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AUDIT REPORT

OFFICE OF AUDITS

EVALUATION AND OVERSIGHT OF NASA'S
UNIVERSITY-AFFILIATED SPACEPORT TECHNOLOGY
DEVELOPMENT CONTRACT NEEDED IMPROVEMENT

OFFICE OF INSPECTOR GENERAL



National Aeronautics and
Space Administration

Final report released by:

signed

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Acronyms

ASRC	Arctic Slope Regional Corporation
CO	Contracting Officer
COTR	Contracting Officer's Technical Representative
FAR	Federal Acquisition Regulation
FY	Fiscal Year
GAO	Government Accountability Office
KSC	Kennedy Space Center
MIDAS	Management Information Decision Analysis System
NFS	NASA FAR Supplement
PDR	Preliminary Design Review
SB	Small Business
TO	Task Order
USTDC	University-Affiliated Spaceport Technology Development Contract

OVERVIEW

EVALUATION AND OVERSIGHT OF NASA'S UNIVERSITY- AFFILIATED SPACEPORT TECHNOLOGY DEVELOPMENT CONTRACT NEEDED IMPROVEMENT

The Issue

The Office of Inspector General received an anonymous complaint alleging that the performance of the Arctic Slope Regional Corporation (ASRC), ASRC Aerospace Corporation, did not meet the contract requirements of NASA's University-Affiliated Spaceport Technology Development Contract (USTDC), NAS10-03006. Specifically, the complainant alleged that contract deliverables for task order (TO) 425 under contract NAS10-03006 were not timely and that deliverables did not meet minimum standards specified in the contract's statement of work. We were unable to ascertain whether ASRC Aerospace Corporation deliverables for TO 425 were timely and met contract performance standards because TO 425 only identified a completion date for technical engineering support; it did not identify specific dates for design deliverables. Therefore, we expanded our objectives to determine whether fiscal year (FY) 2007 performance evaluation factors provided a fair and objective assessment of the contractor's performance and whether cost data submitted to NASA by the contractor during FY 2008 for the 9-month period of October 2007 through June 2008 was accurate. To meet our objectives, we initiated an audit of 191 TOs that were active at the end of FY 2007. Of those TOs, we identified 113 that did not include milestones, and we statistically selected a sample of 51 TOs for further review (see Appendix A for details of the audit's scope and methodology).

The USTDC is a performance-based; indefinite-delivery, indefinite-quantity; cost-reimbursement-award-fee; and incentive-fee contract administered by Kennedy Space Center (KSC). The objective of the USTDC is to provide a broad range of non-routine engineering development services and products to KSC organizations and operational customers. TOs are used to define contract tasks, requirements, funding targets and limits, milestones, performance indicators, and performance standards. TOs for the USTDC are drafted by TO managers, approved by the contracting officer's technical representative (COTR), and issued by the contracting officer (CO). The amount of award fee the contractor earns is based on an evaluation of the contractor's performance against criteria established in the USTDC Award Fee Plan, which includes Technical, Cost, Business, and Special Areas of Emphasis performance areas.

Results

We found that performance evaluation factors used to assess ASRC Aerospace Corporation's performance were not TO-specific and did not provide the basis for a fair and objective assessment of the USTDC contractor's performance. Because performance evaluation factors were not TO-specific and tied to desired outcomes as required by acquisition regulations, the performance evaluations provided little evidence that the approximately \$2.2 million in USTDC award fees for FY 2007 were fully justified or were an accurate reflection of the contractor's performance. In addition, we found that overtime premium costs were not adequately monitored and cost controls were ineffective. Our analysis of cost data submitted to NASA by ASRC Aerospace Corporation from October 2007 through June 2008 identified possible unauthorized overtime premium pay. This occurred because the USTDC CO was never notified by either the contractor or any of the TO managers that overtime premiums were needed.

Performance Evaluation Factors Were Not Specific. We found that FY 2007 performance evaluation factors did not provide a fair and objective assessment of the USTDC contractor's performance. Performance evaluation factors used to assess ASRC Aerospace Corporation's performance were not TO-specific and could not be consistently tied to desired outcomes. In addition, the Award Fee Evaluation Report that documents assessments of the contractor's performance did not identify which performance metrics were considered critical. This occurred because TO managers and the COTR did not follow guidance in the NASA "Award Fee Contracting Guide," June 27, 2001, and the USTDC Award Fee Plan. As a result, we were unable to verify that ASRC Aerospace Corporation's FY 2007 performance evaluation rating was fully justified or that the award fees received were an accurate reflection of the contractor's performance. ASRC Aerospace Corporation received an excellent performance evaluation rating (96) and \$2.2 million of the available \$2.4 million in award fees for FY 2007.

KSC contracting personnel divided contractor performance evaluations into four performance areas for FY 2007: Technical, Cost, Special Areas of Emphasis, and Business. Our review determined that Technical performance evaluation factors were too general to accurately assess the contractor's performance. Of the 51 TOs in our sample, we found that 46 (90 percent) did not include specific dates for contract deliverables and did not have performance evaluation factors that could be tied to deliverables in the TO. However, the USTDC Award Fee Plan identifies milestone performance as a critical metric that should be used to evaluate Technical performance.

NASA Federal Acquisition Regulation Supplement (NFS) 1816.405-274, "Award Fee Evaluation Factors," states that contractor performance evaluation factors should be explicit and tied to desired outcomes. Additionally, a recent Government Accountability

Office audit report¹ states that NASA does not always follow its award fee guidance and, in some cases, there appears to be a significant disconnect between the contractor's performance and fees paid. KSC contracting personnel did not always follow NASA guidance and developed Technical performance evaluation factors that were often generic and not specifically tied to any desired outcomes. For example, one performance evaluation survey included "Quality of Work" as a performance evaluation factor, but did not identify any of the tasks in the TO, how the tasks were to be evaluated, or any of the desired outcomes.

Cost performance evaluation factors were generally inaccurate because the evaluation factors did not measure labor hours and labor costs that fell below the negotiated amounts in the contract. When the metrics were originally developed, KSC contracting personnel did not include formulas in the Cost performance metrics to compute labor hours and labor costs below the contract's negotiated amounts. The formulas did not allow for a reduction in scores when labor hours and labor costs fell below the negotiated amounts, indicating either that the ASRC Aerospace Corporation was unable to meet the staffing levels required under the contract or that labor hours and cost estimates in the contract were overstated. For FY 2007, ASRC Aerospace Corporation's labor hours and labor costs were approximately 20 percent and 19 percent, respectively, below the negotiated amounts.

We also identified approximately 5,000 hours of uncompensated overtime that was included in the labor hours reported by the contractor for the 9-month period ending June 2008. The contractor stated that uncompensated overtime hours were unpaid hours worked in support of the USTDC. However, we were unable to match uncompensated overtime hours reported by the contractor to individual task orders using the contractor's monthly financial management report. Therefore, we were unable to verify whether the hours were actually worked. Including uncompensated overtime hours in the total labor hours could inappropriately elevate contractor performance evaluations and increase the amount of award fee earned by the contractor. The contractor's average labor rate appears to be lower because labor costs are calculated using labor hours that include uncompensated overtime hours.

Performance evaluation factors for Special Areas of Emphasis did not always identify the desired outcomes or how the outcomes were to be measured. This occurred because KSC contracting personnel did not always follow NFS guidance and developed performance evaluation factors for Special Areas of Emphasis that were often generic and open-ended statements. For example, one of the six unverifiable performance factors stated that the contractor should ensure support of NASA's Exploration Mission with an appropriate mix of technical skills while continuing to provide superior quality support to existing programs. However, the performance evaluation factor did not identify what skill mix was appropriate or how superior quality support to existing programs would be

¹ "NASA Procurement: Use of Award Fees for Achieving Program Outcomes Should Be Improved" (GAO-07-58, January 17, 2007).

measured. As a result, contractor performance in Special Areas of Emphasis could not be verified. We did not find any significant issues in the Business area.

Overtime Costs Not Monitored. Our analysis of cost data submitted to NASA by ASRC Aerospace Corporation from October 2007 through June 2008 identified 34 active TOs for FY 2008 that included overtime premium pay² that may not have been authorized by the contract. Federal Acquisition Regulation (FAR) 22.103-3(c) states: “When it becomes apparent that overtime will be required in contract performance, the CO shall secure from the contractor a request for all overtime to be used during the life of the contract.” However, the CO was never notified by either the contractor or any of the TO managers that overtime premiums were needed. The CO and the COTR stated they were unaware that the contractor was charging overtime or that overtime premium was being paid. These overtime premium hours and costs were not broken out separately in the contractor’s monthly financial management report. Without this level of visibility, it is difficult for the CO to monitor these hours and costs to ensure that the discretion provided by the exceptions in Contract Clause 52.222-2(b), “Payment for Overtime Premiums,” is not abused. Therefore, we question the \$136,000 in overtime premiums paid to the contractor for the 9-month period ending June 2008.

Management Action

We recommended that the USTDC CO require the COTR and TO managers to develop new Technical and Special Areas of Emphasis performance evaluation criteria for any new TO issued during the remaining option years of the USTDC. Also, performance evaluation criteria should be TO-specific and tied to contract deliverables, milestones, and desired outcomes. In addition, we recommended that the CO revise Cost performance metrics to ensure that Cost performance evaluation factors assess all direct costs. The CO should require the contractor to include uncompensated overtime hours as a separate line item in the contractor’s monthly financial management report. In addition, the CO should ensure that the COTR properly identifies critical metrics in the Award Fee Evaluation Report.

To improve monitoring and controls over contract costs, the CO should require the contractor and TO managers to document and request overtime premiums in accordance with USTDC’s Contract Clause 52.222-2(b), “Payment for Overtime Premiums,” and FAR 22.103-3(c), “Procedures.” The CO should require the contractor to include overtime premium hours and costs as separate line items in the contractor’s monthly financial management report, thereby allowing for better monitoring of overtime premium costs in accordance with USTDC’s Contract Clause 52.222-2(b), “Payment for Overtime Premiums.”

² Premium pay is computed at one and a half times the employee’s labor rate.

In response to a draft of this report, issued February 19, 2009, the Director of KSC's Office of Procurement (the KSC Procurement Director) concurred with our recommendations and stated that the USTDC CO will require the COTR and TO managers to develop new Technical performance evaluation criteria for any new TO issued during the remaining option years of the USTDC. The KSC Procurement Director agreed to require the USTDC CO to revise Cost performance metrics, to ensure that Cost performance evaluation factors assess all direct costs and to ensure that performance evaluation factors identified in the Award Fee Plan as critical are also identified as critical in the Award Fee Report. The KSC Procurement Director also agreed to require that the USTDC CO document overtime premium requirements in accordance with FAR 52.222-2(b) and to require that the contractor include overtime premium pay hours and cost as separate line items in the contractor's monthly financial management report.

The corrective actions described by management are responsive to our recommendations. The recommendations are resolved and will be closed upon completion and verification of management's corrective action. (See Appendix B for the full text of management's comments.)

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INTRODUCTION

Background

The Office of Inspector General conducted this audit after receiving an anonymous complaint alleging that the performance of a subsidiary of the Arctic Slope Regional Corporation (ASRC), ASRC Aerospace Corporation, did not meet contract requirements of NASA's University-Affiliated Spaceport Technology Development Contract (USTDC), NAS10-03006. Specifically, the complainant alleged that contract deliverables for task order (TO) 425 under contract NAS10-03006 were not timely and that deliverables did not meet minimum standards specified in the contract's statement of work.

The USTDC, administered by Kennedy Space Center (KSC), is a performance-based; indefinite-delivery, indefinite-quantity; cost-reimbursement-award-fee; and incentive-fee contract. Award fees are intended to encourage and reward the contractor for safe, high-quality, cost-conscious performance in fulfilling contract requirements. Incentive fees are intended to encourage the contractor to market the facilities and technical capabilities at KSC to commercial and other Government customers to ensure that those facilities and technical capabilities are fully utilized. Under a performance-based contract, contract requirements are described in terms of what the required output is rather than specify how the work is to be accomplished. TOs are used to define contract tasks, requirements, funding targets and limits, milestones, performance indicators, and performance standards. TOs for the USTDC are drafted by TO managers, approved by the contracting officer's technical representative (COTR), and issued by the contracting officer (CO). NASA designated the Defense Contract Audit Agency as the approval authority for provisional billing for the USTDC; therefore, contractor invoices are sent directly to the Defense Contract Audit Agency and are not reviewed by the CO.

Award fee determinations are made by the KSC Performance Evaluation Board, based on an Award Fee Evaluation Report and any additional information provided by the contractor. In the Award Fee Evaluation Report, the COTR and CO will make a consolidated recommendation of an overall adjective rating and numerical score. The NASA "Award Fee Contracting Guide," June 27, 2001, requires the following adjective ratings and numerical scores to be used on all award fee contracts: Excellent, 100-91; Very Good, 90-81; Good, 80-71; Satisfactory, 70-61; and Unsatisfactory, less than 61.

The Award Fee Evaluation Report does not include individual scores or computations used to arrive at the overall recommendation. Summaries of the TOs are discussed in the USTDC Award Fee Evaluation Report, which divides the performance evaluation into four performance areas:

- Technical: combines performance data for all TOs worked during the evaluation period.
- Cost: evaluates efforts and initiatives made by the contractor to control cost.
- Business: includes factors that impact the whole contract, such as safety, quality assurance, and resource and contract management.
- Special Areas of Emphasis: specific areas of contract performance that are emphasized in the award fee evaluation for the contract period. For example, the contractor was required to ensure an appropriate mix of technical skills to support NASA's Exploration Mission while continuing to provide superior quality support to existing programs.

ASRC Aerospace Corporation, the prime contractor for the USTDC, is an aerospace engineering company that specializes in systems engineering, hardware and software system design and development, network engineering, hardware maintenance, information management, and systems research and development. The base period of the USTDC was from March 1, 2003, through September 30, 2007, with a maximum order value of \$220 million. However, KSC contracting personnel only issued USTDC TOs equaling \$138 million of the \$220 million, with available award fees³ of \$6.8 million and available incentive fees⁴ of \$1.7 million. During this base period, USTDC earned \$6.3 million in award fees and \$343,300 in incentive fees. In October 2007, KSC exercised an option to extend the contract for a 3-year period, through September 30, 2010, increasing the maximum order value to \$430 million. During this option period, USTDC's available award fee could increase by approximately \$12.6 million; there would be no increase to available incentive fee. Including all options, the maximum order value for the contract is \$600 million.

Objectives

In response to the complaint, we initiated a preliminary review in February 2008 to determine whether TO deliverables provided by the ASRC Aerospace Corporation were timely and whether the ASRC Aerospace Corporation met contract performance standards in the USTDC statement of work. Because performance evaluation factors for

³ Available award fee is 6 percent of the adjusted target cost (total estimated cost less direct materials and other direct costs for each TO issued).

⁴ Available incentive fee is 1.5 percent of the adjusted target cost (total estimated cost less direct materials and other direct costs for each TO issued).

INTRODUCTION

TO 425 were not specific and tied to desired outcomes, we expanded our objectives to determine whether fiscal year (FY) 2007 performance evaluation factors provided a fair and objective assessment of the contractor's performance and whether cost data submitted to NASA by the contractor during FY 2008 for the 9-month period of October 2007 through June 2008 was accurate. See Appendix A for details of the audit's scope and methodology, our review of internal controls, and prior coverage.

FINDING A: CONTRACTOR PERFORMANCE EVALUATIONS WERE NOT ALWAYS ACCURATE AND OBJECTIVE

Contractor performance evaluations included in the Award Fee Evaluation Report for the contract period ending September 30, 2007, did not always provide an accurate and objective assessment of the contractor's performance. Performance evaluation factors used to assess ASRC Aerospace Corporation's performance were not TO-specific and could not be consistently tied to desired outcomes. This occurred because TO managers and the COTR did not follow guidance in the NASA Federal Acquisition Regulation Supplement (NFS) 1816.405-274, "Award Fee Evaluation Factors," and NASA "Award Fee Contracting Guide," June 27, 2001.

NFS and NASA's Award Fee Contracting Guide state that contractor performance evaluation factors should be explicit, tied to desired outcomes, and based on characteristics of an individual procurement. In addition, a recent Government Accountability Office (GAO) audit report⁵ states that NASA does not always follow its award fee guidance and, in some cases, there appears to be a significant disconnect between the contractor's performance and fees paid. We found that performance evaluation factors were inaccurate, unverifiable, or too general to accurately assess the contractor's performance in the Technical, Cost, and Special Areas of Emphasis performance areas. We did not identify any significant issues in the Business performance area, but we did determine that critical performance metrics were not properly identified in the Award Fee Evaluation Report. As a result, we were unable to verify that ASRC Aerospace Corporation's FY 2007 performance evaluation rating was fully justified or that the award fees received were an accurate reflection of the contractor's performance. ASRC Aerospace Corporation received an excellent performance evaluation rating (96) and \$2.2 million of the available \$2.4 million in award fees for FY 2007.

Technical Performance

Performance evaluation factors used to evaluate Technical performance were not TO-specific and were too general to accurately assess the contractor's performance. TO managers assess a contractor's performance and provide an adjective rating and a numerical score for each TO on a quarterly basis. Adjective ratings and scores are

⁵ "NASA Procurement: Use of Award Fees for Achieving Program Outcomes Should Be Improved" (GAO-07-58, January 17, 2007).

reported to the COTR and documented in an Award Fee Evaluation Report that is provided to the KSC Performance Evaluation Board.

KSC contracting personnel stated that Technical performance is the most important performance area considered during the award fee evaluation process. The Award Fee Plan for the USTDC lists milestone performance, TO performance evaluation survey, and overall TO ratings as critical metrics for evaluating Technical performance. However, KSC contracting personnel did not follow guidance in the USTDC Award Fee Plan and NASA's Award Fee Contracting Guide when they developed their Technical performance evaluation factors. For example, of the 191 TOs active at the end of FY 2007, 113 (59 percent) did not have milestones. In addition, based on our review of a statistical sample of 51 of the 113 TOs without milestones, we determined that the TO managers

- used performance evaluation surveys consisting of 17 standardized, generic questions that were not TO-specific (51, or 100 percent, of the TOs reviewed);
- used performance evaluation surveys that did not contain metrics or performance evaluation factors that could be tied to TO deliverables (46, or 90 percent, of the 51 TOs reviewed); and
- did not always complete quarterly performance evaluation surveys, even though TO evaluation surveys were listed in the Award Fee Plan as a critical evaluation factor (8, or 16 percent, of the 51 TOs reviewed).

During our audit, KSC contracting personnel attempted to improve the performance evaluation surveys by revising the FY 2008 surveys to include 10 standardized questions to evaluate the contractor's Technical performance. However, the revised performance evaluation surveys still did not meet requirements in NASA's Award Fee Contracting Guide because the 10 evaluation survey questions were not TO-specific. NASA's Award Fee Contracting Guide, Section 3.4.1, "Performance Evaluation Factors," states that evaluation factors used in award fee contracting should not be standardized. The Guide also states that rigid standardization tends to generate evaluation plans that either are too broad or include factors inapplicable to a given function.

Cost Performance

Cost performance evaluations used to evaluate the contractor's labor hours and labor costs were not accurate. When the metrics were originally developed, KSC contracting personnel did not include Cost performance metrics that accurately computed labor hours and labor costs below the negotiated amounts in the contract. Therefore, the formulas in the metrics did not allow for a reduction in scores when labor hours and labor costs fell below negotiated amounts. The Cost performance area included five performance evaluation factors that assessed the contractor's labor rate, labor hours, labor costs,

overhead rate, and other direct costs. The CO rated the contractor's overall Cost performance as Good, with an average score of 73 for the five performance evaluation factors. However, our analysis showed that Cost performance evaluation factors did not accurately compute labor hours and costs that fell below the negotiated amounts in the contract. Our review of FY 2007 labor hours and labor costs, as reported by the contractor in monthly financial management reports,⁶ showed that labor hours and labor costs were approximately 19 percent and 20 percent, respectively, below the negotiated amounts,⁷ which should have lowered the labor hour and labor cost scores. However, we noted that the labor hour and labor cost metrics included a calculation that automatically scores them as 95 or more when labor hours and costs are below or equal to negotiated amounts in the contract. This scoring practice results in an overall Cost performance score that does not adequately consider labor hours and labor costs below negotiated amounts in the contract. The CO noted that the metrics did not adequately consider underruns⁸ and was in the process of revising the metrics for FY 2008 when the audit began.

Although the CO and COTR revised all of the Cost performance evaluation factors for FY 2008, we noted that the overhead rates and other direct costs no longer received a Cost performance evaluation score for FY 2008. This occurred because KSC contracting personnel decided to monitor overhead rates as a trend metric⁹ instead of a scored performance evaluation factor. The evaluation factor for other direct costs was eliminated because contracting personnel determined that TO managers could monitor these items at the TO-level. However, NASA FAR Supplement 1816.405-274, "Award Fee Evaluation Factors," states that the predominant consideration of a cost control evaluation should be a measurement of the contractor's performance against the contract's negotiated estimated costs. Our evaluation of cost data for FY 2008 identified that approximately \$19 million of the contractor's \$66 million in direct costs were excluded from the cost evaluation process because of the elimination of Cost performance evaluation factors for other direct costs. As a result, the revised FY 2008 Cost performance factors did not adequately measure the contractor's Cost performance because approximately 29 percent of the contractor's direct costs were excluded from the cost evaluation.

We also identified approximately 5,000 hours of uncompensated overtime that was included in the labor hours reported by the contractor for the 9-month period reviewed. The contractor stated that uncompensated overtime hours were unpaid hours worked in

⁶ Contractors provide detailed cost data in NASA Form 533M, "Monthly Contractor Financial Management Report."

⁷ Underrunning negotiated amounts indicates the contractor is unable to meet the contract's required staffing levels or was overestimating work.

⁸ The CO's rationale for revising the metrics was "Only measuring overruns incentives the contractor to always overestimate work."

⁹ Those measurements that are useful to collect and evaluate over time but do not receive a performance evaluation score.

support of the USTDC. However, we were unable to match uncompensated overtime hours reported by the contractor to individual task orders because uncompensated overtime hours were not identified separately in the monthly financial management reports. Therefore, we were unable to verify whether the hours were actually worked. Including uncompensated overtime hours in the total labor hours could inappropriately elevate contractor performance evaluations and increase the amount of the award fee earned by the contractor. The contractor's average labor rate appears to be lower because labor costs are calculated using labor hours that include uncompensated overtime. Including uncompensated overtime in labor hours also improves the contractor's labor hour planning and total labor hour metrics. The CO and TO managers stated they were unaware that the contractor had included uncompensated overtime in labor hour cost data provided to NASA.

Special Areas of Emphasis

Our review determined that FY 2007 performance evaluation factors for Special Areas of Emphasis were generic, open-ended statements and that six of the eight performance evaluation factors used were unverifiable. Performance evaluation factors did not identify the desired results or how the desired results were measured. Following are the six performance evaluation factors that we determined to be unverifiable:

- Ensure appropriate technical skill mix to support NASA's Exploration Mission, while continuing to provide superior quality support to existing programs.
- Ensure continued emphasis and support to Constellation Level III and IV integration efforts performed by NASA and other Constellation contractor teams.
- Continued emphasis on teamwork and communication with NASA.
- Continued emphasis on TO closeout when appropriate.
- Continue progress made in implementing Management Information Decision Analysis System (MIDAS) features in order to enhance management reporting and planning.
- Implementation of Earned Value Management principles per the Management Plan or as required by specific customers.

The USTDC Award Fee Plan states that Special Areas of Emphasis are used by the Government to document the specific areas of contract performance that will be emphasized in the award fee evaluation. However, we found that six of the eight performance evaluation factors were subjective with no specific performance indicators. None of the eight evaluation factors listed "outcome" or "output" indicators or the method to be used to evaluate contractor performance. During interviews, both the CO

and the COTR stated that they did not agree that Special Areas of Emphasis were required to include measurable performance evaluation factors and that they intentionally left the performance evaluation factors very broad. However, NASA Headquarters issued Procurement Notice 04-27, dated June 29, 2007, which revises NFS 1816 to reemphasize the importance of tying award fee criteria to desired outcomes. These changes were made in response to the recommendations for improving NASA Award Fee Policy in the GAO audit report, “NASA Procurement: Use of Award Fees for Achieving Program Outcomes Should Be Improved” (GAO-07-58, January 2007).

Further, GAO’s audit report states that while NASA’s evaluations would indicate generally good contractor performances, such performances did not always translate into desired program outcomes. The report states that such a disconnect raised questions as to the extent that NASA was achieving its desired outcome as intended by the award fee criteria. In response to the report’s recommendation, NASA agreed to reemphasize the importance of tying award fee criteria to desired outcomes and limiting the number of subfactors used in evaluations.

Business Performance

We did not identify any significant issues in the Business performance area. The November 2, 2007, USTDC Award Fee Evaluation Report rated the Business performance area as Excellent. The Business performance area includes performance evaluation factors associated with safety and mission assurance, covering work-related mishaps, to include injuries and property damage. The factors state that no more than one work-related injury per quarter is acceptable. Our review of performance evaluation factors indicated that the contractor had only one work-related injury and no property damage mishaps for FY 2007.

The Business performance area also included seven performance evaluation factors for “Business and Management Systems Reviews.” We noted that one of the seven evaluation factors was to evaluate the contractor’s success in meeting “Small Business (SB) Subcontracting Goal” in support of NASA’s Socioeconomic Program. Our review determined that using an SB Subcontracting Goal as a performance evaluation factor was not necessary because the contractor was already an 8(a)¹⁰ firm and had already received credit toward the Agency’s Socioeconomic Program goal. However, the SB Subcontracting Goal evaluation factor was only one of seven factors and had a minimal impact on the overall evaluation of the Business performance area. Therefore, we did not consider this to be a significant issue.

¹⁰The 8(a) Program is named for the section of the Small Business Act that authorizes its policies and procedures. The purpose of the Program is to assist eligible firms to compete in the American economy through business development.

Critical Performance Metrics

We determined that the USTDC Award Fee Evaluation Report, November 2, 2007, used by the Fee Determining Official to evaluate the contractor's performance did not identify whether any of the performance metrics were critical. The USTDC's Award Fee Plan¹¹ identifies 8 critical metrics and 15 non-critical metrics. Critical metrics are considered key indicators of contract performance. However, there was no distinction between critical and other metrics in the USTDC Award Fee Evaluation Report because the COTR failed to identify critical performance evaluation factors in the Award Fee Evaluation Report provided to the Award Fee Board. NASA's Award Fee Contracting Guide, paragraph 3.2.1, requires the Performance Evaluation Board and the Fee Determination Official to evaluate a contractor's performance according to the standards and criteria stated in the Award Fee Plan. Therefore, it is essential that the Award Fee Evaluation Report identify metrics that are critical and key indicators of the contractor's performance. As a result, the KSC Performance Evaluation Board and the Fee Determination Official's determination included non-critical metrics in addition to critical metrics, which are the key indicators of the contractor's performance.

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

Recommendation 1. The USTDC CO should require the COTR and TO managers to develop new Technical and Special Areas of Emphasis performance evaluation criteria for any new TO issued during the remaining option years of the USTDC. Performance evaluation criteria should be TO-specific and tied to contract deliverables, milestones, and desired outcomes.

Management's Response. The KSC Procurement Director concurred, stating that the USTDC CO will require the COTR and TO managers to develop new Technical performance evaluation criteria for any new TO issued during the remaining option years of the USTDC. Performance evaluation criteria will be TO-specific and tied to contract deliverables, milestones, and desired outcomes. The USTDC CO will require the COTR and TO managers to maximize the use of objective performance outcomes for Special Areas of Emphasis while retaining the flexibility to use subjective evaluation techniques where appropriate. Action is to be completed for the unexercised option periods beginning October 1, 2010, in accordance with the recommendation.

Evaluation of Management's Response. Management's proposed action is responsive. The recommendation is resolved and will be closed upon completion and verification of management's corrective action.

¹¹The Award Fee Plan identifies contract level metrics used to evaluate the contractor's performance.

Recommendation 2. The USTDC CO should revise Cost performance metrics to ensure that Cost performance evaluation factors assess all direct costs.

Management's Response. The KSC Procurement Director concurred, stating that the USTDC CO will ensure that Cost performance evaluation factors assess all direct costs. Action is to be completed by November 15, 2009.

Evaluation of Management's Response. Management's proposed action is responsive. The recommendation is resolved and will be closed upon completion and verification of management's corrective action.

Recommendation 3. The USTDC CO should require the contractor to include uncompensated hours as a separate line item in the contractor's monthly financial management report.

Management's Response. The KSC Procurement Director concurred, stating that the USTDC CO will require the contractor to break out uncompensated overtime to a separate line in the contractor's monthly financial management report. Action is to be completed by May 15, 2009.

Evaluation of Management's Response. Management's proposed action is responsive. The recommendation is resolved and will be closed upon completion and verification of management's corrective action.

Recommendation 4. The USTDC CO should require the COTR to identify critical performance evaluation factors in the Award Fee Evaluation Report provided to the KSC Performance Evaluation Board.

Management's Response. The KSC Procurement Director concurred, stating that the USTDC COTR will ensure that performance evaluation factors identified in the Award Fee Plan as critical are also identified as such in the Award Fee Evaluation Report. Action is to be completed by November 15, 2009.

Evaluation of Management's Response. Management's proposed action is responsive. The recommendation is resolved and will be closed upon completion and verification of management's corrective action.

FINDING B: OVERTIME PREMIUM COSTS WERE NOT ADEQUATELY MONITORED

We determined, based on our analysis of cost data submitted to NASA by the contractor from October 2007 through June 2008, that overtime costs were not adequately monitored. This occurred because TO managers did not adequately monitor overtime hours charged to their TOs. Federal Acquisition Regulation (FAR) 16.301-3, "Limitations," states that a cost-reimbursement contract may be used only when the contractor's accounting system can adequately determine costs applicable to the contract and appropriate Government surveillance during the performance period will provide reasonable assurance that efficient methods and effective cost controls are used. Our review disclosed that KSC paid \$136,000 to the contractor during the 9-month period of our review for overtime that may not have been authorized by the contract.

Overtime Premium Pay

Because of the problems we identified with FY 2007 Cost performance evaluation factors, as discussed in Finding A, we reviewed cost data submitted to NASA by the contractor during FY 2008. Our analysis identified 34 active TOs for FY 2008 that included overtime premium pay¹² that may not have been authorized by the USTDC. Contract Clause 52.222-2, paragraph (a), "Payment for Overtime Premiums," states that overtime premiums are not authorized unless the overtime premium is paid for work that meets one of the exceptions in FAR 52.222-2, paragraph (a)(1-4). We attempted to verify that the overtime premium paid met one of the exceptions; however, the contractor was unable to provide documentation for the overtime premiums in question. Therefore, we question the \$136,000 in overtime premiums paid to the contractor for the 9-month period ending June 2008.

Contract Clause 52.222-2(a) states:

[T]he use of overtime is authorized under this contract if the overtime premium does not exceed *\$0 or the overtime premium is paid for work—(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature; (2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting; (3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably

¹²Premium pay is computed at one and a half times the employee's labor rate.

be interrupted or completed otherwise; or (4) That will result in lower overall costs to the Government.

* Insert either “zero” or the dollar amount agreed to during negotiations. The inserted figure does not apply to the exceptions in paragraph (a)(1) through (a)(4) of the clause.

FAR 22.103-3, “Procedures,” paragraph (c), states that “[w]hen it becomes apparent . . . that overtime will be required in contract performance, the contracting officer shall secure from the contractor a request for all overtime to be used during the life of the contract.” However, the CO stated that because the Defense Contract Audit Agency had delegation authority to approve contractor vouchers for provisional payments, he did not review contractor vouchers. Therefore, he was unaware that the contractor was receiving overtime premium payments. FAR 1.602-2, “Responsibilities,” requires the CO to ensure that the contractor complies with terms and conditions in the contract. The CO was never notified by either the contractor or any of the TO managers that overtime premiums were needed. Only 1 of the 16 TO managers responsible for the 34 TOs stated that he was aware that overtime premiums were being charged to his TO. Further, the contractor’s monthly financial management report did not identify overtime premium hours and costs separately from regular overtime hours. Therefore, the CO and the COTR did not have adequate information to provide sufficient oversight in this area.

Contract Clause 52.222-2(b) states:

[R]equests for estimated overtime premiums shall: (1) identify the work unit in which the requested overtime will be used, together with workload, staffing, and other data to permit the Contracting Officer to evaluate the necessity for the overtime; (2) demonstrate the effect that denial of the request will have on the contract delivery or performance schedule; (3) identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts; and (4) provide reasons why the required work cannot be performed by using multi-shift operations or by employing additional personnel.

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

Recommendation 5. The USTDC CO should require the contractor and TO managers to document and request overtime premiums in accordance with USTDC’s Contract Clause 52.222-2(b), “Payment for Overtime Premiums,” and FAR 22.103-3(c) “Procedures.”

Management’s Response. The KSC Procurement Director concurred. The USTDC CO agreed that overtime premium requirements that do not meet the exceptions found in FAR 52.222-2(a) should be documented in accordance with FAR 52.222-2(b). The USTDC CO will issue a letter to the contractor calling attention to the contractor’s responsibilities under FAR 52.222-2. Action is to be completed by April 1, 2009.

Evaluation of Management's Response. Management's proposed action is responsive. The recommendation is resolved and will be closed upon completion and verification of management's corrective action.

Recommendation 6. The USTDC CO should require the contractor to include overtime premium pay hours and costs as separate line items in the contractor's monthly financial management report thereby allowing for better monitoring of Overtime Premium costs in accordance with USTDC's Contract Clause 52.222-2(b), "Payment for Overtime Premiums."

Management's Response. The KSC Procurement Director concurred, stating that the USTDC CO will require the contractor to include overtime premium pay hours and costs as separate line items in the contractor's monthly financial management report. Action is to be completed by May 15, 2009.

Evaluation of Management's Response. Management's proposed action is responsive. The recommendation is resolved and will be closed upon completion and verification of management's corrective action.

APPENDIX A

Scope and Methodology

We performed this audit from February 2008 through February 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We interviewed KSC contracting officials, KSC Engineering Directorate officials, KSC Office of the Chief Financial Officer officials, USTDC governmental TO managers, and ASRC Aerospace Corporation contract employees. We discussed areas related to the USTDC and contract modifications, as well as ASRC Aerospace Corporation background, contract option years, USTDC TOs, TO processes and costs, contract award fee and performance evaluation procedures, and contract employee wages and labor hours.

To evaluate whether ASRC Aerospace Corporation met contract performance standards, we initially reviewed the USTDC Statement of Work and Data Requirement Deliverables for TO 425. In addition, we reviewed the TO evaluation performance history by interviewing the COTR and obtaining the completed FY 2007 TO performance history and the first three quarters of FY 2008 performance history from the COTR and USTDC Internal Surveillance Reports. The COTR identified 191 TOs that were active at the end of FY 2007. Our review of the 191 TOs identified 113 TOs without milestones. Using EZ-Quant statistical sampling techniques, we statistically selected 51 of the 113 TOs for in-depth review. We interviewed TO managers and reviewed the performance history from October 1, 2006, through March 31, 2008, for the 51 TOs in our sample. We also reviewed in detail the performance evaluation metrics and factors used for the FY 2007 award fees and individual TOs and the performance evaluation factors for FY 2008 TOs to ensure compliance with NASA award fee guidance.

To assess the adequacy of performance standards included in TOs under USTDC, we reviewed the 51 TOs in our statistical sample and specifically evaluated whether deliverables were generic and only provided expertise, support, or services for unspecific deliverables. We also interviewed TO managers to determine whether the contractor achieved the primary purpose of the TO during its stated period of duration.

To evaluate whether the USTDC contractor met contract cost performance standards, we obtained from the COTR the Award Fee Evaluation Report, the financial management report (NASA Form 533M), Cost Performance Evaluation Standards, and Cost Metrics

Report for October 1, 2006, through March 31, 2008. In addition, for the same period, we obtained the contractor's monthly Labor Rate Analysis, Task Order Target Cost Data from the Task Order Cost Sheets, and Statement of Indirect Expenses. We also reviewed the March 2003 Contract Proposal Volume IV – Cost Proposal and the March 2003 and August 2007 Contract Modification 3, Attachment J-5A, Task Order Pricing Schedule. We compiled information from all these sources in a database and spreadsheets. We applied the metric formulas and the cost performance evaluation standards to determine whether the contractor met contract cost performance standards.

Computer-Processed Data

We assessed the reliability of ASRC's computer-generated data by comparing monthly payroll data with the monthly NASA Form 533M for the period of October 2007 through June 2008 to verify whether the financial report was supported, complete, and accurate. We also obtained the USTDC's June 2008 Project Resource Analysis report, which covered October 2007 through June 2008, and compared the data in the report with payroll data to determine allocation of TO costs. Further, we compared data from MIDAS with the Project Resource Analysis report to verify the TO requirements, plans, and funding authority. Finally, we compared data from the USTDC Earned Value Management report for the period October 2007 through March 2008 with the Project Resource Analysis report to determine whether any TOs exceeded their funding authority. We assessed the data as sufficiently reliable, given our research questions, verification procedures, and intended use of the data.

Review of Internal Controls

We reviewed and evaluated the internal controls associated with documenting TO requirements, meeting milestones, and reviewing costs. We found internal control deficiencies in all three areas, as discussed in this report. Our recommendations, if implemented, should correct the weaknesses we identified.

Prior Coverage

During the last 5 years, GAO has issued one report of particular relevance to the subject of this report: “NASA Procurement: Use of Award Fees for Achieving Program Outcomes Should Be Improved” (GAO-07-58, January 17, 2007). The report states that approximately half of NASA’s obligated contract dollars for FYs 2002–2004 were for cost-plus-award-fee contracts and that NASA generally does not follow the preferred approach laid out in its guidance. The report also notes that numerous subfactors may dilute the emphasis on any specific criteria. GAO concludes that although NASA’s evaluations of contractor performance generally indicate good contractor performance, contractor performance did not always translate into desired program outcomes. The report also states that NASA has not evaluated the overall effectiveness of award fees and does not have metrics in place for conducting such evaluations. Unrestricted reports can be accessed over the Internet at <http://www.gao.gov> (GAO).

MANAGEMENT COMMENTS

National Aeronautics and
Space Administration
John F. Kennedy Space Center
Kennedy Space Center, FL 32899



March 11, 2009

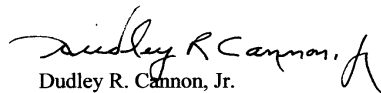
Reply to Attn of: TA-A1B

TO: NASA Headquarters
Attn: Assistant Inspector General for Auditing

FROM: Director, Procurement Office

SUBJECT: Draft Audit Report, "Evaluation and Oversight of NASA's University-Affiliated Spaceport Technology Development Contract Needed Improvement" (Assignment Number S-08-013-00)

We have reviewed the subject draft report and our specific comments are enclosed. Should you require further information, please call Ms. Rebecca Sharek at 321-867-3170 or send e-mail to <Rebecca.L.Sharek@nasa.gov>.


Dudley R. Cannon, Jr.

Enclosure

cc:
HQ/Institutions and Management/Internal Controls and Management Systems
Mr. Roberts
Ms. Miller
KSC/Mr. Cabana
Ms. Petro
Mr. Hattaway

RECOMMENDATION 1

The USTDC Contracting Officer (CO) should require the Contracting Officer's Technical Representative (COTR) and Task Order Managers (TOMs) to develop new Technical and Special Areas of Emphasis performance evaluation criteria for any new Task Order (TO) issued during the remaining option years of the USTDC. Performance evaluation criteria should be TO-specific and tied to contract deliverables, milestones, and desired outcomes.

NASA RESPONSE

Concur. The USTDC CO will require the COTR and TOMs to develop new Technical performance evaluation criteria for any new Task Order (TO) issued during the remaining option years of the USTDC. Performance evaluation criteria should be TO-specific and tied to contract deliverables, milestones, and desired outcomes. Furthermore, in accordance with the NASA Award Fee Guide, the USTDC CO will require the COTR and TOMs to maximize the use of objective performance outcomes for Special Areas of Emphasis while retaining the flexibility to use subjective evaluation techniques where appropriate. Action is to be completed for the currently unexercised option periods beginning October 1, 2010 in accordance with the recommendation.

RECOMMENDATION 2

The USTDC CO should revise cost performance metrics to ensure cost performance evaluation factors assess all direct costs.

NASA RESPONSE

Concur. The USTDC CO will ensure that cost performance evaluation factors assess all direct costs. Action is to be completed by November 15, 2009.

RECOMMENDATION 3

The USTDC CO should require the contractor to include uncompensated hours as a separate line item in the contractor's monthly financial management report.

NASA RESPONSE

Concur. The USTDC CO will require the contractor to breakout uncompensated Overtime to a separate line in the contractor's monthly financial management report. Action is to be completed by May 15, 2009.

RECOMMENDATION 4

The USTDC CO should require the COTR to identify critical performance evaluation factors in the Award Fee Evaluation Report provided to the Kennedy Space Center (KSC) Performance Evaluation Board.

Enclosure

NASA RESPONSE

Concur. The USTDC COTR will ensure that performance evaluation factors identified in the Award Fee Plan as critical are also identified as such in the Award Fee Evaluation Report. Action is to be completed by November 15, 2009.

RECOMMENDATION 5

The USTDC CO should require the contractor and TOMs to document and request overtime premiums in accordance with USTDC Contract Clause 52.222-2(b), "Payment for Overtime Premiums," and FAR 22.103-3(c) "Procedures."

NASA RESPONSE

Concur. The USTDC CO agrees that Overtime Premium requirements that do not meet the exceptions found in FAR 52.222-2 (a) should be documented in accordance with FAR 52.222-2(b). The USTDC CO will issue a letter to the contractor calling attention to the contract's responsibilities under FAR 52.222-2. Action is to be completed by April 1, 2009.

RECOMMENDATION 6

The USTDC CO should require the contractor to include overtime premium pay hours and costs as separate line items in the contractor's monthly financial management report thereby allowing for better monitoring of Overtime Premium costs in accordance with USTDC's Contract Clause 52.222-2(b), "Payment for Overtime Premiums."

NASA RESPONSE

Concur. The USTDC CO will require the contractor to include overtime premium pay hours and costs as separate line items in the contractor's monthly financial management report. Action is to be completed by May 15, 2009.

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MARCH 19, 2009

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