in the BPR report is complete and corresponds to the information contained in the file. However, there were some instances where the task order value and period of performance reported in the BPR lagged behind the information contained in the task order file. In some cases, the lag was a result of the BPR data not capturing the latest task order modification where incremental funding increased the dollars allotted to the task order above the task order value and where the period of performance was extended. In such cases, the modification information should get captured in the following month's BPR.

The NMO CMS has no procurement actions to report on the Acquisition Forecast web site. When discussing this with NMO CMS staff, they indicated that the task order work they perform does not warrant acquisition forecasting. However, NMO CMS indicated that they are currently working with the cognizant Headquarters Office of Procurement analyst to determine how NMO task orders can be incorporated into the system being contemplated that would merge Master Buy, BPR, and the Acquisition Forecast into one consolidated tool.

#### 2. Deviations and Waivers

The 2005 Procurement Management Survey team reviewed all of the pre-award deviations for the JPL prime contract. One consideration was noted: The contract file should contain a copy of the blanket waiver authorizing the deviation to exceed the five-year period of performance (FAR 17.204(e)(i) and NFS 1817.204(e)(i)). The Procurement Officer pointed out that this was an error in the previous survey. It was later corrected, and there was a copy in the file. However, during this review, the document was missing from the file.

Two requests for deviations were submitted to the Headquarters Office of Procurement during the period covered by this survey. The first was a request to deviate from NFS 1815.404-471.6, "Modification to Structured Profit/Fee Approach for Nonprofit Organizations." The second was a request to deviate from NFS 1817.204(e)(i), "Five Year Limitation on Contract Period of

Performance." Both of these deviations were approved by the NASA Assistant Administrator for Procurement.

The NMO has not requested deviations or waivers for individual task orders under the JPL contract. Two international agreements contained deviations and waivers. These were reviewed and approved by the Headquarters Office of Procurement during negotiations of the related International Space Act Agreements. The deviations and waivers were not identified in the master file.

#### **CONSIDERATION:**

The NMO CMS should ensure that all waivers and deviations are included on the office master list including those on international contracts/agreements.

#### 3. Contractor Safety Requirements

The survey team reviewed the JPL contract, NAS7-03001, to verify the inclusion of required clauses: NFS 1852.223-70, "Safety and Health," and NFS 1852.223-75, "Major Breach of Safety or Security." The survey team also interviewed the NMO Environmental, Health, Safety, and Facilities manager, who is responsible for oversight of JPL's compliance with its contractual obligations in these areas. This safety manager attends monthly JPL safety meetings, keeping informed of current or potential safety issues. He is notified of mishaps or close calls, which are also entered by JPL in the mishap reporting system. He provides input on contractor compliance with safety issues at award fee performance evaluation boards because contractor safety is an evaluation factor in the award fee determination.

## **SECTION IV**

# POST-AWARD PROCESSES AND DOCUMENTATION

#### 1. Tracking Data Requirements List Items

The survey team reviewed the prime JPL contract and a sample of individual orders placed under the prime contract to assess whether the contract or task order clearly specified data requirements, whether the requirements were kept to a minimum consistent with the purposes of the contract, and whether effective procedures were in place to monitor contract data deliverables.

There are two types of deliverable data required by the JPL contract: contract-level data requirements and task-specific data deliverables. Categories of contract-level data include contract management, financial management (e.g., NF-533), environmental, facilities, human resources, institutional computing, procurement, property, safety/health, security, socio-economic, and miscellaneous. The NMO web site does not contain a copy of the standard operating procedure for tracking contract-level Data Requirements List (DRL) items. The procedure was removed from the web site pending revision. The DRL tracking process entails email submission of data deliverables and reports to the NMO on-site support contractor. The contractor files the submitted data electronically on a shared database and prints hard copies for the contract file. All NMO CMS staff and the COTR have access to the reports.

The contracting officer periodically reviews a tracking spreadsheet maintained by JPL for the contract-level deliverables and contacts technical requesters periodically to obtain feedback on the receipt of data deliverables. The contracting officer submits an assessment of timeliness, accuracy, and completeness of data deliverables to the award fee board as part of the award fee evaluation. The NMO CMS has undertaken a concerted effort to verify the continuing need for each data requirement. The number of contract-level DRLs has been reduced from 133 to 124 since the last survey. NMO CMS recognizes that the reports are costly and that any unnecessary requirements should be deleted. A DRL scrub is done periodically, and a comprehensive review will be initiated when the contract is considered for re-newel or re-competition.

Task order reporting requirements are exclusively technical. The 2005 Procurement Management Survey identified a weakness in the lack of a system for tracking or follow-up with task-specific deliverables. In their most recent self-assessment, the NMO CMS reviewers reported that there had been exploratory discussions among NMO CMS staff on establishing a process to track and verify receipt of deliverable items, but no actions were taken subsequent to these discussions. The self-assessment team recommended that the Procurement Officer reconstitute the exploratory team with the goal of establishing and implementing a task order deliverable tracking system. The reconstituted exploratory team developed a recommendation that the NASA program executive for major flight projects with hardware deliverables should be responsible for documentation of receipt and acceptance of interim and final deliverables. The sponsor of Research and Development projects and smaller-dollar, less technically-complex tasks that do not include hardware deliverables would submit a letter of acceptance via e-mail to the NMO.

#### **STRENGTH:**

The NMO CMS is commended for effective management and tracking of contract-level deliverables, ensuring that the Government's responsibility for monitoring delivery and receipt of data deliverables is met, and eliminating unnecessary DRL items to the extent practicable.

#### WEAKNESS:

The NMO CMS shall implement a system for tracking task-level deliverables. **(REPEAT FINDING)** 

#### 2. Contractor Performance Evaluations NF-1680

The survey team reviewed contract files and the Past Performance Data Base (PPDB) for compliance with FAR 42.15 and NFS 1842.15. All annual NF-1680s for the current NMO contract are contained in the PPDB. NFS 1842.1502, "Policy," requires that within 60 days of each anniversary of the award of a contract having a term exceeding one year, contracting officers must conduct interim evaluations of performance on contracts subject to FAR 42.15. Although NFS 1842.1503(b), "Procedures," indicates that "evaluations used in determining award fee payments satisfy the requirements of this subpart and do not require completion of NASA Form 1680." Procurement Information Circular (PIC) 01-12, dated June 15, 2001, clarifies the requirement that "award fee evaluations must be summarized on NF-1680 and entered into the NASA PPDB."

The survey team found that the current compliance with NF-1680 transmittal to the PPDB is a significant improvement in NMO CMS processes since the previous survey. Several records were not entered within 60 days following contract anniversary. The evaluation for the prime contract, NAS7-03001, reflected an adjectival rating for each individual category, but the evaluation narrative was incomplete. A note indicated that a full presentation of the CalTech award fee debriefing was available upon request. This does not comply with the guidance in PIC 01-12.

#### **CONSIDERATION:**

The Headquarters Office of Procurement should clarify language in NFS 1852.1503(b) to be consistent with the PIC 01-12 requirement that award fee evaluations must be summarized on NF-1680 and entered into the Past Performance Data Base. The PIC could then be cancelled to avoid duplication of requirements in two different policy documents.

#### WEAKNESS:

The NMO CMS shall ensure that contracting officers initiate timely evaluations of contractor performance for entry in the Past Performance Data Base and ensure award fee evaluation determinations are summarized and included in the PPDB.

#### 3. Subcontracting Plan Administration and Subcontract Consent

The survey team reviewed NMO CMS task order files to determine if subcontract consent approvals and subcontracting plans for subcontractors were in compliance with the requirements of FAR 19.7, FAR 44.3, NFS 1819, and applicable internal NMO CMS standard operating procedures. The prime contract contains the required small business clauses: FAR 52.244-2, "Subcontracts," FAR 52.219-8, "Utilization of Small Business Concerns," FAR 52.219-9, "Small Business Subcontracting Plan," and NFS 1852.219-75, "Small Business Subcontracting Reporting." Contract section G.10 delineates the contract's subcontracting plan procedures and states that small business goals "shall be established annually by mutual agreement between the contractor and NASA." The task orders reviewed included the required contractor request and contracting officer consent for placement of subcontracts.

The NMO CMS has standardized the subcontract review procedures in "NMO Standard Operating Procedure No. 5," revised April 2008. The files reviewed incorporate the "NMO-JPL Checklist for Review of JPL Subcontracts" to summarize all requirements and factors involved in a proposed subcontract request. Copies of supporting documentation were included in the files under this checklist. This process helped to organize a complex process, such as Equal Employment Opportunity clearance, sole source justifications, and Cost Accounting System verification. Where the submitted documentation supported the request, the consent to subcontract was issued in the form of a letter to JPL signed by the contracting officer.

The NMO conducts periodic (the goal is quarterly) targeted reviews of the prime contractor's purchasing processes. About 20-30 task orders are randomly selected covering various dollar values and contract types. Subcontract reviews include areas such as the quality of the contractor's technical and pricing evaluations, justifications for noncompetitive purchases, and justifications for the use of other than small business. Review team members are rotated for each review to get a new mix of procurement styles and experience, so "new sets of eyes" are reviewing the task orders.

The JPL contract has a \$25 million threshold for obtaining subcontract consent. The NMO CMS conducts quarterly acquisition forecast meetings with JPL to discuss anticipated and current subcontracts greater than \$25 million, current status and issues, acquisition schedules, methods of selection, metrics for competitive and noncompetitive actions, undefinitized contract actions, and closeouts. The June 2008 briefing identified 35 active subcontracts and one forecast acquisition valued at greater than \$25 million. NMO CMS metrics show that JPL subcontract awards are about 75 percent competitive and 25 percent noncompetitive. The closeout metrics show an increase in the number of subcontracts closed out since the 1st quarter of Fiscal Year 2008 and that the closeout backlog for prior contract NAS7-1260 has been reduced from 265 to 39.

JPL submits SF-294 and SF-295 in accordance with the requirements of FAR 52.219-9 to document the progress in attaining the small business goals in its subcontracting plan. The previous Procurement Management Survey identified a weakness regarding evaluation of JPL subcontracting goals. The NMO corrected this weakness. The NMO award fee board evaluates JPL performance in attaining subcontracting goals as part of award fee evaluations pursuant to NFS 1816.405-274. Ten percent of the available award fee is allocated to incentivize the attainment of subcontracting goals.

#### **STRENGTHS:**

- 1. The NMO CMS has an organized, efficient, and effective process for evaluating contractor requests to subcontract. This enables the contracting officer to make informed consent decisions.
- 2. The NMO CMS actively maintains oversight of the JPL subcontracting process through task order file review and regular meetings with the JPL acquisition team to discuss current subcontract issues.

#### 4. Award Fee Administration

The survey team reviewed the prime contract, NAS7-03001, for administration of award fee. The contract is an IDIQ cost-plus award fee and award term contract. Work is ordered through task orders. The initial contract term is five years, which NASA can extend annually in three or nine month increments. There are two annual evaluations: one at mid year and one at year end. The mid-year evaluations serve as an opportunity for constructive feedback with adjectival ratings but with no score or fee determination. Year-end evaluations include adjectival ratings and point scores, which are used to recommend final award fee to the fee determination official.

The NMO uses a JPL Evaluation Tool (JET) to support the evaluation of award fee. The webbased JET is password protected and accessible only by those responsible for administering the contract or portions of the contract. The JET integrates data from all responsible offices on one web site. The JET displays the performance evaluation plan, annual evaluation criteria, and performance reports. The JET enables on-line display of input data and archiving of data from previous evaluation periods.

The NASA FAR Supplement 1816.405-276(c) requires that the Fee Determination Official's (FDO's) ratings for both interim and final evaluations will be provided to the contractor within 45 calendar days and that the contractor be paid no later than 60 calendar days after the end of the period being evaluated. The NMO CMS presents evaluation recommendations to the FDO within 30 days after the end of the period being evaluated. The ratings are not provided to the contractor within the required timeframe.

#### **STRENGTH:**

The NMO CMS is commended for implementation of the JPL Evaluation Tool, an effective mechanism for collecting and presenting performance information to the contracting officer, performance evaluation board, and fee determining official.

#### WEAKNESS:

The NMO CMS shall ensure that award fee determinations are provided to JPL within 45 days and that payment is made within 60 days.

#### 5. Task Order Administration and Surveillance

The survey team reviewed a sample of direct and reimbursable task orders for general compliance with FAR, NFS, and NMO CMS policy and procedures. This is to ensure task plan requirements are within the work scope of the prime contract. The scope of the prime contract is defined by 11 discipline areas or "competencies" identified in the basic contract statement of work. Task plans submitted to the NMO CMS specify which of the 11 competencies the work falls under. NMO CMS contracting officers review task plans and validate that the work falls within the specific competency area. All direct task orders reviewed were within the general scope of the prime contract. This process is effective for ensuring that work awarded to JPL falls within the scope of its contract.

The prime contract authorizes JPL to perform work for non-NASA sponsors under reimbursable agreements. The work must fall under one of ten out of the eleven competencies identified in the statement of work based on task plans initiated by JPL. Of the ten disciplines cited in the prime contract from which non-sponsor work can be performed, each task order reviewed cited the same competency, "conducting program supporting research…design to make contributions to space science, space exploration, and space transportation." The efforts called for in the task plans were not clearly associated with the competency cited under the prime contract work statement.

Pursuant to FAR 16.504(1), the contracting officer must establish a reasonable maximum quantity. The JPL prime contract does not contain a maximum quantity or minimum and maximum ordering provisions appropriate for task order contracts.

The previous survey identified two administrative issues on NMO CMS task orders. One was that task order changes were referred to as amendments rather than modifications. NMO CMS has corrected this by using form SF-30 to issue task order modifications. The other issue was that the task order numbering system did not comply with NFS numbering system for task orders. In the prior survey, NMO CMS indicated that it was not required to meet the NFS numbering requirement since the prime contract and initial task orders were awarded prior to the existence of the requirement. Since the task orders issued are being captured in the procurement systems such as FPDS-NG, there is no significant impact with this finding. However, NMO CMS must conform to the NFS numbering requirement on the follow-on action for the contract and any task orders.

#### **STRENGTH:**

NMO CMS is commended for ensuring that task plans fall within the scope of the prime contract work statement.

#### **CONSIDERATION:**

NMO CMS should ensure that the non-sponsor, reimbursable task orders fall under the statement of work competency cited on the task plan.

#### WEAKNESS:

The NMO CMS shall ensure that any follow-on contract that issues task orders includes all requisite FAR and NFS clauses and provisions, including minimum and maximum ordering provisions, and complies with NFS contract and order numbering requirements.

#### 6. Interagency Agreements

The survey team reviewed three interagency agreements for compliance with FAR and NFS requirements. The agreements were issued using NF-523, "Interagency Purchase Request." The determination and findings were well documented and included the purpose of the agreement, legal authority used, and information on the existing contract. Legal reviews were accomplished on all determination and findings. The agreements included period of performance dates, dispute clauses, and property clauses when applicable. Acceptance of the agreement within 30 days by the external agency is documented in the file. Changes in the total estimated price of the interagency agreement were accomplished through amendment to the agreement.

#### 7. Exercise of Options

The task orders awarded by the NMO CMS for the prime contract, NAS7-03001, do not contain options. Performance may be extended through an award term incentive. The survey team reviewed one modification issued during the survey window to extend the period of performance for contract NAS7-03001 for an award term. The modification was well documented and included the appropriate change in provisions for "Estimated Cost and Award Fee," term of the contract, and provisional billing.

One task order file on the APL ARDES contract contained an option. The file evidenced no analysis of the price of the option in the pre-negotiation objective memorandum or the price negotiation memorandum. The option was exercised via modification to the original task order, but it was not done in accordance with NFS 1817.270-70, "Analysis to Support Exercise of Options."

#### WEAKNESS:

The NMO CMS must ensure that options are evaluated and analyzed as part of the prenegotiation objective memorandum and the price negotiation memorandum and that the options are exercised in accordance with NFS 1817.207-70, "Analysis to Support Exercise of Options."

### **SECTION V**

# PRICING, FINANCIAL CONSIDERATIONS, AND AUDITS

#### 1. Audit Follow-Up

The survey team reviewed the NMO CMS procedures and reportable audits received during the survey window. PIC 00-06 provides guidance on contract administration and audit support services provided by the Defense Contract Management Agency (DCMA) and the Defense Contract Audit Agency (DCAA). NFS Part 1842 implements Office of Management and Budget (OMB) Circulars A-50 and A-133. The NFS requires NASA contracting officers to resolve reportable audit issues expeditiously, but not more than six months after issuance of an audit report. Audit resolution memoranda are to be provided to the audit agency for its comments and files. NFS 1842.73 requires that copies of completed OMB Circular A-133 audit resolution memoranda be provided to the Headquarters Office of Procurement Analysis Division and the Headquarters Office of the Inspector General.

The Contract Management Section has assigned an audit liaison representative (ALR) for the recognition of DCAA, DCMA, OIG, and Government Accountability Office (GAO) reportable audits. The NMO uses the NASA-wide Corrective Action Tracking System (CATS II) to report and track reportable audits. Additionally, the ALR maintains a separate database system to track all audit activity. The ALR indicates that validation activities are conducted monthly to ensure corrective actions have been implemented. The ALR tracks the closure of recommendations and writes closure letters to the audit report agency as appropriate.

Full reliance is placed on PIC 00-06, "Contract Administration and Audit Services," and NFS 1842.73, "Audit Tracking and Resolution," for tracking, resolution, and disposition of all reportable audits. An internal standard operating procedure does not exist.

Records of actions taken on recommendations in the reportable contract audit reports are to be input into NASA's CATS II system quarterly. The ALR only updates the CATS II system when actions are taken or completed on the recommendations in the reportable contract audit reports.

For the reportable contract audit actions open or received during the survey window, a significant number were not resolved within six months of receipt. All report resolution memoranda were well documented, providing a detailed justification of the contracting officer's findings. Copies of the resolution memoranda for the OMB Circular A-133 audits were not provided to the Headquarters Office of Procurement Analysis Division or the Headquarters Office of the Inspector General.

#### **STRENGTH:**

The NMO CMS ALR is commended for the detailed comprehensive audit resolution memoranda that resulted in disposition of audit issues in favor of the Government.

#### **CONSIDERATIONS:**

- 1. The NMO CMS should publish standard operating procedures for the tracking, resolution, and disposition of reportable audits.
- 2. The NMO CMS should ensure reportable audit issues are resolved within the sixmonth resolution window.

#### WEAKNESS:

The NMO CMS shall furnish copies of resolution memoranda for the OMB Circular A-133 audits that are required to be forwarded to the Headquarters Office of Procurement and the Headquarters Office of the Inspector General.

#### 2. Financial Management Reporting - NF-533s

The survey team reviewed the JPL and APL contract and task order files for compliance with NFS 1842.7201, "NASA Contractor Financial Management Reporting." CalTech and Johns Hopkins University submit NF-533 reports in a timely manner.

The NMO APL resource analyst is performing an acceptable level of analysis on the NF-533s for the ARDES contract. The NF-533 reports on the JPL contract, however, do not provide an adequate level of detail for the contracting officers to monitor the task order's financial trends or to conduct informed discussions with financial and project team members to resolve noted cost discrepancies or adverse cost trends.

During the survey window, the NMO CMS engaged JPL to provide a supplemental explanatory report, "Task Order Cost - Evaluation Variance at Completion (EVAC)," that expands the information provided in the NF-533 monthly reports. The EVAC report allows for the identification of variances between the estimate to complete and the total value for each task order as required by the NASA Contractor Financial Management Reporting clause. Contracting officers are required to "monitor cost reports on a regular basis to ensure cost data reported is accurate and timely." The NMO CMS contract specialists review each month's NF-533 and EVAC reports. The specialists identify adverse cost trends and variances between the estimate to complete and the total value of each task order. The specialists report the findings to the contracting officer. This process facilitates the proper management of costs under the JPL contract and task orders.

Task order files lack documentation of the contracting officers' review, disposition, and resolution of adverse trends or discrepancies identified in the EVAC report. The files do not evidence communication between contracting officers and the technical or financial management

offices under the appropriate file tab. Discussions with contracting officers and a further review of the task order files demonstrated that the contracting officers were aware of and did consistently address EVAC reported variances.

#### **STRENGTH:**

The NMO CMS is commended for effective oversight and management of contract costs at a task order level. Each NF-533 was submitted in a timely manner, augmented by the EVAC report, and reviewed by a contract specialist who reports adverse trends to the contracting officers. The information provided by the EVAC report has overcome a shortfall of the NF-533. As a result, the EVAC report provides the necessary information to the contracting officers and technical representatives to properly manage the JPL tasks.

#### **CONSIDERATION:**

The NMO CMS should ensure that contracting officers are documenting their reviews of NF-533 variances in the task order contract files under the appropriate tab. Both acceptance and issues noted should be identified in the documentation. NASA Form C-500 is available for the documentation of the NF-533 review.

#### 3. Cost/Price Analysis and NF-634 Structured Fee Approach

The survey team reviewed contract and task order file documentation for compliance with FAR 15.4, "Contract Pricing," and NFS 1815.404-2, "Information to support proposal analysis." While some task order files did not contain cost analyses documentation, those that did consistently met FAR requirements.

In accordance with contract section I-10(d)(1), JPL submits estimated direct and indirect rates annually for the ensuing fiscal year. Proposed rates and cost estimating relationships were reviewed and validated by the DCAA until October 2007. In 2007, DCAA recommended discontinuing the rate review because of the low risk experienced during the previous annual incurred cost audits. The NMO CMS is reviewing the DCAA recommendation with a final decision forecasted for October 2008 concurrent with the submission of JPL rates.

DCAA has performed a timely annual incurred cost audit for each of the contract years. The audits have consistently resulted in an acceptable billed versus allowed incurred cost variance. Because of the small amount of the variance, it is discharged in a lump sum, not by individual task orders. DCAA attributes the acceptable variance level to JPL's diligence in forecasting, intermittent updates, and effective management of the annual estimated rates.

NMO CMS Standard Operating Procedure No. 1, "Processing Direct Task Orders on the JPL Contract," provides a template for use by the contracting officer in conducting cost evaluations of proposed task costs. Upon receipt of a proposal, contracting officers compare the proposed rates and factors with the applicable rates located on the NMO CMS web page and document the review on the template form. Approximately half of the files reviewed did not contain a cost

review. Discussions with those contracting officers indicated that the review was performed but not documented or that is was in process and not completed.

#### **CONSIDERATION:**

The NMO CMS should place additional emphasis on ensuring cost and price analyses are completed, documented, and correctly filed in the contract file.

#### 4. Technical Evaluations

The survey team reviewed the JPL contract and task order technical evaluations for compliance with FAR 15.4 and NFS 1815.404-2. Minimum requirements for an adequate technical analysis include examination of the types and quantities of material proposed and analysis of the need for the types and quantities of labor hours and the mix of labor categories. The contracting officer may request assistance from other technically-qualified individuals to perform the analysis.

The NMO CMS Standard Operating Procedure No. 1 provides a template for use by contracting officers in the technical evaluation of a task plan's proposed labor types and quantities, other direct costs, and subcontracted effort. Upon receipt of a proposal, the contracting officer sends the task manager a request to perform a technical analysis providing the template and instructions for its completion.

Approximately half of the files reviewed did not contain technical evaluations. Discussions with those contracting officers indicated that the evaluation was performed but not documented or that the review was requested but not completed. Several evaluations are filed under an incorrect tab in the task order file. Only one file contained follow-up documentation requesting the technical review be performed. Most technical reviews displayed little evidence of independent analysis; evaluators merely check the "yes" box in response to template questions in an apparent effort to get the paperwork done.

#### **CONSIDERATION:**

The NMO CMS should place additional emphasis on ensuring technical analyses are completed, documented, and correctly filed in contract and task order files. Follow-up requests should be sent to evaluators who have not responded to initial requests. These requests should be documented in the contract file. Evaluations lacking independent analysis should be returned with a request for the appropriate level of analysis to ensure that the proposal is technically sound.

## **SECTION VI**

# **OTHER ISSUES**

#### 1. Applied Physics Laboratory Contract and Task Order Administration

Two members of the survey team conducted a site visit of the NMO APL in Laurel, Maryland. The survey team reviewed the basic Aerospace Research, Development, and Engineering Support (ARDES) contract file, including an analysis of the Justification for Other than Full and Open Competition (JOFOC), for compliance with FAR 6.302-3, "Industrial Mobilization; engineering, developmental, or research capability; or expert services." The JOFOC was very well written, and it completely justified the use of a (c)(3) exception. It was reviewed at the appropriate level and satisfied all FAR requirements. The JOFOC was synopsized on the Federal Business Opportunities (<u>http://FedBizOpps.gov</u>) web site prior to approval and responses were analyzed and documented prior to approval.

The survey team reviewed ten task orders awarded under the ARDES contract. The task order files were generally well documented. The files contained complete pre-negotiation objective and price negotiation memoranda with sufficient back-up documentation. Rates were negotiated in accordance with DCAA forward pricing recommended rates, and the fee was negotiated in the basic ARDES contract. The contracting officer consistently applies a process for determining if requested task orders are in scope. All of the tasks reviewed were within the scope of the basic contract. Several price negotiation memoranda were incomplete, but the file contained documentation indicating the negotiated cost for those tasks.

The contracting officer is commended for creating a task order template for use by technical officers when they are requesting that a task be placed under the contract. The competed templates effectively document that a task was requested by a Government official and requires the requesting official clearly demonstrate that the task is within the scope of the ARDES contract. The template also contains clauses associated with the contract as a tickler to remind technical officers when the clauses apply to the task. The form has two boxes: one to check for essential research and engineering work and another box for other engineering and research work. The reviewer was under the impression that "other" would mean work outside of the scope of the ARDES contract because all work placed under the contract is essential engineering and scientific research in accordance with the JOFOC. However, from discussions with the NMO APL contracting officer, other work was in scope of the contract.

An emergency task was issued in accordance with the basic contract's clause for emergency tasks. The task was issued prior to negotiating a price. The issuance of this emergency task was an undefinitized contracting action (UCA) that requires approval from the Head of the Contracting Activity (HCA). The NMO APL contracting officer is commended for definitizing the UCA within one month. The file included approval from the NMO CMS Procurement Officer. Time constraints were cited as the primary concern for not obtaining HCA approval. The NMO CMS requests that HCA authority be delegated to the director of the NASA

Management Office (NMO). The UCA was not reported to the Headquarters Office of Procurement.

#### **STRENGTHS:**

- 1. The NMO CMS is commended for the overall high quality of file documentation at the NMO APL office.
- 2. The NMO CMS is commended for the high quality JOFOC that was completed for the ARDES contract. This JOFOC should be used as an Agency-level example for developing a JOFOC.

#### **CONSIDERATIONS:**

- 1. The NMO CMS should ensure pre-negotiation objective memoranda and price negotiation memoranda are included in contract files to document negotiations.
- 2. The NMO APL contracting officer should clarify the checkboxes included in the task order template.

#### WEAKNESS:

The NMO CMS must ensure that emergency tasks are reported as UCAs to the Headquarters Office of Procurement.

#### 2. International Agreements

The survey team reviewed NMO JPL contract and task order files related to Deep Space Network (DSN) international agreements. The DSN is a network of antennas that supports interplanetary spacecraft missions, radio and radar astronomy observations for the exploration of the solar system and the universe, and select earth-orbiting missions. The DSN currently consists of three deep-space communications facilities placed approximately 120 degrees apart around the world: at Goldstone, in California's Mojave Desert; near Madrid, Spain; and near Canberra, Australia.

Prior to 2005, the DSN international agreements were not issued through FAR-based contracts. In October 2005, the NMO awarded two FAR-based contracts: one to Spain and one to Australia for the operation and maintenance of DSN facilities. Both contracts are cost-type, no-fee. The \$130 million contract with Spain covers work through 2013. The \$120 million contract with Australia ends in 2010. The contracts were executed under a government-to-government international space act agreement. The international space act agreements are negotiated and executed by NASA Headquarters. The end dates of these contracts are tied to the periods covered by the international agreements – not to the period of performance of the JPL prime contract. Technical management of the DSN is performed under direct task order 10820 under the JPL contract.

The lengthy and complex pre-award process, begun in 1999, was reviewed as part of the 2005 Procurement Management Survey. This review focuses on administration of these contracts. The relationship between the NMO CMS and the institutions in the two countries is not a typical Government-contractor relationship. This is an international partnership with a 40-year history. The DSN team is composed of NASA representatives from Headquarters, the DSN program executive, the NMO CMS contracting officer, JPL's DSN Program Manager, and functional experts. High-level management attention and constant communication occur with both of the international partners with significant face-to-face interaction.

The contract and modification files are well organized and complete. The majority of modifications have been issued for funding actions. The most significant administrative action to date has been a workforce reduction, which resulted in savings of approximately \$1 million per year for each contract. There are detailed workforce reduction files for both contracts. The workforce reduction was budget driven, initiated by NASA, and based on mission requirements. NASA gave each site a percentage goal for cost reduction, and the institutions submitted proposals. The proposals were reviewed extensively by JPL and NASA technical and procurement personnel, negotiated, and finally reviewed by DCAA prior to NASA approval and issuance of the contract modification. To date, all resignations have been voluntary buy outs, negotiated in accordance with local law and policy. FAR 31.205-6(g)(6) limits the cost allowability of severance payments to foreign nationals under a service contract performed outside of the United States unless a waiver is obtained prior to contract award. Waivers to this requirement were executed. Both contracts appropriately include FAR 52.237-9, "Waiver of Limitation on Severance Payments to Foreign Nationals."

The survey team reviewed the interim past performance evaluations, NF-1680s, for both contracts. The evaluations were completed and submitted by the contracting officer in accordance with NFS requirements. Two categories in one of the contracts received poor ratings for cost/price performance and for communication of financial information. The contracting officer reported that NASA's issues are related to the indirect-type employees and costs. Recent negotiations with the director general of the institution have resulted in some efficiency, and the issues continue to receive high-level attention. There is clear evidence that performance issues are being addressed.

Payments under the contracts are made in advance in U.S. dollars pursuant to a deviation from the advance payments clause. The 2005 survey included a consideration related to documentation of the pricing/cost estimating process. This consideration has been adequately addressed in the price negotiation memoranda and annual budget files. The contract provides for annual management meetings where the final budget forecast for the upcoming fiscal year and the preliminary budget forecast for the following five years are presented and discussed by the two governments. The DSN team performs technical and cost analyses annually. The agreed-upon final budget forecast becomes the estimated cost of the contract for the fiscal year to which it pertains. Revisions are negotiated when either government deems such action necessary. Detailed monthly financial status reports are submitted including the actual costs incurred and claimed as allocable, allowable, and reasonable in accordance with each governments' established accounting principles. The DCAA performs annual incurred cost and to status for the contract with Spain. The Australian institution performs periodic audits of all costs incurred in

performance of the contract. The Australian institution submits annual certified financial statements audited by the responsible Australian Government Agency (equivalent to the GAO). Australia will provide certified statements of cost and copies of audit and financial reports, as requested, for three years after completion or termination of the contract.

The survey team reviewed the DSN and the Space Science Flight Support task order files under the JPL contract. These contract vehicles are used to develop requirements and provide funding that is then directed by NASA to JPL. The international space act agreements negotiated by NASA with Japan's space agency are contained in these task order files. An international space act agreement is currently being negotiated with India's space agency for NASA/JPL support for the Chandrayaan-1 mission. The requirements call for JPL to provide two instruments for the spacecraft. Technical evaluations and cost analyses were located in the contract files. Contract scope was addressed in the task plan and is described as a provision of DSN telecommunications services for non-NASA missions. This is in accordance with a written agreement between NASA and the international space agency.

#### **STRENGTH:**

The NMO is commended on award of the international contracts and maintenance of complete and thorough documentation in the files.

#### 3. Contract Management Module

The survey team reviewed the implementation program and CMM usage at the NMO CMS. The survey team interviewed individuals responsible for the CMM system, members of the procurement workforce, and customers to assess the effectiveness of communications, training, and user support associated with CMM. The general perception of CMM is that it is getting better and the level of acceptance is improving. The Procurement Officer supports CMM.

The survey team reviewed the basic contract and a sample of task order contracts in CMM. Contract NAS7-03001 was awarded in 2002 and was converted into CMM when the system became operational in 2006. The CMM contains a record for the basic contract, including pertinent data fields such as award date, period of performance, and contract value. Beginning with modification 39 issued in January 2007, modifications are incorporated into CMM to include pertinent data fields and the SF-30 contract modification form.

Task orders issued prior to implementation of CMM were converted into CMM as "shell" records, reflecting only basic information about the task order without containing the task orders themselves. Task orders and modifications issued after CMM implementation are included in the system with complete data fields and packages including the SF-1449, OF-347, or SF-30 and supporting documentation, as appropriate.

Interviews with procurement staff regarding the impact of CMM indicate that the initial learning curve with adoption of the new system was a challenge. Some learned more quickly than others, some required significant help. Training and on-site super-user support was highly effective at overcoming initial challenges. The Integrated Enterprise Management Program Competency

Center is reported as having done a good job addressing issues. Over time, NMO CMS employees gained confidence and initial resistance has been largely overcome. Procurement personnel report improved system performance over time. As an integrated application, CMM performance can be impaired because of slow interfaces. Several report CMM response time as slow because of the large number of screens to navigate and generally slow system response time. The central time zone closing of the IEMP Competency Center is a sore point for some NMO CMS users.

Some users report that CMM has had a significant negative impact on workload. Routine transactional work, such as incremental funding and contract closeout, has been relegated to contractor support. The solicitation and contract generation process in CMM is reported as cumbersome. There is no easy way for edits on custom clauses to be saved back into the system. The process for adding custom local clauses is reported as overly complex. Some interviewees report exporting CMM-generated documents to MS Word and making changes outside of the system. They explained that the CMM generates a good starting document but that the contracting officer needs to make changes. As a result, contracts within CMM do not reflect the official document contained in the contract file.

Procurement reporting continues to be an issue. Individuals interviewed expressed a lack of confidence in CMM data. Several expressed frustration at the lack of progress on key procurement reports (e.g., lead time, active contracts, purchase request status, and workload). The CMM report formats, with many reports limited to read-only output or to poorly formatted spreadsheets, is also a limiting factor for NMO CMS employees.

Recommendations for system improvement include the ability to edit award documents, to be able to "Drag and Drop" purchase requests into files, to have increased flexibility in organizing users' inboxes, and to include a "comment" field to track PR Status. In general, NMO CMS personnel recognize that the integrated contract writing system brings a number of benefits but feel that it could and should be improved.

#### **STRENGTH:**

The NMO CMS is commended for its effective implementation of CMM and for consistently high levels of system adoption and usage.

#### 4. Contract Closeout

The survey team reviewed contract and task orders eligible to be closed. Previous prime contracts with the current prime contractor to operate JPL have included NAS7-100 (period of performance 1962 – 1982), NAS7-918/ 920 (1982 – 1993), NAS7-1260 (1993 – 1998), and NAS7-1407 (9/21/98 – 9/30/03). The current contract, NAS7-03001, has a completion date of 9/30/10. NAS7-100 is closed. Contracts NAS7-918 and NAS7-920 are currently with the contracting officer for final closeout review. It is expected they will be closed this fiscal year.

The NMO CMS closeout procedures are documented in an NMO standard operating procedure for closeout. The task order closeout process begins when JPL determines that a task order is

ready for closure. The determination is conditioned on closure of all subcontracts issued under the task order, completion of allocated direct cost audits, disposition of any property under the task order, and determination of final financial information. Several individuals interviewed indicated that JPL personnel are reluctant to closeout any task orders while there are outstanding issues, until all subcontractor claims are paid, until overhead rates settle, etc. Many task order subcontracts have periods of performances that span multiple task orders. Some subcontracts have five-to-ten year periods of performance.

Previous surveys in 2002 and 2005 identified weaknesses that task orders were not being closed out in a timely fashion. Since the last survey, there has been substantial progress at the NMO CMS in reducing the number of open task orders where the work has already been completed. In March 2007, the NMO CMS created a contractor position in the office dedicated to task order closeout. The survey found that since this position was established within the NMO CMS, a total of 619 task orders have been closed. In addition, the JPL acquisitions team has taken a more proactive role in this process with a goal to closeout 40 subcontracts per month. As a result, since the last survey, contract NAS7-1260 has 64 open subcontracts that are in the closeout process, down from 1,184 in 2005. Contract NAS7-03001 has some inactive task orders, but no closeouts have been initiated because the priority is to first close out the older task orders.

# 5. Federally Funded Research and Development Center Continued Use and Need Approval

At the time of this survey, the prime contract has been extended through year 2010 in accordance with clause H.54, "Award Term." The extensions were executed before the September 30, 2008 five year-term of the contract. FAR 35.017 requires a comprehensive review and the NASA Administrator's approval for the continued use of and need for the FFRDC before the contract is extended beyond five years. The contract includes language in clause H.54(c), which states, in part, "The parties acknowledge that extension of the contract beyond five years will require that the agency determine that there is a continuing use and need for the FFRDC in accordance with FAR 35.017-4." It is, however, apparent that executing the award term extensions before meeting the FAR requirement was an NMO CMS oversight and that the timing of the execution of the award term extensions in accordance with clause H.54 conflicts with the timing of the FAR 35.017 requirements. A comprehensive review has been completed and forwarded to Headquarters for executive review and the approval of the Assistant Administrator for Procurement. The NMO CMS must consider the FAR and NFS requirements for contracts that may exceed the five year period of performance limitation when examining the suitability of utilizing award term procedures for the follow-on contract. The NFS requires a comprehensive review and approval by the Assistant Administrator for Procurement for contracts that exceed the 5 year period of performance limitation.

#### WEAKNESS:

For the follow-on contract, the NMO CMS must ensure that the FAR 35.017 requirements for comprehensive review and Administrator approval for continued use and need for the FFRDC is conducted before the contract is extended beyond five years.