

National Aeronautics and  
Space Administration

**Office of Inspector General**  
Washington, D.C. 20546-0001



Reply to Attn of: W

October 20, 2004

**TO:** Deputy Chief Acquisition Officer/Director for Procurement  
Director, Ames Research Center  
Director, Goddard Space Flight Center  
Director, Johnson Space Center

**FROM:** Assistant Inspector General for Auditing

**SUBJECT:** Final Memorandum on Management of NASA Procurement Workforce  
Assignment Number A-03-024-00  
Report Number IG-05-002

We conducted an audit of the management of the NASA procurement workforce to determine whether NASA defined its procurement workforce consistent with the Office of Federal Procurement Policy's (OFPP) definition, adequately addressed the training needs of that workforce, adequately addressed procurement workforce attrition, and initiated additional actions to address future procurement workforce planning. We performed audit work at Ames, Goddard, Headquarters, and Johnson. Enclosure 2 provides details on the objectives, scope, and methodology of the audit.

### ***Executive Summary***

The President's Management Agenda places emphasis on Human Capital issues in the Federal workforce. Because NASA spends 85 to 90 percent of its budget through procurements each year, effective management of the procurement workforce is especially critical for the Agency. During the audit, we identified management control weaknesses for ensuring that designated Contracting Officer Technical Representatives (COTRs) received the required training. We found that, in some cases, COTRs lacked the required training necessary to carry out their delegated duties and responsibilities.

We made five recommendations to Agency management geared toward ensuring that all designated COTRs receive the required training necessary to effectively perform their contract oversight duties and responsibilities. Management concurred with all of our recommendations and has taken appropriate corrective action.

In addition to the Presidential emphasis on Human Capital issues in the Federal workforce, the Government Accountability Office (GAO) has highlighted Human Capital as a management challenge for Federal agencies. Because NASA spends 85 to 90 percent of its budget through procurements each year, NASA has initiated a number of acquisition reform initiatives to streamline the acquisition process including the effective management of the procurement workforce.

We found that NASA defined its procurement workforce generally consistent with the OFPP definition. In OFPP Policy Letter 97-01, dated September 12, 1997, OFPP defines an agency's acquisition workforce to include (1) all positions in the General Schedule (GS-1102) contracting series; (2) all contracting officers regardless of GS series with authority to obligate funds above the micropurchase threshold; (3) all positions in GS-1105 purchasing series; and (4) all COTRs or equivalent positions. We also found that the Agency adequately addressed procurement workforce attrition and initiated appropriate actions addressing future procurement workforce planning. Our analysis of hires and losses at the installations reviewed indicated that NASA has taken steps to address workforce attrition by implementing programs that facilitate the hiring, development, and retention of procurement professionals. Additionally, each installation reviewed had either taken or initiated actions to address future procurement workforce planning (for example, using NASA's Cooperative Education and Contracting Intern programs to bring in entry-level procurement professionals).

NASA's Office of the Chief Financial Officer/Procurement Directorate has Agency-wide responsibility for functional management, leadership, and policy direction of procurement activities. Installation program offices are responsible for ensuring that COTRs possess the necessary training commensurate with the duties and responsibilities for which they will be delegated. Installation procurement personnel are required to verify that delegated COTRs have received the mandatory basic training before duties are delegated. Although the Office of the Chief Financial Officer/Procurement Directorate instituted a career development program designed to provide procurement professionals with the type of standardized and consistent training that adequately addresses the training needs of the workforce, controls over the training of COTRs needed improvement. Specifically, we found that of the 1,593 designated NASA COTRs at the 4 installations reviewed, 18 (6 active and 12 inactive) lacked the required basic training and 571 needed refresher training. For effective contract administration, all designated COTRs must be properly trained to perform the duties and responsibilities assigned to them. The problem of designated COTRs lacking the required training occurred because the installations did not effectively track and enforce COTR training. Also, although NASA's Office of the Chief Financial Officer/Procurement Directorate has Agency-wide responsibility of procurement activities, the office is not directly involved in tracking and ensuring that installation COTRs receive the required training.

We made five recommendations to ensure that all designated COTRs are effectively trained to carry out their oversight responsibilities. Specifically, we recommended that the Ames and Johnson Center Directors ensure that active COTRs at the respective centers who have not had basic COTR training take the mandatory basic training. We also recommended that the Deputy Chief Acquisition Officer/Director for Procurement coordinate with the Center Directors and Procurement Officers to ensure that all active COTRs have the necessary refresher training. We further recommended that the Deputy Chief Acquisition Officer/Director for Procurement revise the NASA Far Supplement to incorporate a clear policy for the frequency of refresher training. Finally, we recommended that the Deputy Chief Acquisition Officer/Director for Procurement track and enforce completion of basic and refresher COTR training on an Agency-wide basis. Management concurred with all of our recommendations.

### ***Some COTRs Lack Required Basic COTR Training***

NASA Federal Acquisition Regulation (FAR) Supplement (NFS) 1842.270, “Contracting Officer Technical Representative (COTR) Delegations,” requires that, with one exception, employees must complete a mandatory basic COTR training course before they can be designated as COTRs and assume delegated contract oversight responsibilities. The exception to that requirement is that the Procurement Officer may appoint a temporary COTR for no longer than 6 months on an urgent need basis without the COTR taking the required basic training. Generally, controls at the four installations reviewed were effective in ensuring that designated COTRs had the required basic training. Of the 1,593 designated COTRs, 6 active COTRs lacked the required basic training. Active COTRs are designated COTRs who are responsible for monitoring one or more NASA contracts. The six COTRs, at two NASA installations, were responsible for monitoring eight contracts valued at approximately \$86.4 million in total. Enclosure 3 provides, by installation, details of COTR training data.

A summary of the specific basic COTR training data for each installation reviewed follows.

- Of the 591 designated COTRs at Ames, 14 have not had basic COTR training. Of the 14, 2 were active COTRs at the time of our field work. Those two COTRs were responsible for monitoring four contracts valued at approximately \$71.7 million in total.
- Of the 668 designated COTRs at Goddard, all 668 have had the required basic training.
- Of the 125 designated COTRs at Headquarters, all 125 have had the required basic training.

- Of the 209 designated COTRs at Johnson, 4 had not had basic COTR training. Those four COTRs were responsible for monitoring four contracts valued at approximately \$14.7 million in total.

The problem of having active COTRs who lack basic training occurred because of inadequate management controls at Ames and Johnson. At the two installations, six COTRs were assigned COTR responsibilities without verification of training or proper delegation. Installation program offices did not ensure that the active COTRs possessed the necessary training commensurate with the duties and responsibilities for which they would be delegated, pursuant to NFS 1842.270(a). Also, contracting officers did not verify that the designated COTRs had received the mandatory basic training before signing the delegation forms, pursuant to NFS 1842.270(g).

For effective contract administration and oversight, all active NASA COTRs must have the required training to perform the duties and responsibilities delegated to them. Basic COTR training is also necessary and prudent because such training helps protect the interests of the individuals assigned as COTRs, since those individuals may be held personally liable for unauthorized acts.

#### ***Some COTRs Lack Refresher COTR Training***

Of the 1,593 COTRs at the 4 installations reviewed, 571 needed refresher training in accordance with Office of the Chief Financial Officer/Procurement Directorate guidance. Of those 571, 70 were active COTRs who were monitoring 159 contracts valued at approximately \$801 million in total. Enclosure 4 provides a breakdown, by installation, of the number of COTRs needing refresher training and number of years since their last training.

A summary of the specific COTR refresher training data for each installation reviewed is as follows.

- Of the 591 designated Ames COTRs, 363 needed refresher training. Of those 363, 29 were active COTRs at the time of our field work. The 29 active COTRs were responsible for monitoring 47 contracts valued at approximately \$511.3 million in total. Among the 29 active COTRs needing refresher training, the elapsed time since their last COTR training varied from 5 to 12 years.
- Of the 668 designated Goddard COTRs, 81 needed refresher training. Of those 81, 19 were active COTRs at the time of our field work. The 19 active COTRS were responsible for monitoring 77 contracts valued at approximately \$143.9 million in total. Among the 19 active COTRs needing refresher training, the elapsed time since their last COTR training varied from 5 to 12 years.

- Of the 125 designated Headquarters COTRs, 79 needed refresher training. Of those 79, 2 were active COTRs at the time of our field work. The 2 active COTRs were responsible for monitoring 10 contracts valued at \$22.7 million in total. Both of the COTRs last received COTR training 8 years ago.
- Of the 209 designated Johnson COTRs, 48 needed refresher training. Of those 48, 20 were active COTRs at the time of our field work. The 20 COTRs were responsible for monitoring 25 contracts valued at \$123 million. Among the 20 active COTRs needing refresher training, the elapsed time since their last COTR training varied from 5 to 10 years.

The failure to ensure that some COTRs received refresher training occurred because the NFS included a mandatory requirement for basic COTR training, but does not include any explicit requirement for refresher training. Instead of implementing an NFS requirement pertaining to refresher training, the Assistant Administrator (AA) for Procurement [now the Deputy Chief Acquisition Officer/Director for Procurement] issued guidance, in the form of a memorandum (Enclosure 5) to installation Procurement Officers, dated September 13, 2001, requesting that each installation pursue refresher training for COTRs.

The memorandum states that, as a minimum, refresher training should be given to those COTRs who have not received comprehensive training within the last 5 years. The Audit Liaison Representative for the Office of the Chief Financial Officer/Procurement Directorate at NASA Headquarters informed us that the Deputy Chief Acquisition Officer/Director for Procurement decided to issue a memorandum in lieu of implementing an NFS requirement because the Office of the Chief Financial Officer/Procurement Directorate and the installation procurement offices did not have the authority to impose training requirements on installation program personnel. COTRs report to installation program offices, not the Deputy Chief Acquisition Officer/Director for Procurement or the installation procurement offices. Also, training budgets, including funding for COTR training, are managed by each respective installation and not the Office of the Chief Financial Officer/Procurement Directorate. Despite the memorandum from the AA [now the Deputy Chief Acquisition Officer/Director for Procurement], COTR refresher training at the four NASA installations reviewed was not sufficiently tracked and enforced because of uncertainty whether the memorandum was intended as mandatory Agency policy or simply a suggestion.

The Federal procurement environment is dynamic and changes rapidly. Therefore, for effective contract administration and oversight, periodic COTR refresher training is essential to ensure that designated COTRs are aware of the most current Federal procurement regulations, policies, initiatives, procedures, and techniques relating to their COTR duties and responsibilities. A firm Agency policy requiring refresher training will help ensure consistent training of designated COTRs as well as effective tracking and enforcement of the required training.

Management's Response is included as Enclosure 6.

### *Recommendations for Corrective Action*

- 1. The Ames Center Director should ensure that those active COTRs who have not had basic COTR training take the mandatory basic training. If the COTRs are unable to take the basic training at its next offering, technical oversight responsibilities for the contracts should be reassigned to COTRs who have met the basic training requirements.**

**Management's Response.** Concur. The Ames Center Director issued a memorandum to the Center's organizational Directors restating the policy for training of COTRs. Ames will ensure that active COTRs who have not had basic COTR training take the mandatory basic training within the next 6 months and refresher COTR training classes every 5 years. Technical oversight responsibilities for the contracts will be reassigned to COTRs who have met the basic training requirements if the primary COTR has not been properly trained.

**Evaluation of Management's Response.** Ames management provided documentation verifying that the two COTRs completed the required training. Management's actions are responsive to the recommendation. We consider the recommendation closed for reporting purposes.

- 2. The Johnson Center Director should ensure that those active COTRs who have not had basic COTR training take the mandatory basic training. If the COTRs are unable to take the basic training at its next offering, technical oversight responsibilities for the contracts should be reassigned to COTRs who have met the basic training requirements.**

**Management's Response.** Concur. Of the four COTRs identified at Johnson who had not received the basic training, three attended a training session held February 2-4, 2004. The remaining COTR attended a training session held August 16-18, 2004. The Johnson Office of Procurement reminded all Center contracting officers to verify that a COTR has received the mandatory training before signing NASA Form 1634, "Contracting Officer Technical Representative (COTR)/Alternate COTR Delegation."

**Evaluation of Management's Response.** Johnson management provided documentation verifying that the four COTRs completed the required training. Management's actions are responsive to the recommendation. We consider the recommendation closed for reporting purposes.

- 3. The AA for Procurement [now the Deputy Chief Acquisition Officer/Director for Procurement], in coordination with the Center Directors and Procurement Officers at the four installations reviewed, should ensure that the active COTRs who have not had refresher COTR training take the training at the next available offering.**

**Management's Response.** Concur. The Deputy Chief Acquisition Officer/Director for Procurement will issue a letter to the Center Directors advising them of the recommendation and ask that they advise the COTRs of the need to take refresher training at least once every 5 years. The letter will be issued by October 31, 2004.

**Evaluation of Management's Response.** A memorandum was issued on September 3, 2004 (see Enclosure 7). Management's actions are responsive to the recommendation. We consider the recommendation closed for reporting purposes.

- 4. The AA for Procurement [now the Deputy Chief Acquisition Officer/Director for Procurement] should revise the NFS and incorporate a clear policy for mandatory refresher COTR training at a specified interval (for example, at least every 5 years).**

**Management's Response.** Concur. Procurement Notice 97-102 was prepared and states the requirement for refresher training for all COTRs for whom it has been more than 5 years since they received comprehensive training.

**Evaluation of Management's Response.** Procurement Notice 97-102 was issued on August 27, 2004. Management's actions are responsive to the recommendation. We consider the recommendation closed for reporting purposes.

- 5. The AA for Procurement [now the Deputy Chief Acquisition Officer/Director for Procurement] should ensure that the Office of the Chief Financial Officer/Procurement Directorate tracks and enforces on an Agency-wide basis completion of basic and refresher COTR training.**

**Management's Response.** Concur. The Office of the Chief Financial Officer/Procurement Directorate requested its Procurement Survey Team to review the area of COTR training when performing procurement surveys. COTR training weaknesses are reported immediately to the Center Procurement Officer for corrective action.

**Evaluation of Management's Response.** In addition to tasking the Procurement Survey Team to review the area of COTR training, the Deputy Chief Acquisition Officer/Director for Procurement also issued a memorandum to Center Directors on September 3, 2004 (see Enclosure 7), asking them to reinforce the need for the technical directorates to get directly involved with the COTRs and the Procurement Officer to ensure that the required training is received. Management's actions are responsive to the recommendation. We consider the recommendation closed for reporting purposes.

If you have questions, please contact Mr. Joe Kroener, Director, Procurement Directorate at (202) 358-2558. We appreciate the courtesies and cooperation provided during the audit.

[original signed by]

David M. Cushing

Enclosures

cc:

Administrator

Chief Financial Officer

Office of the Chief Financial Officer/Procurement Directorate/Audit Liaison Representative

Office of Institutional and Corporate Management, Management Systems Division/

Audit Liaison Representative

ARC/241-1/Chief, Acquisition Division

ARC/200-9/Audit Liaison Representative

GSFC/210/Chief, Procurement Operations Division

GSFC/201/Audit Liaison Representative

JSC/BA/Director, Office of Procurement

JSC/BD5/Audit Liaison Representative

### **Status of Recommendations**

<b>Recommendation No.</b>	<b>Resolved</b>	<b>Unresolved</b>	<b>Open/ECD*</b>	<b>Closed</b>
1	X			X
2	X			X
3	X			X
4	X			X
5	X			X

**\*ECD – Estimated Completion Date.**

## **Objectives, Scope, and Methodology**

Our objectives were to determine whether NASA defined its procurement workforce consistent with the OFPP's definition, adequately addressed the training needs of that workforce, adequately addressed the effect of procurement workforce attrition, and initiated additional actions to address future procurement workforce planning. To accomplish the objectives, we performed the following work:

- Interviewed NASA Office of the Chief Financial Officer/Procurement Directorate personnel; Center Procurement Management; and Acquisition Training Coordinators at Headquarters and all the Centers (Ames, Goddard, and Johnson).
- Identified NASA and Center Contracting Officers (COs) and Contracting Officer Technical Representatives (COTRs) and determined their certification and training levels.
- Obtained and reviewed hires and departures for the period October 1, 2000, through August 19, 2003.
- Reviewed Center Procurement Management Survey Reports to identify areas of weaknesses, considerations/recommendations, and best practices at the three Centers.
- Reviewed COTR Training Evaluation Forms.
- Interviewed procurement management officials at Ames, Goddard, and Johnson to verify actions taken by each Center to address future workforce planning.

We performed the audit from August 2003 through February 2004 in accordance with generally accepted government auditing standards.

## COTR Training Data By Installation

	Ames	Goddard	Headquarters	Johnson	Total
<b>Total Number of COTRs</b>	591	668	125	209	1,593

<b>COTRs with No Basic Training</b>	14	0	0	4	18
Active (delegated to monitor contracts)	2	0	0	4	6
Number of Contracts Monitored	4	0	0	4	8
Value of Contracts Monitored	\$71,682,751	\$0	\$0	\$14,724,767	\$86,407,518

<b>COTRs in Need of Refresher Training</b>	363	81	79	48	571
Active (monitoring contracts)	29	19	2	20	70
Number of Contracts Monitored	47	77	10	25	159
Value of Contracts Monitored	\$511,254,825	\$143,942,415	\$22,743,766	\$122,958,316	\$800,899,322

**Number of Active COTRs  
And Years Elapsed Since Refresher Training**

<b>Elapsed Years</b>	<b>Ames</b>	<b>Goddard</b>	<b>Headquarters</b>	<b>Johnson</b>	<b>Total</b>
5 to 6 Years	12	10	0	11	<b>33</b>
7 to 8 Years	8	8	2	2	<b>20</b>
9 to 10 Years	5	0	0	7	<b>12</b>
11 to 12 Years	<u>4</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u><b>5</b></u>
<b>TOTAL</b>	<b><u>29</u></b>	<b><u>19</u></b>	<b><u>2</u></b>	<b><u>20</u></b>	<b><u>70</u></b>

# Memorandum from Deputy Chief Acquisition Officer/Director for Procurement to Installation Procurement Officers

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



Reply to: HK

SEP 13 2001

TO: Procurement Officers

FROM: H/Associate Administrator for Procurement

SUBJECT: Refresher Training for Contracting Officers' Technical Representatives (COTR)

Since 1994, NASA has had a training program for COTRs. It has been a major success in standardizing and improving contract management processes. But a long time has passed since many COTRs received their required instruction. Since inception of the COTR training program, innovative acquisition and contract management methods and techniques have been introduced or refined.

Examples of new material include the following: Risk Based Acquisition Management (RBAM) introduced performance surveillance requirements that are coupled to NPG 7120.5 management processes. RBAM was introduced by PN 97-46 in June 2000, and NPG 8735.2 "Management of Government Safety and Mission Assurance Surveillance Functions for NASA Contracts", was issued on August 15, 2000. In October 2000, "Performance Based Task and Delivery Order Contracts", PIC 00-24, was issued. Also, reviews have discovered a need to reemphasize basic principles such as avoidance of personal services contracting (PIC 01-03, February 21, 2001). Now, undefinitized contract actions (UCA) are a focus of management attention and new guidance will soon be issued. All of these are pertinent to COTR training and should be presented to all COTRs.

Several Centers have already initiated COTR refresher training. I would like each Center procurement office to pursue refresher training for COTRs. This effort should be tailored to the needs of your Center, but as a minimum, refresher training should be given to those COTRs for whom it has been more than five (5) years since they received comprehensive training.

In Code H, Patrick Flynn (202) 358-0460, is the point of contact and he is available to discuss a range of available options on the Internet.

A handwritten signature in black ink, appearing to read "Tom Luedtke".

Thomas S. Luedtke

## Management's Response

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



August 25, 2004

Reply to Attn of:

Office of the Chief Financial Officer, Procurement Directorate,  
Contract Management Division

**TO:** W/Assistant Inspector General for Auditing  
**FROM:** HK/Director, Contract Management Division  
**SUBJECT:** Agency Response to OIG Draft Memorandum on Management of NASA  
Procurement Workforce, Assignment Number A-03-024-00

Enclosed is our response to the subject draft memorandum dated July 28, 2004.

Please call Lou Becker at 202-358-4593 if you have any questions or need further coordination on this matter.

*Deborah C. O'Neill*  
*for*  
James A. Balinskas

Enclosure

## Management's Response

### **Recommendation 1:**

The Ames Center Director should ensure that those active COTRs who have not had basic COTR training take the mandatory basic training. If the COTRs are unable to take the basic training at its next offering, technical oversight responsibilities for the contracts should be reassigned to COTRs who have met the basic training requirements.

### **Response:**

Concur. Via a letter dated August 17, 2004, the Ames Center Director re-stated the policy for training of Contracting Officer Technical Representatives (COTRs) to the Center's Organizational Directors. They will ensure that those active COTRs who have not had basic COTR training take the mandatory basic training class within the next six months and refresher COTR training classes every five years. Technical oversight responsibilities for the contracts will be reassigned to COTRs who have met the basic training requirements if the primary COTR has not been properly trained.

Based on the action taken, request this recommendation be considered closed.

### **Recommendation 2:**

The Johnson Center Director should ensure that those active COTRs who have not had basic COTR training take the mandatory basic training. If the COTRs are unable to take the basic training at its next offering, technical oversight responsibilities for the contracts should be reassigned to COTRs who have met the basic training requirements.

### **Response:**

Concur. Of the four COTRs identified who had not received the basic training, three individuals attended the February 4, 2004, training session. The remaining COTR completed training August 18, 2004. Those training records are available to the Office of Inspector General for validation. To ensure this does not recur, all contracting officers have been reminded to verify that a COTR has received the mandatory training before signing NASA Form 1634 used to delegate authority to the COTR.

Based on the action taken, request this recommendation be considered closed.

### **Recommendation 3:**

The AA for Procurement, in coordination with the Center Directors and Procurement Officers at the four installations reviewed, should ensure that the active COTRs who have not had refresher COTR training take the training at the next available offering.

### **Response:**

Concur. The Assistant Administrator for Procurement will issue a letter to the Center Directors advising them of the IG recommendation and ask that they advise the COTRs of the need to take refresher training at least once every 5 years. This letter will be issued by October 31, 2004.

## Management's Response

**Recommendation 4:**

The AA for Procurement should revise the NFS and incorporate a clear policy for mandatory refresher COTR training at a specified interval (for example, at least every 5 years).

**Response:**

Concur. Procurement Notice 97-102 (change to NFS 1842.270 (f)(2)) stating the requirement for refresher training for all COTRs for whom it has been more than five (5) years since they received comprehensive training has been prepared and will be signed by August 31, 2004.

Based on the action taken, request this recommendation be considered closed.

**Recommendation 5:**

The AA for Procurement should ensure that the Office of Procurement tracks and enforces on an Agency-wide basis completion of basic and refresher COTR training.

**Response:**

Concur. The Procurement Survey Team has been requested to review the area of COTR training when performing procurement surveys. Weaknesses in this area, if any, are immediately reported to the Procurement Officer and corrective action is taken.

Based on the action taken, request this recommendation be considered closed.

## Memorandum to Center Directors Regarding COTR Training

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



September 3, 2004

Reply to Alt: of

Deputy Chief Acquisition Officer/Director for Procurement

TO: Center Directors  
FROM: Deputy Chief Acquisition Officer/Director for Procurement  
SUBJECT: Contracting Officer Technical Representative (COTR) Training Requirements

During a recent audit by the Office of the Inspector General (OIG), they found several instances where the Centers did not effectively enforce COTR basic and refresher training requirements. The OIG reported that lack of proper COTR training could lead to poor contract cost, schedule, and quality performance.

The NASA FAR Supplement addresses the need for mandatory basic training for COTRs, and is being amended to include a requirement for mandatory periodic refresher training at least once every five (5) years.

We will be working with the Procurement Officer at your Center to improve our training and management of the COTR process. However, to be successful, we need the support of the technical managers. Please reinforce the need for the technical directorates to get directly involved with the COTRs and the Procurement Officer to ensure the required training is received.

If there are any questions, please contact Mr. Lou Becker at (202) 358-4593 or call me at (202) 358-2090. Thank you.

A handwritten signature in black ink, appearing to read "Tom Luedtke".

Tom Luedtke  
Deputy Chief Acquisition Officer  
Director for Procurement