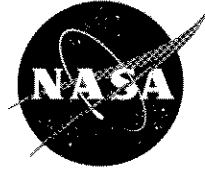


National Aeronautics and Space Administration
Office of Inspector General
Washington, DC 20546-0001



August 29, 2008

TO: Manager, External Tank Project Office

FROM: Deputy Assistant Inspector General for Auditing

SUBJECT: Closeout Inquiry of \$39.5 Million Contract Modification Award to Lockheed Martin Space Systems, New Orleans

On May 22, 2008, we sent you a memorandum requesting that you provide to the Office of Inspector General documentation to support NASA's decision to allow modification to the Lockheed Martin Space Systems, New Orleans, external tank contract to implement an employee retention plan. Specifically, we asked for additional support or justification identifying the business and technical factors NASA took into consideration in making the decision to provide incentives to retain the contractor's external tank workforce.

We received your response on May 29, 2008 (see the enclosure). We reviewed the supporting documentation on increasing attrition, local employment opportunities, lessons learned from similar Government programs identified for retirement, and the risks associated with mission failure. We found that the business and technical factors considered in NASA's decision to provide incentives to retain the contractor's external tank workforce adequately supported that decision. Our concerns have been sufficiently mitigated, and the inquiry will be closed in our records.

We thank you and your staff for thoroughly responding to our request. If you have any questions or concerns regarding this issue, please contact Daniel Devlin, Human Capital and Institutional Management Director, at 202-358-7249 or me at 202-358-2567.

A handwritten signature in cursive script that reads "A. Dahnelle Payson".

A. Dahnelle Payson

Enclosure

cc:
Contracting Specialist

Management's Comments

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National Aeronautics and
Space Administration

George C Marshall Space Flight Center
Marshall Space Flight Center, AL 35812



May 29, 2008

TO: Deputy Assistant Inspector General for Auditing

FROM: Manager, External Tank Project Office

SUBJECT: Office of Inspector General Inquiry of \$39.5 Million Contract Modification
Awarded to Lockheed Martin Space Systems, New Orleans

The External Tank (ET) Project Office has reviewed the Office of Inspector General memorandum, dated May 22, 2008 (Enclosure 1), regarding NASA's recent \$39.5 million modification to the ET contract providing for Lockheed Martin Space Systems, New Orleans to implement an ET Program Completion Plan (i.e. employee retention plan). The subject inquiry requests documentation detailing the scope of work for the ET employee retention plan as well as additional support or justification which provides the business and technical factors considered in NASA's decision to provide incentives to retain the contractor's ET workforce. The following information is provided in response to the subject inquiry:

In accordance with the United States Policy for Space Exploration dated January 14, 2004, the Space Shuttle Program is scheduled for retirement in September of 2010. NASA and Lockheed Martin recognize that retention of the knowledgeable and skilled ET workforce will be necessary to produce the remaining shuttle hardware and safely execute all remaining contract requirements, which includes ET-137, ET-138 and ET-139. As such, the External Tank Program Completion Plan (i.e. employee retention plan) was developed in response to direction provided via memorandum from the Manager of the Space Shuttle Program, dated June 12, 2006 (Enclosure 2) with a scope of work designed to: a) incentivize all eligible ET employees to remain stakeholders in the ET Program Mission Success objectives; b) establish a reasonable and effective mitigation of the perceived financial risk for those employees who remain on assignment to ET through the completion of their assignment; and c) provide further incentive to those employees identified by name as possessing critical skills on ET Production to commit to 100 percent Mission Success through the end of their ET Program assignment. A copy of the contract modification which details the terms and conditions of the plan is provided as Enclosure 3.

The following business and technical factors were considered in NASA's decision to provide incentives to retain the contractor's External Tank workforce: a) increasing attrition data; b) significant local employment opportunities available; c) past lessons learned from the United States Air Force/Lockheed Martin Titan Program efforts to retain critical skills; and d) risk of mission failure.

None of the enclosures identified in this memorandum are provided with this enclosure.

First, attrition data suggests that the current workforce is seeking other employment as a result of the anticipated retirement of the Space Shuttle Program. The Government reviewed the Lockheed Martin Human Capital Review for Lockheed Martin External Tank Program Employees, provided as Enclosure 4, and found the attrition rate to greatly exceed historical standards. An update to the Human Capital Review is also provided as Enclosure 5. The Government considered the loss of critical skills and job focus the most prominent and substantial risk to mission success.

Second, due to the availability of Hurricane Katrina employment opportunities, the External Tank workforce has numerous opportunities to seek other employment locally which increases the current attrition values. With rebuilding the local area after the structural devastation caused by Hurricane Katrina underway, a significant boom in employment in the construction industry is ongoing and expected to last for several years. Specifically, the Mississippi Business Journal reports on December 04, 2006 that construction employment increased by 11 percent in the local area the year after Katrina and that the near double-digit growth in construction employment is expected to remain high. As a result, the risk of losing External Tank workers to such widely available local employment opportunities remains elevated. Impacts of other job opportunities were considered in the development of the Government's proposal evaluation analysis, provided as Enclosure 6 and the negotiation memorandums, provided as Enclosure 7 and 8.

Third, the Government considered past lessons learned from the United States Air Force/Lockheed Martin Titan Program efforts to retain critical skills. The Titan IV was an unmanned, heavy-lift space launch vehicle used to carry government payloads into space. Retirement planning for the Titan Program began in 1998, after the Department of Defense directed the Air Force to develop another capability to lower launch costs. The Lockheed Martin experience in retiring the Titan Program offered valuable insight into the benefits of implementing an incentive plan to retain critical skills. In accordance with FAR 15.404-1(c)(2)(iii)(B), the Government elected to analyze the approach and cost of the ET Program Completion Plan by comparing the proposal with the Titan Completion Plan approach and cost estimates. The details of the Titan Completion Plan and the Government's analysis of the data are provided as Enclosures 9 and 10.

Finally, the Government recognized the tremendous risk of mission failure should retention of the External Tank workforce not be attained. While it is the responsibility of the contractor to provide the means necessary to fulfill contract obligations (i.e. retention planning), the Government recognized that such efforts are an allowable cost under the contract for which the contractor could bill to the Government without an adjustment to contract value. However, it was the Government's determination that without a contract adjustment, the contractor is likely to overrun the target cost of the contract which subsequently adversely impacts contractor motivation. Further, by incorporating the retention plan into the contract terms and conditions, the Government retains a greater degree of oversight over the implementation and management of the plan.

It is the Government's position that mission success cannot be neglected and in order to ensure the proper execution of NASA's Strategic Goal to Fly the Space Shuttle Safely until its retirement not later than 2010, actions by both parties must be taken to eradicate the current

and anticipated risk to mission failure due to the loss of critical skills and job focus. As a result, NASA determined it would be in the best interest of the Government to provide incentives to retain the contractor's External Tank workforce.

Should you require additional information, please contact Mr. John Rector, External Tank Business Manager at (256) 544-6735 or by email at john.b.rector@nasa.gov



John S. Chapman
Manager, External Tank Project

Enclosures