

INSPECTOR GENERAL

U.S. Department of Defense

AUGUST 30, 2016



U.S. Army Contracting Command–Redstone Arsenal and U.S. Army Medical Research Acquisition Activity Properly Awarded and Administered Firm-fixed-price Level-of-effort Term Contract Actions

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Results in Brief

U.S. Army Contracting Command–Redstone Arsenal and U.S. Army Medical Research Acquisition Activity Properly Awarded and Administered Firm-fixed-price Level-of-effort Term Contract Actions

August 30, 2016

Objective

We determined whether Army Contracting Command-Redstone Arsenal (ACC-RA) and U.S. Army Medical Research Acquisition Activity (USAMRAA), officials properly awarded and administered firm-fixed-price level-of-effort term contracts in accordance with Federal and DoD regulations and policies. A firm-fixed-price level-of-effort term contract requires the contractor to provide a specified level-of-effort over a stated period of time on work that can be stated only in general terms and the Government is required to pay the contractor a fixed-dollar amount. Firm-fixed-price level-of-effort term contracts are suitable for investigations or studies in a specific research and development area.

During FY 2014 and FY 2015, ACC-RA and USAMRAA awarded 73 FFP LOE term contract actions totaling \$332 million. Of the 73 contract actions from ACC-RA and USAMRAA, we non-statistically selected 15 contract actions for review (nine base contracts and six task orders). The 15 contract actions were for various research and development efforts for medical, software development, and engineering services.

Finding

ACC-RA and USAMRAA contracting officials properly awarded firm-fixed-price level-of-effort term contracts and task orders in accordance with Federal and DoD guidelines.

Specifically, for the nine contracts and six task orders reviewed, ACC-RA and USAMRAA contracting officials properly justified the use of the firm-fixed-price level-of-effort term contract type. In addition, ACC-RA and USAMRAA contracting officials properly administered the reviewed firm-fixed-price level-of-effort contracts and task orders by designating qualified contracting officer's representatives to monitor contractor performance and providing adequate contract surveillance. As a result, DoD Components benefited by using firm-fixed-price level-of-effort term contracts that allowed contractors the flexibility to develop innovative research and new technologies in support of the warfighter. Therefore, we are not making any recommendations.

Management Comments and Our Response

We provided a discussion draft to ACC-RA, and U.S. AMRAA officials on July 12, 2016; however, they did not provide comments.

Recommendations Table

Management	Recommendations Requiring Comment		
U.S. Army Contracting Command–Redstone Arsenal	None		
U.S. Army Medical Research and Materiel Command	None		



INSPECTOR GENERAL DEPARTMENT OF DEFENSE 4800 MARK CENTER DRIVE ALEXANDRIA, VIRGINIA 22350-1500

August 30, 2016

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: U.S. Army Contracting Command–Redstone Arsenal and U.S. Army Medical Research Acquisition Activity Properly Awarded and Administered Firm-fixed-price Level-of-Effort Term Contract Actions (Report No. DODIG-2016-132)

We are providing this final report for information and use. U.S. Army Contracting Command–Redstone Arsenal and U.S. Army Medical Research Acquisition Activity contracting officials properly awarded and administered firm-fixed-price level-of-effort term contracts and task orders in accordance with Federal and DoD guidelines. We conducted this audit in accordance with generally accepted government auditing standards.

We provided a discussion draft to U.S. Army Contracting Command–Redstone Arsenal and U.S. Army Medical Research Acquisition Activity officials on July 12, 2016; however, they did not provide comments in response.

We appreciate the courtesies extended to the staff. Please direct questions to me at <u>Micheal.Roark@dodig.mil</u>, (703) 604-9187 (DSN 664-9187). If you desire, we will provide a formal briefing on the results.

Michael

Michael J. Roark Assistant Inspector General Contract Management and Payments

Contents

Introduction

Objective	1
Background	1
Review of Internal Controls	2

Finding. ACC-RA and USAMRAA Properly Awarded and Administered FFP LOE Contract Actions

3

Appendixes

Acronyms and Abbreviations	13
Appendix B. FFP LOE Term Contract Actions Reviewed at ACC-RA and USAMRAA	11
Prior Coverage	
Use of Technical Assistance	
Use of Computer-Processed Data	10
Appendix A. Scope and Methodology	8

Introduction

Objective

We determined whether Army officials properly awarded and administered firm-fixed-price level-of-effort (FFP LOE) term contracts in accordance with Federal and DoD regulations and policies. See Appendix A for scope and methodology and prior coverage.

Background

U.S. Army Contracting Command–Redstone Arsenal (ACC-RA), a subordinate command of U.S. Army Contracting Command, located in Huntsville, Alabama, provides innovative, effective, and efficient global contracting support to warfighters supporting military operations. ACC-RA contracts for major weapon systems production and services vital to soldiers' mission and well-being and provides contracting support to program offices that support the Army major acquisition program.

The U.S. Army Medical Research and Materiel Command, in Fort Detrick, Maryland, is the Army's medical materiel developer that is responsible for medical research, development, and acquisition and medical logistics management. The U.S. Army Medical Research Acquisition Activity (USAMRAA), also located in Fort Detrick, Maryland provides acquisition and contracting support to the U.S. Army Medical Research and Materiel Command.

Criteria Governing FFP LOE Term Contracts

The Federal Acquisition Regulation (FAR)¹ states that FFP LOE term contracts require the contractor to provide a specified level-of-effort over a stated period of time on work that can be stated only in general terms, and also states the Government is required to pay the contractor a fixed-dollar amount. The contractor provides a product that is usually a report showing the results achieved through application of the required level-of-effort. The FFP LOE term contract is suitable for an investigation or study in a specific research and development area. The contracting officer selects the most appropriate contract type, awards contracts, delegates a contracting officer's representative (COR),² and prepares a quality assurance surveillance plan (QASP).³ The COR monitors the contractor performance based on standards and guidelines outlined in the QASP.⁴ The QASP

¹ FAR Part 16, "Types of Contracts," FAR subpart 16.207, "Firm-fixed-price, Level-of-effort Term Contracts."

² FAR Part 1, "Federal Acquisition Regulations Systems," FAR subpart 1.602, "Contracting Officers."

³ DFARS subpart 246.401, "General."

⁴ "DoD Contracting Officer's Representative Handbook," revised March 22, 2012.

is an important tool the COR can use as a guide for systematically and effectively monitoring the quality of services received and in compliance with the terms and conditions of the contract.

FFP LOE Term Contracts Reviewed

From FY 2014 through FY 2015, DoD awarded 352 FFP LOE term contract actions, valued at \$1 billion. Of that amount, the Army awarded 130 FFP LOE term contract actions, valued at \$454 million. During FY 2014 and FY 2015, ACC-RA and USAMRAA awarded 73 FFP LOE term contract actions totaling \$332 million. Of the 73 contract actions from ACC-RA and USAMRAA, we nonstatistically selected and reviewed 15 contract actions (9 contracts and 6 task orders), valued at \$209.7 million.⁵ See Appendix B for the list of the 15 contract actions reviewed.

Review of Internal Controls

DoD Instruction 5010.40⁶ requires DoD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls. The ACC-RA and USAMRAA internal controls we reviewed were effective; we identified no internal control weaknesses.

⁵ See Appendix A for the full methodology for selecting the contract actions we reviewed.

⁶ DoD Instruction 5010.40, "Managers' Internal Control Program Procedures," May 30, 2013.

Finding

ACC-RA and USAMRAA Properly Awarded and **Administered FFP LOE Contract Actions**

ACC-RA and USAMRAA contracting officials properly awarded FFP LOE term contracts and task orders in accordance with Federal and DoD guidelines. Specifically, for the nine contracts and six task orders reviewed, ACC-RA and USAMRAA contracting officials properly justified the use of the FFP LOE term contract type. In addition, ACC-RA and USAMRAA contracting officials properly administered the reviewed FFP LOE term contracts and task orders by designating qualified CORs to monitor contractor performance and providing adequate contract surveillance. As a result, DoD Components benefited by using FFP LOE term contracts that allowed contractors the flexibility to develop innovative research and new technologies in support of the warfighter.

ACC-RA and USAMRAA Properly Awarded FFP LOE **Contracts and Task Orders**

ACC-RA and USAMRAA contracting officials properly awarded the reviewed FFP LOE term contract actions for various types of research and development efforts for medical, software development, and engineering services. Specifically, ACC-RA and USAMRAA contracting officials properly justified the use of FFP LOE term contracts for the nine contracts and six task orders reviewed. The FAR⁷ states that a FFP LOE term contract requires the contractor to provide a specified level-of-effort, over a stated period of time, on work that can be stated only in general terms; and the Government

ACC-RA and USAMRAA contracting officials properly awarded the reviewed FFP LOE term contract actions.

FFP LOE term contracts are suitable for investigations or study in a specific research and development area. Furthermore, the FAR⁹ states the FFP LOE term contract type may be used only when:

• the work required cannot be clearly defined,

pays the contractor a fixed dollar amount. The FAR⁸ states

- the required level-of-effort is identified and agreed upon in advance, and
- there is reasonable assurance that the intended results cannot be achieved by expending less than the stipulated effort.

⁷ FAR subpart 16.207-1, "Description."

⁸ FAR subpart 16.207-2, "Application."

⁹ FAR subpart 16.207-3, "Limitations."

Also, when the contract value is \$150,000 or more, the chief of the contracting office must approve the selection of the contract type.

ACC-RA and USAMRAA contracting officials determined that the requirements for the nine contracts and six task orders were in accordance with the FAR description of the FFP LOE term contract type. Each of the nine contracts and six task orders we reviewed included a specified level-of-effort in the performance work statement such as to conduct research to identify technology or to evaluate the potential for using a specific technology to meet an operational need. In addition, work on the nine contracts and six task orders required the work to be completed within a stated period of time and that the contracting officer determined that the level-of-effort to achieve the results was sufficient. Furthermore, for each of the nine contracts and six task orders we reviewed, payments to contractors for services performed were based on a fixed price. For each of the FFP LOE contracts, valued at more than \$150,000, the contracting activities' chief of the contracting office approved the use of the FFP LOE term contract type.

In each case, ACC-RA and USAMRAA contracting officers sufficiently documented the rationale for selecting the FFP LOE term contract types in the determination and findings¹⁰ documentation. For example, in the determination and findings, ACC-RA contracting officers fully supported and documented the decision to use the FFP LOE term contract type for two indefinite-delivery indefinite-quantity contracts and the six task orders issued under each contract. The determination and findings clearly outlined the specified level-of-effort the contractors would provide, stated a period of time for completing the work that was stated in general terms, and stated the Government would pay the contractor a fixed dollar amount. Finally, because the contracts and task orders had a value over \$150,000, the chief of the contracting activity at ACC-RA properly approved the determination and finding.

ACC-RA and USAMRAA Properly Administered FFP LOE Contracts and Task Orders

For the nine contracts and six task orders reviewed, ACC-RA and USAMRAA contracting officials properly administered the FFP LOE term contracts and task orders by designating qualified CORs to monitor contractor performance and providing adequate contract surveillance. Specifically, ACC-RA and USAMRAA contracting officers designated and authorized qualified CORs to oversee the work and progress of the contractors. In

ACC-RA and USAMRAA contracting officials properly administered the FFP LOE term contracts and task orders.

¹⁰ Determination and findings outlines the statements of fact or rationale essential to support the contracting decisions made.

Finding

addition, ACC-RA and USAMRAA contracting officers ensured each contract and task order had a QASP and the CORs were properly monitoring the progress on the contracts by receiving and evaluating the contractors' monthly progress reports, as well as, the contractors' final report outlining the results of the level-of-effort.

ACC-RA and USAMRAA Contracting Officers Designated Qualified Contracting Officer's Representatives

ACC-RA and USAMRAA contracting officers appointed qualified subject matter experts as CORs for each of the nine contracts and six task orders reviewed. The FAR¹¹ and DoD Instruction¹² states contracting officers are to ensure that CORs are:

- designated and authorized, in writing and in accordance with agency procedures; and
- qualified by training and experience commensurate with the responsibilities to be delegated in accordance with agency procedures.

In addition, the DoD Instruction and DoD COR Handbook state that contracting officers should designate specific duties and responsibilities to the COR and ensure that the letter of appointment is included in the contract file.

For all 15 contract actions reviewed, the ACC-RA or USAMRAA contracting officers designated a COR in writing through a nomination letter giving them sufficient authority to properly monitor the performance and progress of the contractors. We determined each designated COR had the experience in the subject area of the research to effectively oversee the research and development and to evaluate the contractor's research methodology and identify any concerns to the contracting officers. In addition, ACC-RA and USAMRAA contracting officers ensured each COR (for 15 contract actions reviewed) completed the required COR training before being designated as a COR. For example, the ACC-RA contracting officer ensured the COR, for the Advanced Warhead Design contract had the technical expertise to accurately evaluate the research performed by the contractor. In addition, the contracting officer ensured the COR completed training satisfying the DoD Instruction and DoD COR Handbook requirements.

¹¹ FAR subpart 1.602-2, "Responsibilities."

¹² DoD Instruction 5000.72, "DoD Standard for Contracting Officer's Representative (COR) Certification," March 26, 2015.

ACC-RA and USAMRAA CORs Properly Provided Contract Surveillance

For each of the 15 contract actions reviewed, the designated CORs properly monitored contractor performance and provided adequate contract surveillance as required by the DoD COR Handbook. The DoD COR Handbook states monitoring contractor performance includes evaluating and maintaining data, documenting performance, and reviewing or verifying invoices. In addition, the ACC-RA and USAMRAA contracting officers ensured each of the 15 contract actions reviewed had a QASP that outlined how the COR would monitor the performance of the contractor. The primary methods used by each COR to monitor contractor performance and provide contract surveillance were reviewing and evaluating the contractors' monthly or quarterly progress reports and the final report that outlined the results of the completed research.

In addition, the ACC-RA and USAMRAA CORs, in accordance with the QASPs, provided the contracting officers monthly reports outlining their evaluation of the contractor's progress made towards the defined level-of-effort. Specifically, the COR's monthly reports, provided to the contracting officers, showed the COR's rating of the contractor's quality of work and their review of the contractor-submitted invoices for accuracy. Finally, the CORs certified that their reports were in accordance with the terms and conditions of the contract, the QASP, and the monthly surveillance schedule. For example, the USAMRAA Advanced Modular Manikin contract had a QASP outlining the COR's duties to provide quarterly, annual, and technical reports submitted by the contractor and to attend the phase one demonstration of the prototype. To document the oversight, the COR maintained a complete file that contained copies of reports, evaluations, recommendations and actions related to the contractor's performance.

DoD Components Benefit By Using FFP LOE Term Contracts

For the nine contracts and six task orders reviewed, ACC-RA and USAMRAA contracting officers properly awarded and administered FFP LOE term contracts and task orders in accordance with Federal and DoD guidelines. DoD Components benefited by using FFP LOE term contracts that allowed contractors the flexibility to develop DoD Components benefited by using FFP LOE term contracts that allowed contractors the flexibility to develop innovative research and new technologies in support of the warfighter. innovative research and new technologies in support of the warfighter. Some of the innovative technologies DoD Components developed through the FFP LOE term contracts reviewed were:

- an advanced medical training torso that allows users to simulate a variety
 of medical conditions and a soldier-worn blast dosimeter¹³ that improves
 assessing and diagnosing soldiers injuries resulting from an explosion; and
- a technique for producing orthotic and prosthetic sockets with large cavities that allow air circulation near the skin to promote evaporation.

In each case the use of the FFP LOE term contract type gave the contracting officer the flexibility to award a contract to conduct research and identify the feasibility of innovative technologies to address the operational requirements of DoD Components.

¹³ The blast dosimeter is a device worn by warfighters to monitor blast exposure.

Appendix A

Scope and Methodology

We conducted this performance audit from January 2016 through August 2016 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.

Audit Universe and Sample

We queried the Federal Procurement Data System and identified FFP LOE term contract actions awarded by DoD during FYs 2014 and 2015. DoD awarded 352 FFP LOE term contract actions with a total award value of \$1 billion. During this period, the Army was DoD's largest contracting activity issuing 130 contract actions totaling \$454 million. During the same period, ACC-RA and USAMRAA were the Army's largest contracting activities that issued FFP LOE contract actions. ACC-RA issued 39 contract actions valued at \$282 million and USAMRAA issued 34 contract actions (total of 73 contract actions) valued at \$50 million. We nonstatistically selected 20 contract actions; 10 from ACC-RA and 10 from USAMRAA. Of the 10 contract actions from ACC-RA, 6 were task orders from two indefinite-delivery indefinite-quantity contracts in our selection for a total of 22 contract actions. We reviewed 15 of the 22 contract actions in our sample and found no anomalies; therefore, we did not review the remaining seven contract actions.

Review of Documentation and Interviews

For the nine contracts and six task orders, we reviewed contract file documentation such as:

- requirements documents (broad agency agreements, solicitations, statement of work;
- record of market research;
- requests for proposals;
- determination and findings on the use of FFP LOE term contract type;
- independent government estimates;

¹⁴ Of the contract actions we reviewed, ACC-RA issued 11, valued at \$201.2 million, and USAMRAA issued 4 valued at \$8.6 million.

- technical evaluations of proposals;
- COR designation letters;
- QASPs;
- contractor's monthly and annual progress reports; and
- COR monthly report to the contracting officer.

We obtained contract file documentation during our February and March 2016 site visits to USAMRAA, Fort Detrick, Maryland, and ACC-RA (Huntsville, Alabama and Colorado Springs, Colorado field office). We reviewed the documentation to evaluate the two contracting activities' processes and procedures to award and administer the FFP LOE term contract actions. Specifically, we determined whether the decision to use the FFP LOE term contract type was appropriate for the requirements. We identified and evaluated the steps the USAMRAA and ACC-RA contracting officials took to determine whether the CORs had the experience in the research subject area to effectively oversee the research and development, evaluate the contractor's research methodology, and identify any concerns to the contracting officers. In addition, we interviewed ACC-RA and USAMRAA contracting officials, including contracting officers, CORs, contract specialists responsible for the nine contracts and six task orders, as well as legal and policy personnel. We discussed the process and procedures to select the contract type, administer the FFP LOE term contracts, and monitor contractor performance.

We used the following Federal and DoD guidelines to determine whether USAMRAA and ACC-RA contracting officials properly awarded and administered the nine contracts and six task orders.

- FAR Part 16, "Types of Contracts," FAR subpart 16.207, "Firm-fixed-price, Level-of-effort Term Contract."
- FAR Part 1, "Federal Acquisition Regulations Systems," FAR subpart 1.602, "Contracting Officers."
- FAR Part 46, "Quality Assurance," FAR subpart 46.102, "Policy."
- "DoD Contracting Officer's Representative Handbook," revised March 22, 2012.
- DoD Instruction 5000.72, "DoD Standards for Contracting Officer's Representative (COR) Certification," March 26, 2015.

Use of Computer-Processed Data

We did not use computer-processed data to perform this audit.

Use of Technical Assistance

The DoD Office of Inspector General Quantitative Methods Division assisted us during the audit. Specifically, the Quantitative Methods Division assisted us in developing a nonstatistical sample of the universe of FFP LOE term contract actions awarded by ACC-RA and USAMRAA during FYs 2014 and 2015.

Prior Coverage

No prior coverage has been conducted on the Army's use of FFP LOE term contracts during the last 5 years.

Appendix B

FFP LOE Term Contract Actions Reviewed at ACC-RA and USAMRAA

	Contract Number	Task Order No.	Description of Services	Date Contract Was Awarded	Contract Value (in millions)			
	U.S. Army Contracting Command – Redstone Arsenal							
1	W31P4Q-14-C-0093		Engineering services for the "PATRIOT" weapon system	8/15/14	\$81.8			
2	W9113M-15-C-0010		Research on advanced warhead design	2/12/15	0.5			
3	W9113M-14-C-0023		Research on generators for advanced munitions	8/25/14	0.1			
4	W9113M-10-D-0002		Engineering/technical support ¹	7/29/10	²			
5	W9113M-10-D-0002	1406	Engineering/technical support ¹	9/1/14	16.4			
6	W9113M-10-D-0003		Engineering/technical support ¹	7/29/10	²			
7	W9113M-10-D-0003	1401	Engineering/technical support ¹	11/19/13	5.7			
8	W9113M-10-D-0003	1407	Engineering/technical support ¹	9/30/14	3.6			
9	W9113M-10-D-0003	1408	Engineering/technical support ¹	9/26/14	36.8			
10	W9113M-10-D-0003	1501	Technical support to USFORCES-Afghanistan	1/1/15	6.3			
11	W9113M-10-D-0003	1504	Engineering/technical support ¹	9/26/15	49.9			
Su	Subtotal \$201.1							
U.S. Army Medical Research Acquisition Activity								
12	W81XWH-14-C-0103		Research on an advanced modular manikin	9/5/14	1.7			
13	W81XWH-14-C-0042		To develop a blast dosimeter to assess soldiers injury risks	9/26/14	3.0			

Please see the final page of Appendix B for the Table footnotes.

FFP LOE Term Contract Actions Reviewed at ACC-RA and USAMRAA (cont'd)

	Contract Number	Task Order No.	Description of Services	Date Contract Was Awarded	Contract Value (in millions)
14	W81XWH-15-C-0110		Conduct advanced design and manufacturing of prosthetic and orthotic devices	9/15/15	2.9
15	W81XWH-15-C-0141		Research on cognitive deficiency characteristics	9/30/15	1.0
Subtotal				\$8.6	
Total				\$209.7	

 $^{1\,}\,$ For the Warfighter Modeling, Simulation, Analysis, and Integration Support effort.

² Contract was an indefinite-delivery, indefinite-quantity contract awarded in FY 2010 with a not to exceed amount of \$463.6 million. ACC-RA awarded task orders that we reviewed from this contract.

Acronyms and Abbreviations

- ACC-RA U.S. Army Contracting Command–Redstone Arsenal
 - **COR** Contracting Officer's Representative
 - FAR Federal Acquisition Regulation
- FFP LOE Firm-fixed-price Level-of-effort
 - **QASP** Quality Assurance Surveillance Plan
- USAMRAA U.S. Army Medical Research Acquisition Activity



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