**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION**



**FY 2013 Service Contract Inventory Analysis**

**December 2014**

**Office of Procurement**

**NASA Headquarters**

**Washington, DC 20546**

Background

The National Aeronautics and Space Administration (NASA) is the United States government agency that is responsible for the nation’s civilian space program, as well as aeronautics and aerospace research. Its mission is to drive advances in science, technology, aeronautics, and exploration to enhance knowledge, education, innovation, economic vitality, and stewardship of Earth.

Since its inception, NASA has accomplished its mission through the combined efforts of civil service employees and a far larger body of scientific, technical, and support personnel sustained through contracts, grants, and other agreements with industry and academia. One of NASA’s overarching strategies to strengthen the Agency and support U.S. competitiveness on a global scale is to invest in next-generation technologies and approaches to spur innovation. This would not be possible without NASA’s historically close ties with the private and academic sectors, and today NASA continues to contract with the private sector for most of the products and services it uses.

Approximately 13.5 percent of the Agency’s authorized funding is expended on full time, permanent civil service salaries and benefits. The remainder is dispersed widely in the national economy through NASA contracts, grants, and other agreements. Through these expenditures NASA acquires a variety of scientific, technical, and support services for the civilian aeronautics and space programs to achieve its six strategic goals:

1. Extend and sustain human activities across the solar system.
2. Expand scientific understanding of the Earth and the universe in which we live.
3. Create the innovative new space technologies for our exploration, science, and economic future.
4. Advance aeronautics research for societal benefit.
5. Enable program and institutional capabilities to conduct NASA’s aeronautics and space activities.
6. Share NASA with the public, educators, and students to provide opportunities to participate in our Mission, foster innovation, and contribute to a strong national economy.

NASA conducts its work through six principal organizations:

* Human Exploration and Operations: develops the systems and capabilities required for human exploration of space beyond low Earth orbit and for U.S. crew vehicle access to the International Space Station; sustains and operates the International Space Station; develops and implements future space launch complex upgrades; manages rocket testing capabilities; acquires launch vehicles (Atlas, Delta, etc. for all the Agency), maintains secure and dependable communications to ground stations between platforms across the solar system; and provides the necessary training and supports health and safety of the nation’s astronauts.
* Science: conducts scientific exploration enabled by the use of space observatories and space probes that view the Earth from space, observe and visit other bodies in the solar system and gaze into the galaxy and beyond.
* Aeronautics: expands the boundaries of aeronautical knowledge for the benefit of the Nation through partnerships with academia, industry, and other government agencies, helping to foster a collaborative research environment in which ideas and knowledge are exchanged across multiple communities; ensures the future competitiveness of the nation’s aviation industry.
* Space Technology: develops and demonstrates advanced space systems concepts and technologies enabling new approaches to achieving NASA’s current mission set and future missions not feasible today.
* Education: strengthens NASA and the nation’s future workforce; attracts and retains students in science, technology, engineering and mathematics disciplines; engages Americans in NASA’s mission.
* Mission Support: provides critical mission support capabilities necessary to maintain the operation and administration of the Agency that cannot be directly aligned to specific program or project requirements; sustains institutional capabilities for supporting NASA’s mission portfolio by leveraging resources to meet mission needs, establishing Agency-wide capabilities, and providing institutional checks and balances;

In the next 20 years, while continuing its science and aeronautics research, NASA will be laying the groundwork for sending humans not only beyond Earth’s orbit, but farther into space than humans have ever been before. NASA is also studying an asteroid redirect mission, which will identify and capture a near Earth asteroid and place it into lunar orbit. Given its dynamic and ambitious mission, NASA carefully balances the utilization of civil service expertise and resources with the external capabilities provided by America’s industry through acquisitions that are often unique and complex. To meet its high risk mission, NASA requires the use of flexible contract vehicles to facilitate critical research, leading edge innovation, and development of complex hardware.

Introduction

Section 743 of Division C of the Fiscal Year (FY) 2010 Consolidated Appropriations Act, P.L. 111-117, requires civilian agencies to prepare an annual inventory of their service contracts. On March 11, 2014 NASA published its FY 2013 Service Contract Inventory (SCI) as required and in accordance with OMB issued guidance dated December 9, 2011. In addition agencies are to:

* perform an analysis of the data in their inventories for the purpose of determining if contract labor is being used in an appropriate and effective manner, and
* determine if the mix of federal employees and contractors in the agency is effectively balanced.

In accordance with the FY 2011 OMB guidance, which remained in effect for the 2013 Inventory, each agency was asked to identify the Product Service Codes (PSCs) on which they planned to conduct further analysis. When choosing these functions, agencies were asked to not identify functions that were previously the subject of a focused analysis unless additional analysis of those functions was necessary. Agencies were encouraged to reflect on insight gained and lessons learned from its multi-sector workforce pilots, analysis of the FY 2012 inventory, the initiative to reduce spending on management support service contracts, and agency analysis of its FAIR Act Inventory to help guide its decision.

On December 29, 2013 NASA submitted to OFPP its planned PSCs for analysis; AR16 (R&D SPACE: AERONAUTICS/SPACE TECHNOLOGY (MANAGEMENT/SUPPORT)) and R499 (SUPPORT-PROFESSIONAL OTHER). OMB concurred with NASA’s proposed PSCs and the agency’s intent to examine these PSCs was publicly posted on March 11, 2014. The table below lists the FY13 dollars obligated against those PSCs and a brief description of the selection rationale.

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| **PSC** | **Product or Service Description** | **Dollars Obligated in FY 2013** | **Rationale for Selection** |
| AR16 | R&D SPACE:AERONAUTICS/SPACE TECHNOLOGY (MANAGEMENT/SUPPORT) | $57,009,801 | PSC selected because it has the potential for personal services and inherently governmental work to be performed by contractors. PSC also has potential to cover some NASA critical functions. |
| R499 | SUPPORT-PROFESSIONAL OTHER | $228,389,730 | PSC selected because it has the potential for personal services and inherently governmental work to be performed by contractors. PSC also has potential to cover some NASA critical functions. |

The OMB guidance also requested a pilot comparison or “crosswalk” between the SCI and the FAIR Act Inventory be attempted for the chosen PSCs. The SCI captures what functions are contracted out by an agency. The FAIR Act Inventory captures the composition of the internal civil service workforce. By comparing the results of the two reports, an agency can review, in a comprehensive manner, how it accomplishes particular agency functions to determine if the chosen approach is most effective. To complete the requested SCI/FAIR Act crosswalk, NASA requested, in its 2014 FAIR Act data call, for Centers to mark if the selected PSCs for analysis apply to any the Federal Full Time Equivalents (FTE) listed. The Service Contract Inventory coding, which is based by industry, and FAIR Act coding, which is based on specific work functions, do not precisely correspond but there are instances where in-house functions perform similar work to a contracted function. For example, NASA employs civil service engineers to perform engineering development functions (PSC AD24). NASA also contracts with firms to perform engineering development functions. In this case a Center would identify the NASA civil service engineers performing engineering development functions as being associated with PSC AD24.

Analysis

NASA conducted its SCI analysis in accordance with section 743(e) FY 2010 Consolidated Appropriations Act to ensure that:

* Each contract in the inventory that is a personal services contract has been entered into, and is being performed, in accordance with applicable laws and regulations;
* The agency is giving special management attention, as set forth in Federal Acquisition Regulation (FAR) 37.114, to functions that are closely associated with inherently governmental functions;
* The agency is not using contractor employees to perform inherently governmental functions;
* The agency has specific safeguards and monitoring systems in place to ensure that work being performed by contractors has not changed or expanded during performance to become an inherently governmental function;
* The agency is not using contractor employees to perform critical functions in such a way that could affect the ability of the agency to maintain control of its mission and operations; and
* There are sufficient internal agency resources to manage and oversee contracts effectively.

A highly experienced, multifunctional team was assigned to carry out the analysis. The team members possessed broad knowledge of NASA operations as well as Federal service contract requirements and procedures. A mixture of professional disciplines is vital to complete a meaningful analysis since the OMB guidance requires an understanding of the functions being performed, how they relate to the agency’s core mission, and what constitutes effective contract management.

***Methodology***

The following methodology was carried out by a team of NASA procurement and subject matter experts to support the analysis.

Step One: Determine the analysis sample. For NASA’s selected PSCs (AR16 (R&D SPACE: AERONAUTICS/SPACE TECHNOLOGY (MANAGEMENT/SUPPORT)) and R499 (SUPPORT -PROFESSIONAL OTHER) the universe of contracts was identified. From this list, contracts were selected representing a mixture of NASA Centers and dollar levels. A strict random sample was not utilized to ensure greater location and contract size diversity.

Step Two: For the identified contracts, collect supporting documentation. This included:

* Conformed statements of work (SOW) for the basic contract as they exist today, including any supporting documentation or details
* Specific Task Orders (and their SOWs) based on dollar size and/or importance
* Contractor Financial Management Reports (NASA Form 533) when required
* Relevant contract modifications
* Annual obligation estimates
* Estimated staffing levels

Step Three: SCI team members individually performed a detailed review of all of the collected contract documentation.

Step Four: The team members met to share their analyses and collectively discuss their thoughts.

Step Five: Based on the initial analyses, the review team conducted interviews and follow-on discussions with members of the acquisition teams managing the selected contracts. The acquisition teams included the contracting officer (CO), contracting officer representative (COR), and occasionally requirements officials. The interview questions addressed:

* Annual obligations and staffing levels estimates
* Completeness of contract requirements and methods for assigning work
* Contract funding mechanism(s)
* Contract change implementation processes
* Inherently governmental functions performed
* Functions closely related to inherently governmental functions and oversight methods
* Critical functions performed
* COR organization, placement, training, and certification
* Location of work performed, degree of monitoring by COR, and
* Procedures used for inspecting and assessing performance

Step Six: The FAIR Act Inventory data for the two PSC codes, collected in a separate process, was analyzed to gain an understanding of NASA’s overall contractor to Federal employee mix for the selected PSCs

Step Seven: The team performed a final data review and prepared the final report.

***PSC AR16 (R&D SPACE: AERONAUTICS/SPACE TECHNOLOGY (MANAGEMENT/SUPPORT))***

AR16 was selected because this PSC has above average potential for personal services and/or inherently governmental work to be performed by the contractor. R&D work is a core mission within NASA. Due to its importance, one or more R&D codes will likely be selected for in-depth analysis annually.

Five contracts were selected as the sample. The sample value was $24,050,902 representing 42.19% of the AR16 total FY13 obligated value of $57,009,801.

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| **Contractor** | **NASA Contracting Center** | **Contract #** | **Contract Title** | **Contract Amount FY2013** |
| ARES Technical Services Corporation | Johnson Space Center  | NNJ13TA03B  | Multi-Purpose Crew Vehicle Program Integration Contract | $5,134,303 |
| Barrios Technology Limited | Johnson Space Center |  NNJ08TA13C | Orion Project Integration Contract | $2,747,506 |
| Cornell Technical Services | Langley Research Center |  NNL12AA00B | Evaluations, Assessments, Studies,Services, and Support - EASSS | $13,191,692 |
| Millennium Engineering and Integration  | Goddard Space Flight Center |  NNG12WA38C | NASA Safety Office Contract | $2,273,139 |
|  Universities Space Research Association | Marshall Space Flight Center |  NNM13AA43C | NSSRC Research and Support | $704,262 |
|  |  |  | Total  | $24,050,902 |

**NNJ13TA03B/NNJ08TA13C ARES Technical Services Corp/Barrios Technology Limited**

These indefinite delivery indefinite quantity (IDIQ) contracts issue task orders to support the Multi-Purpose Crew Vehicle (MPCV) program office. The statement of work for the current contract, NNJ13TA03B, and its predecessor contract, NNJ08TA13C, were both included in the review sample and both were reviewed. The work requirements were so similar they were addressed together in one interview. No personal services were found and no inherently governmental functions are being performed in either contract. There is extensive closely related to inherently governmental work. The contractor assists with budgeting, performance oversight of the MPCV prime contractor, and strategic planning among other duties. In all of these situations the contractor is in a supporting or advisory role providing reports and data to a government official for the ultimate decision making. The contract has a robust oversight structure consisting of a certified Contracting Officer Representative (COR) and three Task Management Representatives (TMRs), one assigned per task order. All have worked with the contract work statement since pre-award and are highly knowledgeable about the contract requirements. The TMRs are formally appointed and provided formal direction on their responsibilities and limitations by the COR. The COR and TMRs are located at the contractor’s work site.

The contract is supporting a critical NASA mission. The MPCV will be the principal spacecraft for manned NASA exploratory missions and is central to NASA’s near and long term exploration goals. The contract workforce force averages between 30-35 work year equivalents (WYE). The program office’s civil service workforce numbers 50 FTEs. Technical knowledge of all the contractor’s duties is found within the government workforce and the government maintains the internal resources to properly manage and oversee the contract operations.

**NNL12AA00B Cornell Technical Services**

This cost plus fixed fee (CPFF) contract provides acquisition support to the Science Mission Directorate. The contractor identifies and provides the technical experts (peer reviewers) who perform proposal review as part of the NASA Announcement of Opportunities process. The whole contract is for closely associated with inherently governmental function, namely supporting the acquisition process. The purpose of the contract is almost identical to NNH10CC97C listed with the R499 contracts.

A dedicated government acquisition oversight office, the Science Office for Mission Assessments (SOMA), fills all board leadership positions with civil servant scientists. These leaders also serve as the technical monitors (TM) feeding contract performance data to the COR. Multiple government TMs are assigned when the teams meets outside of the Langley geographic area to ensure consistent oversight and a continued government presence. The majority of the work, reviewing and commenting on proposals, is accomplished independently by each reviewer. The proposal data is provided to the reviewer through the secure Remote Evaluation System and the reviewer recommendations are recorded the same way. After the reviews are complete, a Government led plenary session is held to integrate the evaluation results. Close government oversight is present throughout the process and no contractor product is accepted to NASA without being reviewed by SOMA office staff. The work is critical in that the contractor is providing expertise that will inform NASA decision making on core NASA science missions.

The contract oversight workload is adequate for the one assigned COR.

**NNG12WA38C Millennium Engineering and Integration**

This IDIQ contract provides safety office support to various program offices located primary at the Wallops Island Launch Site. No personal services or inherently governmental functions were identified. No closely associated to inherently governmental functions or critical tasks were present. While not considered NASA critical, the safety function is seen as vital to NASA success in all undertakings. The contract has a COR and alternate COR. Both are certified and they are assisted by four task monitors overseeing seeing approximately 15 WYEs. There is a healthy civil servant safety presence, numbering twice the contractor workforce and who are professionally certified at higher levels than the contractor personnel.

 **NNM13AA43C Universities Space Research Association**

This cost plus fixed fee contract develops modeling processes to support national and international weather forecasting. The effort provides reports on the contractor’s research findings. No personal services or inherently governmental functions were included in the statement of work. No closely associated to inherently governmental functions were identified. This contract did not contain critical NASA work. A certified COR was assigned. The single COR is adequate for the surveillance necessary on this contract. Changes were implemented through the Changes clause with supplemental agreements negotiated to implement work changes.

***PSC R499 SUPPORT-PROFESSIONAL OTHER***

Eleven contracts were selected as the sample from this PSC. The sample value was $147,591,605 or 64.62% of the PSC total FY13 obligated value of $228,389,730. On the task order contracts sampled, a mixture of tasks orders skewed toward larger dollar actions were selected for review in addition to the base contract statement of work. One GSA order was reviewed. Each contract and the GSA order will be discussed individually.

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| **Contractor** | **NASA Contracting Center** | **Contract #** | **Contract Title** | **Contract Amount FY2013** |
| Alphaport, Inc | Glenn Research Center |  NNC12CA04C | NASA Safety Center Technical Services | $4,330,776 |
| Booz, Allen , Hamilton, Inc  | Ames Research Center |  NNA11AA19C | Aviation Safety Reporting System | $5,542,673 |
| Chugach Federal Systems   |  Langley Research Center |  NNL11AA07C | Operation of NASA Center for Aerospace Information and STI Program Support | $5,841,313 |
| Deltha-Critique NSS Joint Venture  | Ames Research Center |  NNA10DE58C | Business Operations and Technical Services | $5,842,064 |
|  Honeywell Technology Solutions | Goddard Space Flight Center |  NNG11VM00C | Ground Systems and Mission Operations | $70,231,532 |
|  Manufacturing Technical Solutions Inc. |  Marshall Space Flight Center |  NNM13AA04Z | Marshall Integrated Program Support Services | $3,264,994 |
|  Paragon Tec |  Glenn Research Center |  NNC13BA07B | Glenn Educational Support Services | $2,740,967 |
|  Paragon Tec | Glenn Research Center |  NNC13CA13C | Education Program Office Basic Operations | $2,297,292 |
| Smart Global Solution JV | Goddard Space Flight Center | NNH10CC97C | Sponsored Research and Education Support Services | $16,738,817 |
| TASC | Goddard Space Flight Center | NNG12SA03C | Independent Verification and Validation Services | $24,819,576 |
| Wichita Tribal Enterprises | Kennedy Space Center | NNK13OW20B | Kennedy Institutional Support Services III | $5,941,600 |
|  |  |  |  TOTAL | $147,591,605 |

**NNC12CA04C Alphaport**

This contract supports the NASA Safety Center located near Glenn Research Center (GRC). It provides training to the Safety and Mission Assurance workforce and carries out several other safety missions. No personal services were found and no inherently governmental functions are being performed. No closely associated to inherently governmental functions or critical functions were identified. A certified COR and alternate COR were assigned. Both have been trained. In addition, four task monitors (TM), one for each technical area, are in place to assist with surveillance. TMs were also provided COR type training.

**NNA11AA19C Booz, Allen, Hamilton, Inc**

This cost plus fixed fee contract operates the NASA Aviation Safety Reporting System (ASRS). The ASRS provides multiagency support through intergovernmental agreements. It uses NASA’s trusted position to collect and document safety concerns received from employees in key transportation industries. No personal services or inherently governmental functions were identified. No closely associated to inherently governmental work or NASA critical work was included in the contract. One certified COR was assigned. They are well position to monitor contractor operations.

**NNL11AA07C Chugach Federal Systems**

This firm fixed price contract operates the Center of Aerospace Information (CASI). This is a scientific data warehousing operation. No personal services or inherently governmental function are assigned. No closely associated to inherently governmental functions or critical services are being performed. One certified COR is assigned to monitor contract performance. This is appropriate given the amount of oversight needed.

**NNA10DE58C Deltha-Critique NSS Joint Venture**

This IDIQ contract issued firm fixed price task orders to support Ames Research Center’s Business Operations and Technical Services (BOATS) contract. No personal services or inherently governmental functions were included. The contract did include closely associated to inherently governmental functions and a small amount of critical work.

The contract requires extensive duties to be performed associated with supporting program management, acquisition support, and human capital, all closely associated to inherently governmental functions. A robust quality assurance structure is in place. There is a COR and alternate COR assigned. Both are certified. Assisting them are 25 task monitors, one assigned per task orders. With a total contractor workforce of approximately 50 employees, the large number of TMs provides the upgraded oversight desired when performing closely associated to inherently governmental functions under contract.

**NNG11VM00C Honeywell Technology Solutions**

This cost plus award fee contract provides Ground Systems and Mission Operations (GSMO) at Goddard Space Flight Center. It is a large contract with over 440 WYEs. No personal services or inherently governmental work was identified. No closely associated to inherently governmental work was identified. The contract provides ground operation support for space operations and is considered critical to the NASA mission. One certified COR is assigned as is a deputy certified COR. An additional 50 technical monitors are assigned to assist with oversight. The TMs are assigned by task and are well positioned to monitor contract operations. The government has a large pool of 450 NASA employees available to provide guidance, oversight, or assist with operations if there is a work disruption. This is a cost plus award fee contract. Twice a year TMs provide detail information through the TOMS (Task Order Management System) to build a recommendation for the Fee Determining Official further supporting the oversight function.

**NNM13AA04Z Manufacturing Technical Solutions Inc.**

This is a blanket purchase agreement (BPA) written against a GSA Schedule. It is one of nine BPAs in place which allow task orders to be competed and awarded for program support. No personal services or inherently governmental duties were identified. There are numerous closely associated to inherently government functions in the contract including procurement, programmatic, and budget support. Some NASA critical work is on the contract with the contractor supporting the Space Launch System and Space Technology efforts. A robust oversight function is in place. There is a certified COR and alternate COR who are assisted by 40 technical monitors. This is significant oversight for a contractor providing approximately 100 work year equivalents to staff the contract. There are 136 civil servant FTEs in the supported organizations to draw oversight personnel.

**NNC13BA07B/NNC13CA13C Paragon Tec**

These contracts provides Glenn Research Center education program support. They are cost plus fixed fee IDIQ contract vehicles which provide program development and logistical support to the Education Office’s STEM engagement, Educator professional development, and intern and fellowship programs. No personal services or inherently governmental duties were on the contract. There are no closely associated to inherently governmental functions or critical work on the contract. The contract oversight is performed by a certified COR and eight Technical Monitors.

**NNH 10CC97C** Smart **Global Solution JV**

The contract provides acquisition support for the NASA Mission Directorate’s NASA Research Announcement (NRA) process. This includes recruiting a peer group to perform the peer reviews and facilitation of the review process throughout. No personal services or inherently governmental functions were identified. There is extensive closely associated to inherently governmental work on this contract. The contract supports an acquisition process, an inherently governmental function. The peer group’s work is limited to reviewing the proposal and making recommendations. NASA employees always serve as the chairman of the peer review boards and make the final determination on the proposal selections. Robust oversight structure is in place. There is one certified COR on this contract assisted by 30-35 project officers who also serve as the task monitors with support from a task lead in each Mission Directorate. No critical work was found on the contract.

**NNG12SA03C TASC**

This cost plus award fee contract provides independent validation and verification of NASA software. There were no personal services or inherently governmental functions included in the work statement. There were no closely related to inherently governmental functions or critical services covered in the contract. A certified COR was assigned who is assisted by 15 performance monitors.

**NNK13OW20B Wichita Tribal Enterprises**

This firm fixed price IDIQ contract provides non-engineering institutional support services to various directorates throughout Kennedy Space Center. Fourteen task orders have been issued to date aligned by directorate. No personal services or inherently government functions were identified. The contract does include administrative assistance for Division Directors. The type of support provided under this contract can create personal services if not well managed.

 The contract management team was well aware of this and provided frequent training to the task order customers to ensure they understood what could and could not be directed. A “dos and don’ts” letter is sent to all customers every year as a reminder. Both of these efforts along with the initial preparation of the work statement were closely coordinated with the legal office to identify potential problem areas.

 There was some work effort closely associated to inherently governmental work found in the financial management and procurement support areas. A certified COR and Alternate COR are assigned to oversee this contract. In addition, a high level of contract oversight is apparent in the financial management area, with four Task Monitors assigned for a function with 28 WYEs and one Task Monitor for 8 WYEs in the procurement area. No critical work was included in the contract.

**Analysis Summary**– Overall the contract work statements were written in a manner which displays a strong understanding of the requirements and limitations of service contracting. The contract management teams were aware of their oversight responsibilities and were able to discuss, in detail, the contract requirements, how requirements are added or removed from the contract, how they accomplished surveillance, and how performance issues are addressed. All contracts reviewed had a properly appointed COR who had received the mandatory 40 hours of training. The contract management teams were aware of the prohibition on contractor performance of inherently governmental functions. No instances of personal services were identified during the analysis.

Contracting for functions closely related to inherently governmental duties was widespread. In contracts where closely related to inherently governmental functions were acquired, NASA had established robust oversight systems that met the higher oversight standards recommended for these contracts.

Critical functions also were commonly contracted out. In all instances reviewed, there was a parallel government organization or a substantial number of government employees with similar skills that were capable of providing the necessary oversight to manage the function and monitor the contractors. The government functional leadership retained responsibility for these functions and used the contractors to support their plans. NASA is compliant with Section 743(e)(2) and has ensured that contractor employees are not employed to a level which could affect the ability of the agency to maintain control of its mission and operations.

NASA has established several controls to ensure service contracts are properly written and managed. The Baseline Performance Review (BPR) process reviews major programs periodically and their results. This process provides a check on mission requirements creep. NASA Procurement Management Reviews (PMR), which occur every two to three years for each Center, determines whether applicable Federal procurement laws and regulations are being followed. Determining if inherently governmental functions are being accomplished and that adequate contract administration is in place and performing meaningful oversight are special interest items on the PMRs.

Since 2001 NASA has instituted several practical policies that help preserve the distinction between contractor and NASA employees in the workplace. Contractors, when assigned a NASA email address, have the initials “ctr” or their company name included in the address. Contract employees also have distinctive ID badges issued to them with a prominent colored stripe to indicate they are a contract employee.

**Follow-up on 2012 Analysis Recommendation –** Two contracts were identified in the 2012 SCI Analysis that included contract language which supported the purchase of products directly on behalf of the government, an inherently governmental function. In both cases that capability had not been exercised by the Government staff but it was available in the IDIQ work statement. The report recommended the language be removed to ensure there was no future usage and to ensure no one believes this is an acceptable practice. Since publishing the report, the contracting officers involved have modified the work statements to remove the language. This matter was also briefed to the NASA Procurement Officers in a training forum held in November 2013. The matter is considered close.

**SCI/FAIR ACT CROSSWALK**

In the OMB Instruction for Section 743 of the Consolidated Appropriations Act of FY 2010 (P.L. 111-117), a pilot program to “crosswalk “ the Service Contract Inventory data and compare it to the FAIR Act data was instituted. NASA’s FAIR Act Inventory data collection process was amended and the needed data gathered to participate in the pilot study.

This is the third year NASA has performed the pilot crosswalk. In each year there has been some difficulty in associating the PSC codes with the FAIR Act function codes. This is a structural problem caused by detail level and purpose of the two coding systems. The FAIR Act function codes indicate specific types of employees (accountant, engineer, contract specialist, etc.) whereas the PSC codes used in the SCI Analysis designate whole industries (logistics, Space R&D, chemical manufacturing, etc.). This leaves the coding office to make an informed guess as to what type of employees may be utilized in those industries. The issue makes the FAIR Act PSC association data inconsistent, with the likelihood an agency is underreporting in the FAIR Act Inventory how many government employees are associated with the chosen PSCs. Part of the association problem stems from the difficulty/reluctance of government employees to view contractors and civil servants as functionally interchangeable. Employees are consistently cautioned to maintain a clear demarcation between the two workforces, partially to prevent the issues addressed in this analysis, such as unjustified personal services and contractor performance of inherently governmental duties.

Under PSC AR16 R&D SPACE:AERONAUTICS/SPACE TECHNOLOGY (MANAGEMENT/SUPPORT), NASA had 19 contracts with $57,009,801 in FY13 obligations. The FAIR Act data submissions indicated there were 4,509 Government Full Time Equivalents (FTE) associated with this PSC.

Analysis – NASA is a research and development organization. It has a large internal engineering workforce and contracts out a significant amount of R&D work. By dividing the obligation value for this PSC by a factor of $200,000 per work year, there are an estimated 285 contractor WYEs working in this PSC. The work year factor was developed by analyzing burdened labor rates for highly skilled engineering talent in a variety of NASA contracts and in available industry statistics. Applying the factor to the contract obligation total creates the maximum theoretical contractor WYE count, what would be seen if the contracts were totally made up of labor costs. This approach was used to ensure we did not overestimate the numbers of government workers relative to the contractor workforce. The results revealed an excellent ratio of government to contractor employees with 15.8 FTEs for each contractor WYE. With such a large internal pool of engineering talent to draw from it is easy to locate technically competent government employees to assist with contract oversight. The large internal workforce also would allow NASA to continue research albeit at a slower pace in the case of a major contract disruption.

Under PSC R499 SUPPORT-PROFESSIONAL OTHER NASA had $228,389,730 in FY13 obligations spread out among 157 contracts and purchase orders. The FAIR Act inventory revealed 1,896 NASA FTEs marked as associated with R499.

Analysis – NASA contracts out a large proportion of its total budget, upwards of 80%. Numerous contracts are let for program management support to help manage this workload. Applying a factor of $175,000 per work year, there are 1,305 contract WYEs working under this PSC. The factor was developed by analyzing the sample contract cost reports and industry statistics for program management employees. The FAIR Act submission indicated there were 1,896 NASA employees associated with PSC R499 work. This reveal a ratio of approximately 1.5 civil servants per contractor WYE which is adequate for NASA to maintain effective control of these important functions. The large civil service program management workforce ensures NASA has extensive internal knowledge plus ensures there are numerous individuals available to assist with contract oversight. Since program management support is closely related to inherently governmental work, a highly favorable government to contractor ratio is desirable. The large number of civil servants would also permit the agency to continue operations in the case of a contract disruption.

***summary***

Overall NASA continues to effectively utilize service contracts to support its agency operations without becoming overly reliant or dependent on contract support. The contract documents reviewed ensured the roles and responsibilities between the agency and supporting contractors were clearly delineated and cover allowable contractor functions. The contract monitoring systems are robust with high level surveillance performed on higher risk contracts. Properly trained and appointed contracting officer representatives were present in all cases and were effectively carrying out their contract oversight responsibilities. Overall responsibility for the Service Contract Inventory resides with Mr. William P. McNally, Associate Administrator for Procurement. Mr. McNally can be reached at 202-358-2090 or William.P.McNally@nasa.gov.