# Inspector General

United States
Department of Defense



DoD Procurement Policy for Body Armor

#### **Additional Copies**

To obtain additional copies of this report, visit the Web site of the Department of Defense Inspector General at <a href="http://www.dodig.mil/audit/reports">http://www.dodig.mil/audit/reports</a> or contact the Secondary Reports Distribution Unit at (703) 604-8937 (DSN 664-8937) or fax (703) 604-8932.

#### **Suggestions for Future Audits**

To suggest ideas for or to request future audits, contact the Office of the Deputy Inspector General for Auditing at (703) 604-9142 (DSN 664-9142) or fax (703) 604-8932. Ideas and requests can also be mailed to:

ODIG-AUD (ATTN: Audit Suggestions)
Department of Defense Inspector General
400 Army Navy Drive (Room 801)
Arlington, VA 22202-4704



#### To report fraud, waste, mismanagement, and abuse of authority.

Send written complaints to: Defense Hotline, The Pentagon, Washington, DC 20301-1900 Phone: 800.424.9098 e-mail: hotline@dodiq.mil www.dodiq.mil/hotline

#### Acronyms

CENTCOM U.S. Central Command

DAPs Deltoid and Axillary Protectors

DFARS Defense Federal Acquisition Regulation Supplement

ESBIs Enhanced Side Ballistic Inserts FAR Federal Acquisition Regulation

FAT First Article Testing
FSS Federal Supply Schedule

GSA General Services Administration

IBA Interceptor Body Armor ICE Infantry Combat Equipment

IG Inspector General

MCSC Marine Corps Systems Command

OTV Outer Tactical Vest

PDM Preliminary Design Models PEO Program Executive Office

PM ICE Program Manager Infantry Combat Equipment

PM SEQ Project Manager Soldier Equipment

RDECOMAC U.S. Army Research, Development and Engineering Command

**Acquisition Center** 

SAPIs Small Arms Protective Inserts

SOUM Safety of Use Message



# INSPECTOR GENERAL DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202-4704

March 31, 2008

MEMORANDUM FOR AUDITOR GENERAL, DEPARTMENT OF THE ARMY PROGRAM EXECUTIVE OFFICE SOLDIER COMMANDER, U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND

SUBJECT: Report on DoD Procurement Policy for Body Armor (Report No. D-2008-067)

We are providing this report for review and comment. This report is the second in a series of congressionally requested audits. We considered management comments on the draft when preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. The comments from the Deputy Assistant Secretary of the Army (Policy and Procurement), responding for the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) are partially responsive. The comments from the Program Executive Office Soldier are nonresponsive. Therefore, we request that the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) and the Program Executive Office Soldier provide additional comments on Recommendations 3. and 1., respectively, by April 30, 2008. As a result of comments from the Commander, U.S. Army Research, Development and Engineering Command, we revised draft Recommendation 2. to show the correct command structure. The Commander's comments were responsive and no further comments are required.

If possible, please send management comments in electronic format (Adobe Acrobat file only) to <u>AUDROS@dodig.mil</u>. Copies of the management comments must contain the signature of the authorizing official. We cannot accept the / Signed / symbol in place of the signature. If you arrange to send classified comments electronically, they must be sent over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the staff. Questions should be directed to me at (703) 604-8863 (DSN 664-8863) or Mr. Kenneth W. Sokol at (703) 602-0676 (DSN 332-0676). The team members are listed inside the back cover. See Appendix H for the report distribution.

Donald A. Bløomer

Deputy Director

Joint and Overseas Operations

#### **Department of Defense Office of Inspector General**

**Report No. D-2008-067** 

March 31, 2008

(Project No. D2007-D000LA-0054.000)

#### **DoD Procurement Policy for Body Armor**

#### **Executive Summary**

Who Should Read This Report and Why? DoD acquisition and contracting personnel should read this report because it concerns procurement decisions for body armor components used by DoD in the Global War on Terror.

**Background.** A member of Congress asked the DoD Office of Inspector General to review DoD procurement of body armor and armored vehicles to determine whether officials followed contracting policies. In addition, the member asked the DoD Office of Inspector General to provide information on why DoD issued contracts to Armor Holdings and Force Protection and to determine the effect the Army's ban on privately procured body armor had on the safety of our Service members. This is the second of two reports issued in response to the request. This report discusses the procurement of various body armor components by the Army and the Marine Corps, and the effect of the ban on privately procured body armor (Appendix C). The first report, Report No. D-2007-107, "Procurement Policy for Armored Vehicles," June 27, 2007, covered the procurement policy for armored vehicles and why DoD issued contracts for armored vehicles to Armor Holdings and Force Protection.

**Results.** The Army and Marine Corps issued contracts and Federal Supply Schedule orders valued at more than \$5.2 billion for body armor components. The Federal Acquisition Regulation requires contracting organizations to maintain adequate contract documentation to provide a complete acquisition history. Specific information concerning testing and approval of first articles was not included in 13 of 28 Army contracts and orders reviewed, and contracting files were not maintained in 11 of 28 Army contracts to show why procurement decisions were made. As a result, DoD has no assurance that first articles produced under 13 of the 28 contracts and orders reviewed met the required standards, or that 11 of the 28 contracts were awarded based on informed procurement decisions. We recommended that the Program Executive Office Soldier direct testing and evaluation of first articles for contract conformance before production on all contracts, update purchase descriptions, and document contractual actions for all body armor contracts. In addition, we recommended that the U.S. Army Research, Development and Engineering Command ensure First Article Testing instructions are included in contracting documents when applicable, and document contractual actions. We also recommended that the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) ensure proper use of non-DoD contracts to ensure that the contracts are in the best interest of the Government. Recommendations in this report, if implemented, will correct deficiencies identified, and ensure the DoD receives the best value in the body armor it procures. See the Finding section for the detailed recommendations.

**Scope Limitations.** The audit scope was limited to Army and Marine Corps contracts and orders awarded between January 2004 and December 2006 for body armor

components. We divided the acquisition process into three phases: presolicitation, solicitation and evaluation, and contract administration. The scope was limited to reviewing the presolicitation and the solicitation and evaluation phases of the acquisition process for specific contracts. We also reviewed contracting files as necessary to determine requirements for First Article Testing. We did not evaluate the contract administration phase of the acquisition process, which includes activities performed after contract award, such as quality control and testing, deliverable requirements, and monitoring and measuring performance and end-user satisfaction, to determine whether the contractor met the requirements of the contract. We also did not visit contractor facilities during the audit. See Appendix F for a summary of the contracts reviewed.

Management Comments and Audit Response. The Program Executive Office Soldier neither concurred nor nonconcurred with Recommendation 1. Specifically, the Program Executive Office Soldier stated that for Recommendations 1.a., 1.b., and 1.c. no action would be required because all of the recommended actions are already regular and consistent current business practices that his office follows in accordance with the Federal Acquisition Regulation. However, our audit results show that testing and evaluation of first articles for contract conformance before production, updating of purchase descriptions, and documenting of all contractual actions for all body armor contracts are not consistently occurring. The Program Executive Office Soldier also provided comments on the draft report and finding, and stated that although not in the scope of our audit, the Army also conducts lot acceptance testing and post issue surveillance testing, both critical parts of the body armor testing program. In an additional meeting with Army officials, the Program Executive Office Soldier stated that the Army has no evidence of deaths that can be attributed to defective body armor. We request that the Program Executive Office Soldier provide additional comments on Recommendations I.a., 1.b., and 1.c. in response to the final report by April 30, 2008.

The Commander, U.S. Army Research, Development and Engineering Command concurred with Recommendation 2. The Commander also provided comments on the draft report and finding. The comments of the Commander, U.S. Army Research, Development and Engineering Command on the recommendation were responsive, and no additional comments are required.

The Deputy Assistant Secretary of the Army (Policy and Procurement), responding for the Assistant Secretary of the Army (Acquisition, Logistics, and Technology), concurred with Recommendation 3. Although he concurred, the Deputy Assistant Secretary's comments are only partially responsive because he did not identify what actions will be taken to ensure that policies and procedures are enforced. We request that the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) provide additional comments that address the proposed actions for Recommendations 3.a.1., 3.a.2., 3.a.3., and 3.a.4. in response to the final report by April 30, 2008. A discussion of the management comments is in the Finding section of the report; the complete text of the comments is in the Management Comments section; and management comments on the draft report and finding, along with audit response, are in Appendix G.

\_

<sup>&</sup>lt;sup>1</sup> Quality control and testing (acceptance testing) involves testing each item or manufacturing lot of items to verify that each particular item meets its specification requirements. The purpose of acceptance testing is to catch random defects on a particular item that are not systemic in the manufacturing process; because of our scope limitation, we did not examine acceptance testing.

# **Table of Contents**

<b>Executive Summary</b>	i
Background	1
Objectives	2
Review of Internal Controls	3
Procurement History for Body Armor	4
Findings	
Army Procurement of Body Armor	9
Appendixes	
<ul> <li>A. Scope and Methodology Prior Coverage</li> <li>B. Congressional Request</li> <li>C. Effect of Body Armor Ban</li> <li>D. Guidance for Contracting Officers</li> <li>E. Interceptor Body Armor</li> <li>F. Summary of Interceptor Body Armor Contracts Reviewed</li> <li>G. Management Comments on the Draft Report and Audit Response</li> <li>H. Report Distribution</li> </ul>	20 21 23 25 28 30 31 36 46
<b>Management Comments</b>	
Assistant Secretary of the Army (Acquisition, Logistics, and Technology) Program Executive Office Soldier U.S. Army Research, Development and Engineering Command	49 51 55

# **Background**

This report responds to inquiries by Congresswoman Louise M. Slaughter, 28<sup>th</sup> District, New York (Appendix B). Congresswoman Slaughter asked the DoD Office of Inspector General (IG) to review DoD procurement of body armor and armored vehicles to determine whether officials followed contracting policies. Congresswoman Slaughter also requested specific information on the effect the Army's ban on privately procured body armor had on the safety of the warfighter. This is the second of two audit reports issued in response to her request. This report discusses the procurement of various body armor components by the Army and the Marine Corps. The first audit report covered the procurement policy for armored vehicles and why DoD issued contracts for armored vehicles to Armor Holdings and Force Protection.<sup>2</sup>

**Interceptor Body Armor.** Interceptor Body Armor (IBA) is a vest protecting the upper torso from ballistic threats. It can be configured to defeat the predicted mission threat at minimum weight. IBA consists of:

- an outer tactical vest (OTV), which includes the base vest, outershell carrier, collar assembly, and throat and groin protectors;
- deltoid and axillary protectors (DAPs) for the upper arm and underarm that attach to the OTV and provide protection in the shoulder area;
- small arms protective inserts (SAPIs), which are interchangeable contoured plates inserted into front and back pockets on the OTV, and
- enhanced side ballistic inserts (ESBI),<sup>3</sup> a pair of carrier assemblies and ballistic inserts. The carrier assemblies attach to the sides of the OTV.

All of the components attach to the OTV. The OTV provides protection from conventional small arms munitions. Attachment points on the front of the OTV allow soldiers to carry a limited amount of equipment. See Appendix E for the various components of the IBA.

Program Management and Contracting Responsibilities. The Project Manager Soldier Equipment (PM SEQ), under the Program Executive Office (PEO) Soldier, manages the Army's acquisition of body armor components. The U.S. Army Research, Development and Engineering Command's Acquisition Center (RDECOMAC) is the contracting activity for the Army contracts reviewed. The Program Manager Infantry Combat Equipment (PM ICE), under the Marine Corps Systems Command (MCSC), manages the Marine Corps' acquisition of body armor components. The Office of the Assistant Commander for Contracts, MCSC, is the contracting activity for the Marine Corps contracts reviewed.

<sup>3</sup> The Marine Corps has also referred to the ESBI as the Secondary Small Arms Protective Insert (S-SAPI).

<sup>&</sup>lt;sup>2</sup> Report No. D-2007-107, "Procurement Policy for Armored Vehicles," June 27, 2007.

**Product Testing and Evaluation.** Testing and evaluation occur throughout the acquisition process. Solicitations can require bid samples to be tested and evaluated against factors listed in the solicitation before contract award. The bid samples are evaluated against the evaluation factors in order to rank the different bid samples. The bid samples that represent the best value to the Government are awarded a contract. The bid samples are used to determine only the responsiveness of the bid and not to determine a bidder's ability to produce the required items.

After contract award, first article testing (FAT) can be performed to prove that the contractor can furnish a product that meets the contract specifications. The contracting officer can waive FAT if the contractor is already producing the item under contract. The contracting officer should include FAT instructions in the contract documentation to place responsibility on either the Government or the contractor to perform FAT.

**First Article Testing.** The Federal Acquisition Regulation (FAR) Subpart 2.1, "Definitions," March 9, 2005, defines the "first article" as an initial production sample, and FAT as a testing and evaluating process before or in the initial stage of production to determine whether the proposed product conforms with contract requirements. During FAT, the proposed product is evaluated to determine the contractor's ability to produce a product that can meet or exceed evaluation criteria specified in the contract. FAT ensures that contractor-produced items:

- meet operational requirements,
- satisfy contractual requirements, and
- perform in a simulated working environment.

FAR Subpart 9 "Contractor Qualifications," January 3, 2006, explains that solicitations shall provide the performance specifications that the first article must meet for approval, the detailed technical requirements for the tests that must be performed for approval, and the necessary data that must be submitted to the Government in the first article test report. The FAR allows contracting officials to use their judgment as to when to require FAT, but advises contracting officers to use discretion on implementing FAT. Contracting officers should consider the risk to the Government if FAT is not required; the FAR recommends performing FAT on items described by performance specifications, such as body armor. FAT is also recommended on commercial items that will be fielded in an environment that is different from the one in which they were designed to work. See Appendix D for FAR guidance for contracting officers.

### **Objectives**

Our overall audit objectives were to evaluate: (1) the procurement history of body armor and (2) the effect that the Army's decision to ban the use of personally purchased body armor had on the safety of Service members. See the Finding

section for discussion of objective (1), Appendix C for a discussion of objective (2), and Appendix A for a discussion of the scope and methodology and for prior coverage related to the objectives.

## **Scope Limitations**

The audit scope was limited to Army and Marine Corps contracts and orders awarded between January 2004 and December 2006 for body armor components. We divided the acquisition process into three phases: presolicitation, solicitation and evaluation, and contract administration. The scope was limited to reviewing the presolicitation and the solicitation and evaluation phases of the acquisition process for specific contracts. We also reviewed contracting files as necessary to determine requirements for FAT. We did not evaluate the contract administration phase of the acquisition process, which includes activities performed after contract award, such as quality control and testing, deliverable requirements, and monitoring and measuring performance and end-user satisfaction, to determine whether the contractor met the requirements of the contract. We also did not visit contractor facilities during the audit. See Appendix F for a summary of the contracts reviewed.

#### **Review of Internal Controls**

We reviewed the adequacy of management controls as they applied to our audit objective. Specifically, we reviewed body armor component contract files to determine whether they contained the elements required by the FAR. We identified material internal control weaknesses at RDECOMAC, as defined by DoD Instruction 5010.40, "Managers' Internal Control (MIC) Program Procedures," January 4, 2006. The weaknesses related to the documentation of FAT requirements and results in 13 of 28 Army contracts reviewed. Although RDECOMAC had internal control procedures in place, we identified weaknesses resulting in decisions not always being properly documented in the contract files. Specifically, RDECOMAC officials did not follow the FAR in maintaining contract files to support FAT decisions and results. Implementing our recommendations will improve the quality of the contract files to support informed decisions. A copy this report was provided to the senior official in charge of internal controls at RDECOMAC.

.

<sup>&</sup>lt;sup>4</sup> Quality control and testing (acceptance testing) involves testing each item or manufacturing lot of items to verify that each particular item meets its specification requirements. The purpose of acceptance testing is to catch random defects on a particular item that are not systemic in the manufacturing process; because of our scope limitation, we did not examine acceptance testing.

## **Procurement History for Body Armor**

RDECOMAC and MCSC issued 35 contracts and 5 Federal Supply Schedule (FSS) orders valued at more than \$5.2 billion between January 2004 and December 2006 for body armor components. Specifically, the Army and Marine Corps awarded:

- 21 full-and-open competitive contracts, valued at \$4.8 billion;
- 7 sole-source contracts, valued at \$143.9 million;
- 7 simplified acquisitions, valued at \$10.0 million; and
- 5 FSS orders, valued at \$301.1 million.

The contracts were for components or modifications to IBA, such as enhanced ballistic protection and refurbishment of the existing system. In all, contracts were awarded to 14 manufacturers to provide the various individual components of body armor. The contracts either were for specific quantities of items or were indefinite-delivery, indefinite-quantity contracts. Appendix F contains a summary of the contracts reviewed.

**Outer Tactical Vests.** The Army awarded one FSS order and one full-and-open competitive contract for OTVs, with a combined value of \$214.7 million. The FSS order was in response to a July 1, 2004, Army Statement of Urgency to provide additional OTVs to deployed personnel. The Army awarded the full-and-open competitive contract for the initial and follow-on fielding of OTVs. (See Table 1.)

Table 1. Army Contracts and Orders for Outer Tactical Vests						
Contractor	Contract/Order <u>Number</u>	Maximum <u>Quantity</u>	Contract Value (\$ millions)			
Point Blank Body Armor Inc.	W91CRB-04-F-0126	50,000	\$24.76			
Point Blank Body Armor Inc. <b>Total</b>	W91CRB-05-D-0003	840,000 <b>890,000</b>	189.96 <b>\$ 214.72</b>			

Outer Tactical Vest Conversion Kits and Conversion Services. The Army awarded two simplified acquisitions and four full-and-open competitive contracts for OTV conversion kits and conversion services, with a combined value of

<sup>&</sup>lt;sup>5</sup> An indefinite-quantity contract provides for an indefinite quantity, within stated limits, of supplies or services during a fixed period. The Government places orders to meet particular requirements as they arise. Quantity limits may be stated as number of units or as dollar values.

\$374.7 million. The Army initially fielded the OTV in woodland or desert camouflage patterns. In 2005, the Army changed the camouflage pattern of combat uniforms from woodland and desert camouflage to the universal camouflage pattern. The deviation in color scheme between the fielded OTVs and the soldiers' new uniforms helped the enemy sight its target. The Army awarded the two simplified acquisitions in September 2005 to address this safety issue for deployed personnel. The Army then issued the four full-and-open competitive contracts to switch all OTVs to the new pattern. (See Table 2.)

Table 2. Army Contracts for OTV Conversion Services and Conversion Kits							
<u>Contractor</u>	Contract Number	Maximum Quantity	Contract Value (\$ millions)				
Point Blank Body							
Armor Inc.	W91CRB-05-P-0204*	11,265	\$2.03				
Point Blank Body							
Armor Inc.	W91CRB-06-D-0024*	10,000	1.90				
Point Blank Body							
Armor Inc.	W91CRB-05-P-0215	28,900	4.99				
UNICOR Federal							
Prison Industries	W91CRB-06-D-0027	120,000	24.40				
Point Blank Body							
Armor Inc.	W91CRB-06-D-0030	864,000	169.43				
Specialty Defense	W91CRB-06-D-0031	864,000	<u>171.97</u>				
Total		1,898,165	\$ 374.72				
* Contract was for c	, ,						

**Deltoid and Axillary Protectors.** The Army awarded one simplified acquisition and two FSS orders<sup>6</sup> for DAPs, with a combined value of \$245.3 million. In 2004, the Army determined that IBA left the soldier vulnerable in the upper arm and underarm; DAPs were designed to counter the threat and increase the level of protection to the soldier. The Army awarded a simplified acquisition for the research and development of DAPs. Later, the Army placed the two FSS orders to meet the Army's acquisition objective. (See Table 3.)

\_

<sup>&</sup>lt;sup>6</sup> Contract W91CRB-04-D-0014 was an order off the FSS according to the issuing contracting officer. Contracting actions were placed under GSA contract number GS-07F-8942D.

Table 3. Army Contracts and Orders for Deltoid and Axillary Protectors						
Contractor	Contract/Order Number	Maximum <u>Quantity</u>	Contract Value (\$ millions)			
Point Blank Body						
Armor Inc.	W91CRB-04-P-0169	10,000	\$2.85			
Point Blank Body						
Armor Inc.	W91CRB-04-D-0014*	840,000	239.40			
Point Blank Body						
Armor Inc.	W91CRB-05-F-0072	96,000	<u>3.09</u>			
Total		946,000	\$ 245.34			
* Contract was FSS of	order.					

**Small Arms Protective Inserts.** The Army and Marine Corps awarded 17 contracts and orders for SAPIs, with a combined value of \$3.087 billion. There were 11 full-and-open competitive contracts, 4 simplified acquisitions, 1 FSS order, and 1 sole-source contract. (See Table 4 for Army Contracts and Table 5 for Marine Corps Contracts.)

The Army awarded 13 of the 17 contracts: 7 were full-and-open competitive contracts, 4 were simplified acquisitions, 1 was an FSS order, and 1 was a sole-source contract. The seven full-and-open competitive contracts were awarded in 2004, after the Army increased its acquisition objective. In an effort to meet the new objective, the Army decided to maximize production capacity by awarding a SAPI contract to all capable contractors. In 2005, the Army placed an FSS order with a new contractor to increase output quickly. Afterward, the Army awarded the sole-source contract to the new supplier. The contract was not competed because all other capable contractors were already under contract to produce SAPIs. The four simplified acquisitions were awarded for additional testing of the SAPIs.

The Marine Corps awarded 4 of the 17 contracts; they were full-and-open competitive contracts. These contracts were awarded in 2004 because of an increase in the Marine Corps' acquisition objective. The Marine Corps competed the acquisition to identify new and multiple sources of supply.

Table 4. Army Contracts and Orders for Small Arms Protective Inserts						
		Maximum	Contract Value			
Contractor	Contract Number	Quantity	(\$ millions)			
Ceradyne Inc.	W91CRB-04-D-0039	829,000	\$461.00			
Armor Works LLC.	W91CRB-04-D-0040	829,000	461.00			
Force One, LLC.	W91CRB-04-D-0041	829,000	461.00			
Simula Inc.	W91CRB-04-D-0042	829,000	461.00			
Cercom Inc.	W91CRB-04-D-0043	829,000	424.47			
Composix Co.	W91CRB-04-D-0044	829,000	362.12			
Armacel Armor						
Corp.	W91CRB-04-D-0045	829,000	204.46			
Protective Material						
Grp.	W91CRB-05-F-0086	10,000	14.96			
Simula Inc.	W91CRB-05-P-0147	18	0.01			
Cercom Inc.	W91CRB-05-P-0148	15	0.01			
Armacel Armor						
Corp.	W91CRB-05-P-0159	50	0.04			
Patriot Performance	W91CRB-05-P-0191	50	0.03			
Protective Material						
Grp.	W91CRB-06-D-0004	47,003	<u>60.00</u>			
Total		5,860,136	\$2910.10			

Table 5. Marine Corps Contracts for Small Arms Protective Inserts						
Contractor	Contract Number	Maximum Quantity	Contract Value (\$ millions)			
		<del>-</del>	,			
Armor Works LLC.	M67854-04-D-3005	80,000	\$32.66			
Ceradyne Inc.	M67854-04-D-3116	120,000	41.25			
Simula Inc.	M67854-04-D-3117	120,000	54.06			
Armor Works LLC.	M67854-04-D-3118	<u>120,000</u>	<u>48.96</u>			
Total		440,000	\$ 176.93			

**Enhanced Side Ballistic Inserts and Carriers.** The Army and Marine Corps awarded 12 contracts for ESBIs and carriers, valued at approximately \$1.315 billion. There were five full-and-open competitive contracts, six solesource contracts, and one FSS order. (See Table 6 for Army contracts and Table 7 for Marine Corps contracts.)

The Army awarded 4 of the 12 contracts: 1 sole-source contract, 1 FSS order, and 2 full-and-open competitive contracts. The sole-source contract and the FSS order were awarded to meet the requirement addressed in a September 12, 2005,

Operational Needs Statement. That requirement was for additional protection from bullet penetration to the side of the body. Afterward, the Army awarded the two full-and-open competitive contracts to meet the Army's acquisition objective. (See Table 6.)

The Marine Corps awarded 8 of the 12 contracts: 5 sole-source contracts and 3 full-and-open competitive contracts. Three of the sole-source contracts were awarded to meet a July 11, 2005, Urgent Statement of Need. Like the Army Operational Needs Statement, the Urgent Statement of Need was to address injuries and deaths of Marines caused by bullet penetration of the OTV on the side of the body. The other two sole-source contracts were issued in response to a change to the original Urgent Statement of Need, which increased the requirement from 33,000 to 50,500. Afterward, the Marine Corps awarded three full-and-open competitive contracts to meet the Marine Corps acquisition objective. (See Table 7.)

Table 6. Army Contracts and Orders for Enhanced Side Ballistic Inserts and Carriers							
<u>Contractor</u>	<u>Contract/Order</u> <u>Number</u>	Maximum <u>Quantity</u>	Contract Value (\$ millions)				
Ceradyne Inc.	W91CRB-06-C-0002	200,000	\$70.00				
Ceradyne Inc. Armor Works, LLC.	W91CRB-06-D-0028 W91CRB-06-D-0029	1,782,000 1,782,000	611.71 543.07				
Point Blank Body							
Armor Inc.  Total	W91CRB-06-F-0098	130,000 <b>3,894,000</b>	18.88 <b>\$1,243.66</b>				

Table 7. Marine Corps Contracts for Enhanced Side Ballistic Inserts and Carriers						
Contractor	Contract Number	Maximum <u>Quantity</u>	Contract Value (\$ millions)			
Ceradyne Inc.	M67854-05-C-3062	6,000	\$1.56			
Source One Distributors	M67854-05-C-3063	12,000	2.11			
Diamondback Tactical	M67854-05-C-3065	6,000	2.42			
Ceradyne Inc.	M67854-06-C-3019	19,646	4.19			
Source One Distributors	M67854-06-C-3020	39,236	3.67			
Simula Inc.	M67854-06-D-3031	78,420	23.92			
Armor Works, LLC.	M67854-06-D-3071	78,420	19.83			
Armor Works, LLC.	M67854-06-D-3072	<u>52,279</u>	13.22			
Total		292,001	\$ 70.92			

# **Army Procurement of Body Armor**

Army officials did not follow FAR requirements in procuring body armor components. We identified deficiencies in 16 of the 28 contracts and orders reviewed. Specifically, officials did not:

- include requirements for or perform FAT of body armor components in 13 contracts and orders<sup>7</sup>, or
- adequately maintain files for 11 contracts reviewed.

As a result, DoD has no assurance that first articles produced under 13 of the 28 contracts and orders reviewed met the required standards, or that 11 of the 28 contracts were awarded based on informed procurement decisions.

## **FAR Contract Requirements**

FAR Part 9, "Contractor Qualifications," allows contracting officials to require contractors to perform FAT. Testing and approval offer proof that the product conforms to all contract requirements prior to acceptance. During testing, the specific product (for example, body armor components) is evaluated against performance and technical evaluation criteria specified in the contract and purchase description. Testing and approval of the first article occur after contract award.

FAR Part 4, "Administrative Matters," requires contracting officials to maintain adequate contract documentation. A contract file should constitute a complete history of the transaction and support actions taken, and provide a basis for informed decisions taken during the acquisition. Additionally, the contract file shall provide information for reviews and investigations and furnish essential facts in the event of litigation or congressional inquiries. The following are examples of the records normally contained, if applicable, in contracting files:

- purchase request,
- acquisition planning information,
- solicitation and amendments,
- list of sources solicited,

\_

With regard to first article testing, our review determined that instructions regarding testing and approval of first articles were not included in acquisition documents, and Army officials accepted preliminary design models as contractually compliant before contract award and production. Although not in the scope of our audit, the Program Executive Office Soldier stated that the Army also conducts lot acceptance testing and post issue surveillance testing, both critical parts of the body armor testing program.

- copy of each offer or quotation,
- source selection documentation,
- cost or pricing data and analysis,
- original signed contract or award and modifications,
- determination of the contractor's responsibility (first article testing),
- contract completion documents, and
- any additional documents that reflect actions by the contracting officer pertinent to the contract.

Table 8 shows the number and types of deficiencies identified in Army contracts reviewed. Marine Corps contracts reviewed contained requirements for FAT and adequate documentation to support contractual decisions.

Table 8. Summary of Contract Deficiencies by Service						
			]	Deficiencies Ide	ntified	
<u>Service</u>	Contracts Awarded*	<u>FAT</u>	Market <u>Research</u>	Acquisition Plan	Source- Selection <u>Plan</u>	Discounts Requested
Army	28	13	8	2	1	2
Marine Corps	12	_0_	_0_	_0_	_0_	0_
Total	40	13	8	2	1	2
* See Appendix F for a complete list of the contracts.						

## **FAT for Body Armor Procurements**

Army contracting officials did not require or perform FAT for 13 of the 28 Army contracts and orders reviewed. Specifically, instructions regarding testing and approval of first articles were not included in acquisition documents, and Army officials accepted Preliminary Design Models (PDMs) as contractually compliant before contract award and before production.

Contracting officers use FAT to reduce the risk of the Government receiving a product that does not conform to contract specifications. In all procurements, contracting officers must consider the risk to the Government, impact on time or cost, and the availability of less costly methods of quality assurance. These risks can be monetary and quantifiable or intangible. It is the responsibility of the contracting officer to mitigate these risks to ensure quality products are received from contractors and to protect DoD's interests.

**Contract Requirements.** Although Army contracting officials stated that they were aware of the requirement for FAT, it was not always included in contracts. For example, Contract W91CRB-06-C-0002 for ESBI is vague regarding FAT. The contract does not include FAR contract clause 52.209-4 for First Article Approval (FAT)—Government Testing. However, the purchase description for ESBI (CO/PD 06-20, dated January 12, 2006) states:

Unless otherwise specified in the contract or purchase order, the ESBI supplier is responsible for all first article and conformance inspections and tests herein.

According to paragraph 4.2.1 of the ESBI purchase description, the contractor is required to perform FAT of a production item for the ESBIs unless the contract states otherwise. The contract includes an attachment describing FAT for ESBIs. Because the delivery schedule indicates a delivery of the ESBIs occurred on the same day the Army issued a letter stating that the ESBIs had passed FAT and authorizing production, we could not determine whether the testing performed was for preliminary design acceptance or for initial production authorization FAT.

The contract also included a purchase description for IBA. The IBA purchase description did not include the same paragraph 4.2.1 as the ESBI purchase description. Lastly, the contract did not include an attachment with FAT instructions for the OTV.

**Production Authorization.** Solicitation number W91CRB-04-R-0033, issued on May 19, 2004, required prospective contractors to submit PDMs for evaluation. The Government, using testing procedures in accordance with body armor purchase descriptions, conducted technical qualification testing for each offeror's PDM.

According to FAR Subpart 14.202-4, PDMs will be used to determine only the responsiveness of the bid and will not be used to determine a bidder's ability to produce the required item. Further, PDMs may be examined for any required characteristic, whether or not such characteristic is adequately described in the specification.

the contract.

\_

FAR Subpart 52.209-4, "First Article Approval—Government Testing," June 28, 2006, states that the contracting officer shall insert a clause into the contract defining the number of units the contractor shall deliver within a predefined number of days from the date of this contract to the Government for FAT. The characteristics that the first article must meet and the testing requirements are specified elsewhere in

For this solicitation, RDECOMAC contracting officials issued FAT "production is authorized" letters of approval based on bid responsiveness evaluation procedures performed during source selection for six contracts awarded on August 19, 2004. The "production is authorized" letters were issued to the prospective contractors on August 5, 2004. After body armor contract award, first article units produced at the contractor's facility may not have been tested. There is no evidence of FAT after contract award for those designs in the contracting file. While testing and evaluation performed on the PDM may have followed the same test procedures as a FAT, the bid sample was evaluated as part of source selection, and the first article was not tested.

Waived Requirements. Contracts W91CRB-05-P-0204 and W91CRB-06-D-0024 were awarded for the retrofit of OTVs returning from the U.S. Central Command (CENTCOM) theater. The solicitation and contract incorporated clauses requiring FAT. The solicitation required prospective vendors to submit either PDMs for evaluation testing, or a certification stating that the vendor had previously passed FAT. The statement of work was for retrofitting OTVs; therefore, a certificate for FAT for manufacturing OTVs would not apply to this process. Contracting officials should have required the prospective vendors to submit the required units for preliminary design evaluation testing as the solicitation requested.

When questioned, PM SEQ officials indicated that FAT would not be appropriate for retrofitting services because this process does not involve new manufacturing.

Solicitation officials included FAT certifications or lack thereof as part of their evaluations. The vendor that was awarded the contract submitted a FAT certification from 1999 for the complete manufacture of OTVs. As a result, rating officials evaluated the vendor's "strengths" as "major" because all of the vendor's ballistic packages passed FAT. The rating officials evaluated a competing vendor's offer as "deficient" because the vendor would be required to pass FAT for its ballistic packages. Subsequent Contract W91CRB-06-D-0024 was awarded to the vendor based on the W91CRB-05-P-0204 contract award and the FAT certification from 1999. Further, neither of these contract files contained any evidence that any testing and evaluation occurred on these products after contract award. As a result, the Army purchased 21,265 retrofitted OTVs that were not tested under testing and evaluation protocols as called for in the contract.

**Federal Supply Schedule Orders.** Army programming and contracting officials did not require FAT of body armor components ordered through the FSS. Army contracting officials stated that they believed the General Services Administration (GSA) conducted FAT on items before awarding a contract on the FSS. GSA contracting officials stated that they do not test items before awarding contracts on the FSS and that FAT is the responsibility of the ordering activity.

#### **Contract Documentation**

FAR Subpart 4, "Government Contract Files," prescribes how to establish, maintain, and dispose of contract files. Contract documentation in the files must provide a complete history of the acquisition and the award. If applicable, contracting office files normally include:

- a purchase request,
- acquisition planning information,
- the solicitation and amendments,
- a list of sources solicited,
- a copy of each offer or quotation,
- source-selection documentation,
- determination of the contractor's responsibility (first article testing),
- original signed contract or award and modifications,
- contract completion documents, and
- any additional documents on which action was taken or that reflect actions by the contracting office pertinent to the contract.

Army contract documentation was deficient on 11 of the contracts and orders reviewed. The deficient areas included inadequate or no:

- market research,
- acquisition plan,
- source-selection plan, and
- request for discounts on FSS orders.

Market Research. FAR Subpart 2.1, "Definitions," March 9, 2005, defines market research as collecting and analyzing information on commercial market capabilities to satisfy an agency's needs. Market research can help ensure that the Government gets the best product for the best price. Officials can use a variety of market research techniques to identify potential sources, including reviewing recent market research for similar products; publishing formal requests for information; querying Government databases; querying Internet information sources; obtaining source lists; reviewing catalogs; and holding presolicitation conferences. The only documented evidence in 8 of the 28 contract files was a statement by program officials that market research had been performed; the research was not documented as required by the FAR. Although Army officials

complied with other statutory and regulatory provisions regarding competition, we believe market research was inadequate. See Appendix D for a list of the contract actions.

**Acquisition Plans.** Contracting officials did not prepare a written acquisition plan for the purchase of DAPs before awarding FSS Order W91CRB-04-D-0014. Army officials stated that they did not create an acquisition plan for the order because they considered the acquisition to be a final buyout. This acquisition, however, was an FSS order. The Defense Federal Acquisition Regulation Supplement (DFARS) Subpart 207.1, "Acquisition Plans," March 23, 2004, which waives an acquisition plan for final buyouts, does not apply to FAR Subpart 8.404(c)(1), which states, "Orders placed under a Federal Supply Schedule contract are not exempt from the development of acquisition plans." Thus, an acquisition plan was required.

Contracting officials did not prepare a written acquisition plan for the purchase of OTVs before awarding FSS Order W91CRB-04-F-0126. The officials stated that they did not create an acquisition plan because the FSS order value was lower than the threshold that would require an acquisition plan. In fact, this order requires an acquisition plan because the value for one fiscal year of this order was \$24.7 million, well above the threshold of \$15 million.

**Source-Selection Plan.** The Request for Quote for FSS Order W91CRB-04-D-0014 contained inadequate evaluation factors. Ordering officials included the evaluation factors for award as an amendment to the solicitation. Those evaluation factors were technical performance, delivery time, and cost. The amendment instructed offerors to provide product samples for evaluation; however, the amendment did not provide criteria or a purchase description as a basis for the technical design. Despite the lack of design evaluation criteria, ordering officials wrote in the technical evaluations that competing designs deviated from the design prescribed in the solicitation and were therefore technically unacceptable.

Requests for Discounts. The Army placed two orders from the FSS without requesting discounts even though the orders exceeded the maximum order threshold. For example, ordering officials did not request a discount for FSS Order W91CRB-04-D-0014 even though this order was for \$239 million for 840,000 DAPs. Although the order is listed as an indefinite-delivery, indefinite-quantity contract, contracting files identify it as an order from the FSS. The solicitation stated that discounts were encouraged; however, the vendor did not offer a discount in the quoted price, nor did Army officials actively request a discount or document why one was not requested. Similarly, Army officials did not request a discount for W91CRB-05-F-0072, an order for DAPs valued at

\_

<sup>&</sup>lt;sup>9</sup> An acquisition plan lists the specific actions necessary to execute the approved acquisition strategy and implement the contract. Its purpose is to ensure that the Government acquires items it needs in the most effective, economical, and timely manner possible.

<sup>&</sup>lt;sup>10</sup> Source-selection plans are prepared to evaluate a bid or proposal. The source-selection plan contains evaluation factors and significant subfactors. These factors and significant subfactors help evaluators select the proposal that represents the best value.

\$3.09 million. Contracting officials pursued discounts only by stating in the solicitation, "Discounts off of GSA schedule prices are allowed and encouraged"; no discounts were offered by the manufacturer, and none were obtained.

**Determining a Reasonable Price.** The contracting officer must make sure that items are bought at a fair and reasonable price. Contracting officials are prohibited from obtaining certified cost or pricing data when contracting for commercial items. Instead, contracting officials should rely on market-based pricing supported by evidence of commercial sales to determine fair and reasonable prices. The FAR also allows prior purchase history to be used when making theses comparisons.

There was no evidence that the price was reasonable in Orders W91CRB-04-D-0014 and W91CRB-04-P-0169, valued at approximately \$242 million. The Army paid \$285.00 each for an initial order of 10,000 DAPs from W91CRB-04-P-0169. In subsequent Order W91CRB-04-D-0014, the Army procured 840,000 DAPs from the same manufacturer at the same price as the 10,000, for a total value of \$239 million.

For Order W91CRB-04-P-0169, contracting officials indicated that the \$285.00 price was fair because the offeror could have charged a higher price. The officials maintained that contracting officials using simplified acquisition procedures were allowed to make that choice. Further, for Order W91CRB-04-D-0014, the contracting officer stated that the price was reasonable based on Order W91CRB-04-P-0169 and because the FSS already determined the price to be "fair and reasonable." Contracting officials accepted the offer with the same price despite the substantial quantity ordered.

We believe RDECOMAC contracting officials were not prudent in determining price and in using the Government's funds. We believe a prudent contracting official should, as a rule, use validated historical prices as a basis to determine price reasonableness for current and future procurements. RDECOMAC officials did not ensure the validity of the comparison or the reasonableness of the historical price. Price comparisons were made when volumes were dissimilar. The disproportionate volume order of 840,000 as compared with 10,000 should have alerted the contracting officer to obtain a volume quantity discount after receiving the offer. Based on evidence presented in the contracting file, the contracting officer's rationale for selecting this offer was not supportable. Further, no evidence exists to substantiate that the historical price used was reasonable.

#### Conclusion

We cannot determine whether body armor components purchased under 13 Army contracts and orders met FAR requirements because FAT for body armor components could not be verified. Normally, a first article is tested to verify that the manufacturing process has generated an acceptable item and to catch and correct any defects in the manufacturing process before more items are produced using the same manufacturing process. First article testing would have assisted

Army officials in determining whether the contractor could furnish an acceptable product. Further, we cannot determine whether procurement decisions were informed by best-value criteria in 11 contracts reviewed. The Army should maintain contract files in compliance with the FAR and the DFARS. Well-maintained contract files support informed decisions and ensure DoD receives the best value in the body armor it procures. Because the period of performance for the contracts we reviewed has ended, recommendations made in this report are intended to prevent similar problems from recurring.

## **Management Comments on the Finding and Audit Response**

Summaries of management comments on the finding and audit responses are in Appendix G.

# Recommendations, Management Comments, and Audit Response

**Redirected Recommendation.** As a result of comments from the Commander, U.S. Army Research, Development and Engineering Command, we revised draft Recommendation 2. to show the correct command structure. Specifically, Recommendation 2. is redirected to the Commander, U.S. Army Research, Development and Engineering Command to direct the U.S. Army Research, Development and Engineering Command Acquisition Center to execute actions in 2.a., 2.b., and 2.c.

#### 1. We recommend that the Program Executive Office Soldier:

- a. Direct testing and evaluation of the first article for conformance with contract requirements before the initial stage of production on all contracts for body armor components.
- b. Update the purchase description to identify the appropriate first article and the number of units to be furnished.
- c. Provide adequate documentation to support all contractual actions, including issuing waivers for first article testing.

**Program Executive Officer Soldier Comments.** The Program Executive Office Soldier (hereafter the PEO) neither concurred nor nonconcurred. The PEO stated that for Recommendations 1.a., 1.b., and 1.c., no action would be required because all of the recommended actions are already regular and consistent current business practices in accordance with the FAR.

**Audit Response.** The PEO's comments on Recommendation 1.a. are not responsive. While we agree that procedures exist for testing and evaluation to ensure contract conformance, our audit results show that those procedures are not consistently followed. For example, the PEO states that his office requires two

levels of performance verification tests prior to acceptance (FAT and lot acceptance tests), while in the PEO's comments on the draft report the PEO lists FAT verification conducted on December 3, 2004, for Contract W91CRB-05-D-0003 as the basis for a waiver of FAT on three additional contracts. Another example includes the purchase description for Contract W91CRB-06-D-0024, which is part of the contract and states, "current production items submitted with qualifying FAT data may be considered in the determination of reducing additional FAT verification by the Government." This contract language indicates that the FAT may be reduced, not eliminated, and our review of the contract file indicated the FAT was never performed after contract award. These examples, and our additional audit response to the PEO's comments in Appendix G, support the need for Recommendation 1.a., which if implemented would ensure contract FAT compliance if applicable to the contract. We request that the PEO reconsider his position on Recommendation 1.a. and provide comments on the final report in accordance with DoD Directive 7650.3.

The PEO's comments on Recommendation 1.b. are not responsive. The PEO stated that current business practices ensure that purchase descriptions identify the appropriate first article and the number of units to be furnished. However, we found purchase descriptions that did not contain this information. For example, as noted in the report, the ESBI purchase description states, "Unless otherwise specified in the contract or purchase order, the ESBI supplier is responsible for all first article and conformance inspections and tests herein." This example, and our additional audit response to the PEO's comments in Appendix G, supports the need for Recommendation 1.b., which if implemented would ensure that purchase descriptions are specific in identifying the appropriate first article and number of units to be furnished for FAT. We request that the PEO reconsider his position on Recommendation 1.b. and provide comments on the final report in accordance with DoD Directive 7650.3.

The PEO's comments on Recommendation 1.c. are not responsive. The PEO stated that current business practices ensure the documentation of all contractual actions, including issuing waivers for FAT, in accordance with the FAR. However, we found actions that were not documented. For example, the justification to support the waiver requested for Contract W91CRB-04-D0039 consisted of a copy of a previous FAT authorization included in the offeror's proposal. Neither the program office nor contracting office provided a document to state that a waiver was granted based on a previous test. Further, in Contract W91CRB-05-P-0204, awarded September 26, 2005, the offeror's proposal contained a copy of official FAT authorization issued in February 16, 1999, and the offeror's self-certification that the product passed FAT. Again, no official waiver was present in the contract file. However, in the source-selection evaluation form, the selecting official cites as an example of the offeror's strengths that "ballistic packages have all passed FAT." These examples, and our additional audit response to the PEO's comments in Appendix G, support the need for Recommendation 1.c., which if implemented would ensure that adequate documentation is maintained to support all contractual actions. We request that the PEO reconsider his position on Recommendation 1.c. and provide comments on the final report in accordance with DoD Directive 7650.3.

11 W91CRB-05-F-0072, W91CRB-04-D-0204, and W91CRB-06-D-0024.

\_

- 2. We recommend that the Commander, U.S. Army Research, Development and Engineering Command direct the U.S. Army Research, Development and Engineering Command Acquisition Center to:
- a. Require contracting officers to include specific instructions in acquisition documents for first article testing when required, and maintain documentation to support contractual actions in accordance with the Federal Acquisition Regulation Part 4, "Administrative Matters."
- b. Require contracting officers to require body armor manufacturers and subcontractors to provide preproduction body armor components for testing and evaluation before the Government authorizes production.
- c. Reevaluate the circumstances surrounding the price determination for Orders W91CRB-04-D-0014 and W91CRB-04-P-0169 to determine whether administrative remedies are necessary or available.

Commander, U.S. Army Research, Development and Engineering Command Comments. The Commander, U.S. Army Research, Development and Engineering Command (hereafter the Commander) concurred with Recommendations 2.a., 2.b., and 2.c. The Commander stated that for Recommendation 2.a., guidance would be issued to contracting officers no later than February 29, 2008; for Recommendation 2.b., guidance would be issued to contracting officers no later than February 29, 2008, for handling a requirement for body armor manufacturers and subcontractors to provide preproduction components for testing and evaluation before production; and for Recommendation 2.c., reevaluation and determination would be accomplished by February 29, 2008.

**Audit Response.** The Commander's comments were fully responsive, and no additional comments are required. Additionally, based on the Commander's suggestion, we redirected the recommendation to show the correct command structure.

- 3. We recommend that the Assistant Secretary of the Army for Acquisition, Logistics, and Technology/Army Acquisition Executive:
- a. Require contracting officers who conduct direct acquisition for amounts greater than the simplified acquisition threshold to:
- (1) Determine whether the use of non-DoD contracts is in the best interest of the Government, and verify that the required goods cannot be obtained as conveniently or economically by using a DoD contract. The contracting officer or another official designated by the agency head should document those conclusions in writing.
- (2) Request discounts when placing orders from the Federal Supply Schedule.

- (3) Document their requests for discounts. If discounts were received, document how the discounts were determined to be fair; if discounts were not received, explain why the vendor was chosen.
- (4) Fully document decisions not to consider all potential sources when awarding orders using the Federal Supply Schedule.

Office of the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) Comments. The Deputy Assistant Secretary of the Army (Policy and Procurement), responding for the Assistant Secretary of Army (Acquisition, Logistics, and Technology), concurred with Recommendation 3., stating that policies and procedures are already fully in place. The Deputy Assistant Secretary stated that guidance on acquiring supplies and services through contracts or orders issued by non-DoD agencies is contained in the DFARS, the U.S. Army Federal Acquisition Regulation Supplement, and other policy issued by the DoD and the Army. Specific Army policy includes the ASA(ALT) memorandum, "Proper Use of Non-Department of Defense (Non-DoD) Contracts," July 12, 2005. This memorandum requires a written certification for using non-DoD contract vehicles on or after January 1, 2005, for acquisitions above the simplified acquisition threshold.

Further, the Deputy Assistant Secretary stated that guidance on requesting discounts is contained in FAR 8.404, and an Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics) memorandum, "Use of Federal Supply Schedules and Market Research," January 28, 2005. This guidance reminds contracting officers to seek discounts for orders exceeding the maximum order threshold. The guidance also requires contracting officers to explain in the contract file how the discount was determined to be fair and reasonable or the reason for not obtaining a discount. Finally, the memorandum discusses the importance of conducting market research for acquisitions above the simplified acquisition threshold and advises contracting officers that they "should document the contract file on the market research efforts conducted in support of each acquisition."

**Audit Response.** The Deputy Assistant Secretary's comments are partially responsive. Although the Deputy Assistant Secretary concurred with the recommendation and we agree that policies and procedures are in place to ensure supplies and services acquired through contracts or orders issued by non-DoD agencies are adequate, the Deputy Assistant Secretary did not identify steps that will be initiated to ensure that these policies and procedures are enforced.

During our review, we observed the application of the Army's policy for reviewing and approving the use of non-DoD contracts. For Order W91CRB-05-F-0072, issued June 2, 2005, the application of Army policy was not evident. However, for Order W91CRB-06-F-0098, issued January 19, 2006, the policy was properly applied. Although this example shows that Army officials may be making progress on uniform implementation of Army policy, we request that the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) reconsider his position on Recommendation 3. and provide comments on the final report in accordance with DoD Directive 7650.3 indicating what actions will be taken to ensure the policies and procedures are enforced.

# Appendix A. Scope and Methodology

We conducted this performance audit from November 2006 through March 2008 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 evaluated whether contracting officials with the Army's RDECOMAC and the Marine Corps' MCSC awarded contracts for IBA according to the FAR and the DFARS. We reviewed the procurement of body armor between January 2004 and December 2006. Specifically, we evaluated documentation of contracts for body army components from presolicitation to solicitation and evaluation.

We collected, analyzed, and reviewed documents dated December 1997 through April 2007. We collected the acquisition documents of 40 contracts and orders for body armor components. We analyzed contracting files, which contained acquisition plans, requests for proposals, proposal evaluation plans, price negotiation memorandums, notifications to unsuccessful bidders, sole-source award justifications, award letters, contracts and modifications, and protests against award.

We interviewed contracting officials at the Army's RDECOMAC and Marine Corps' MCSC. We interviewed program office personnel from the Army's PEO Soldier and PM SEQ, and from the Marine Corps' PM ICE. We also interviewed officials at the Service headquarters. We coordinated with Government Accountability Office personnel who were conducting a concurrent review of body armor issues.

We reviewed contracting regulations in the FAR, the DFARS, Public Laws, and the United States Code. We also reviewed Service regulations, instructions, handbooks, and field manuals.

The audit scope was limited to Army and Marine Corps contracts and orders awarded between January 2004 and December 2006 for body armor components. We divided the acquisition process into three phases: presolicitation, solicitation and evaluation, and contract administration. The scope was limited to reviewing the presolicitation and the solicitation and evaluation phases of the acquisition process for specific contracts. We also reviewed contracting files as necessary to determine requirements for FAT. We did not evaluate the contract administration phase of the acquisition process, which includes activities performed after contract award, such as quality control and testing, <sup>12</sup> deliverable requirements, and monitoring and measuring performance and end-user satisfaction, to

\_

<sup>&</sup>lt;sup>12</sup> Quality control and testing (acceptance testing) involves testing each item or manufacturing lot of items to verify that each particular item meets its specification requirements. The purpose of acceptance testing is to catch random defects on a particular item that are not systemic in the manufacturing process; due to our scope limitation, we did not examine acceptance testing.

determine whether the contractor met the requirements of the contract. We also did not visit contractor facilities during the audit. See Appendix F for a summary of the contracts reviewed.

**Use of Computer-Processed Data.** We did not rely on computer-processed data to perform this audit.

Use of Technical Assistance. We did not require technical assistance to perform this audit

Government Accountability Office High-Risk Area. The Government Accountability Office has identified several high-risk areas in DoD. This report provides coverage of the DoD Contract Management high-risk area.

## **Prior Coverage**

During the last 5 years, the Government Accountability Office (GAO), the DoD IG, and the Department of the Army have issued six reports discussing body armor. Unrestricted GAO reports can be accessed on the Internet at <a href="http://www.gao.gov">http://www.gao.gov</a>. Unrestricted DoD IG reports can be accessed at <a href="http://www.dodig.mil/audit/reports">http://www.dodig.mil/audit/reports</a>. Dissemination of Army reports is prohibited except as authorized by Army Regulation 20-1.

#### **GAO**

GAO-07-662R, "Defense Logistics: Army and Marine Corps's Individual Body Armor System Issues," April 26, 2007

GAO-06-943, "DoD Excess Property: Control Breakdowns Present Significant Security Risk and Continuing Waste and Inefficiency," July 25, 2006

GAO-05-275, "Defense Logistics: Actions Needed to Improve the Availability of Critical Items during Current and Future Operations," April 8, 2005

#### DoD IG

DoD IG Report No. D-2007-107, "Procurement Policy for Armored Vehicles," June 27, 2007

#### Army

Department of the Army, Inspector General, "Special Inspection of the Processes Used to Provide Body Armor to U.S. and Coalition Forces in Operation Iraqi Freedom and Enduring Freedom, December 2003–February 2004," April 20, 2004

Army Audit Agency, Audit Report A-2004-0202-AMA, "Interceptor Body Armor," March 17, 2004

# **Appendix B. Congressional Request**

COMMITTEE ON RULES

RANKING MEMBER

WASHINGTON OFFICE: 2469 RAYBURN BUILDING WASHINGTON, D.C. 20515-3221 (202) 225-3615



#### LOUISE M. SLAUGHTER CONGRESS OF THE UNITED STATES 28TH DISTRICT, NEW YORK

April 19, 2006

.....

3120 FEDERAL BUILDING 100 STATE STREET ROCHESTER, NY 14614 (585) 222-4850

485 MAIN STREET, SUITE 106 BUFFALO, NY 14203 (716) 853-5813

1910 PINE AVENUE NIAGARA FALLS, NY 14301 (716) 282-1274

Wessite: http://www.lnuise.house.gov

The Honorable Thomas F. Gimble Acting Inspector General U.S. Department of Defense 400 Army Navy Drive Arlington, VA 22202-4704

Dear Inspector General Gimble,

I am writing to request that you review the Department of Defense's (DoD) procurement policies for body armor and armored vehicles.

As you know, an internal Pentagon memo — first revealed by *The New York Times* in January — found that 80 percent of marines killed in Iraq due to upper body wounds could have survived if they had extra body armor. This troubling news follows earlier revelations that our troops went into Iraq without enough bulletproof vests and armored vehicles necessary to safeguard their lives. It was not until our service men and women decided they had no choice but to purchase their own body armor that the DoD moved to equip our soldiers with the vital protection needed to fight a war. But despite armor upgrades, many soldiers remain unhappy with the quality of their body armor, and have continued to purchase equipment from private companies. Unfortunately, the Army recently barred service personnel from using non-DOD procured body armor. I am concerned that our soldiers in the field — who think they need better protective gear than provided to them by DoD — were not consulted before the Army banned privately-bought body armor.

In addition to DoD policies regarding body armor, I am concerned with the DoD's procurement history for armored vehicles. As with body armor, the DoD failed at the outset of the Iraq war to equip our troops with the armored vehicles needed to protect them from improvised explosive devices (IEDs). The New York Times has reported that DoD continues to rely on just one small company in Ohio, Armor Holdings, to produce the military's primary vehicle, the Humvee. Initiatives to speed up delivery of the new Humvees remain stalled, as the company is severely backlogged with orders. The Times also has reported that a small company in South Caroline, Force Protection, was given a contract in May 2005 for 122 armored vehicles, despite the fact that Force Protection has never mass-produced Humvees in the past. Predictably, the 122 armored vehicles have not all arrived in Iraq, and the vehicles that have continue to be plagued by mechanical failures.

In light of DoD's troubling pattern of misguided decisions regarding supplies for our troops, I respectfully request that you examine DoD's procurement history for body armor and armored vehicles, and determine whether or not proper policies were followed. I would like specific information on why DoD issued contracts to Armor Holdings and Force Protection. In addition, I

PRINTED ON RECYCLED PAPER

The Honorable Thomas F. Gimble April 19, 2006 Page # 2

request that your office determine the effect the Army's ban on privately bought body armor will have on the safety of our service men and women.

I appreciate your attention into this request and await your prompt response. Should you have any additional questions, please contact Alan Snyder of my staff at (202) 225-3615.

Sincerely,

Louise Slaughter Member of Congress

LMS:abs

# Appendix C. Effect of Body Armor Ban

### Request

Determine the effect of the Army's ban on personally procured body armor on the safety of our Service members.

To respond to this request, we reviewed the Army's ban on personally procured body armor, and determined whether the Army had enough body armor in inventory to protect its soldiers.

## **Policies Banning Commercially Available Body Armor**

The Army issued a Safety of Use Message (SOUM) on March 17, 2006, banning the use of personally procured, commercially available body armor products in a combat zone. Titled "Discontinued Use of Unauthorized Body Armor, Dragon Skin," the SOUM states:

There may be Soldiers deployed in OIF/OEF who are wearing commercial body armor called "Dragon Skin," made by Pinnacle Armor, in lieu of their issued Interceptor Body Armor (IBA). Media releases and related advertising imply that Dragon Skin is superior in performance to IBA. The Army has been unable to determine the veracity of these claims.

#### The message continues:

The Army has been involved in the development of the Dragon Skin and the different technology it employs. Dragon Skin's capabilities do not meet Army requirements. In fact, the Dragon Skin has not been certified by the Army for protection against small arms threats being encountered in Iraq and Afghanistan today. . . . Although this message specifically identifies Dragon Skin, it applies to other commercially available body armor products (such as commercial police vests) that are not Army approved and issued.

According to Army officials, the SOUM was issued to address concerns raised by the Army Chief of Staff that deployed soldiers may be using nonstandard body armor. The Army found that units had bought nonstandard body armor, and the SOUM directed units to turn in nonstandard body armor. Commanders were required to replace all other types of body armor immediately with IBA. The Marine Corps issued policy on the wear and purchase of body armor and personal protective equipment on April 17, 2007. The Army and Marine Corps issued the policies to enhance the safety of military personnel by ensuring that their body armor meets established military ballistic standards.

The SOUM made soldiers aware that commercially available body armor did not meet military specifications for ballistic protection. The Services require that ballistic testing be performed by an independent certified National Institute of

Justice testing facility. The testing facilities confirmed that IBA reduces the effects of fragmentation and ballistic projectiles. As a result, troops are equipped with modular body armor certified as meeting Government test standards.

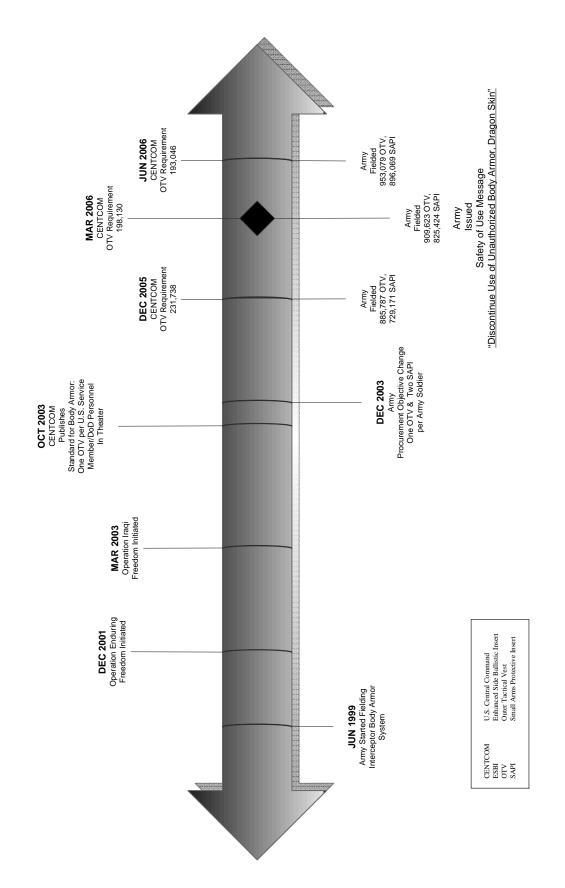
### **Inventory of Body Armor**

According to Army officials, an adequate supply of body armor was available and issued at the time of the ban. An October 2003 CENTCOM message states that each Service member and DoD civilian in the CENTCOM theater was to be issued one suit of body armor. We evaluated the Army's inventory against the CENTCOM requirement to determine whether the Army had sufficient stocks of IBA on hand at the time of the ban. The table provides information on theater requirements and quantities fielded by the Army.

Outer Tactical Vests Fielded			
<u>Date</u>	CENTCOM Theater Requirement	OTVs Fielded by the Army	SAPIs (sets) Fielded by the Army
December 2005	231,738	885,787	729,171
March 2006	198,130	909,623	825,424
June 2006	193,046	953,079	896,069

Sufficient stocks of IBA were available for Service members at the time of the Army ban. Although there may have been isolated instances of IBA not being readily available, reported quantities on hand were sufficient to issue one suit of body armor to each Service member and DoD civilian in the CENTCOM theater.

The figure on the next page provides a timeline showing when standards were issued and when body armor components were required and fielded by the Army. The timeline illustrates the period June 1999 to June 2006.



# **Appendix D. Guidance for Contracting Officers**

The FAR and DFARS provide guidance to contracting officers and Government contractors. Specifically, the FAR and DFARS define duties and responsibilities for all personnel involved in the pre-award and award of Federal contracts. The following sections of the FAR and DFARS pertain to the administration of the contracts and orders we reviewed.

- **FAR Part 2, "Definitions of Words and Terms."** FAR Part 2.000(a)(1) Defines words and terms that are frequently used in the FAR; (2) Provides cross-references to other definitions in the FAR of the same word or term; and (3) Provides for the incorporation of these definitions in solicitations and contracts by reference.
- **FAR Part 4, "Administrative Matters."** FAR Part 4 prescribes policies and procedures relating to the administrative aspects of contract execution, contractor-submitted paper documents, distribution, reporting, retention, and files.
- **FAR Part 7, "Acquisition Planning."** FAR Part 7 prescribes policies and procedures for (a) Developing acquisition plans; (b) Determining whether to use commercial or Government resources for acquisition of supplies or services; (c) Deciding whether it is more economical to lease equipment rather than purchase it; and (d) Determining whether functions are inherently governmental.
- **FAR Part 8, "Required Sources of Supplies and Services."** FAR Part 8 deals with the acquisition of supplies and services from or through Government supply sources.
- **FAR Part 9, "Contractor Qualifications."** FAR Part 9 prescribes policies, standards, and procedures pertaining to prospective contractors' responsibility; debarment, suspension, and ineligibility; qualified products; first article testing and approval; contractor team arrangements; defense production pools and research and development pools; and organizational conflicts of interest.
- **FAR Part 12, "Acquisition of Commercial Items."** FAR Part 12 prescribes policies and procedures unique to the acquisition of commercial items. It implements the Federal Government's preference for the acquisition of commercial items contained in Title VIII of the Federal Acquisition Streamlining Act of 1994 (Public Law 103-355) by establishing acquisition policies more closely resembling those of the commercial marketplace and encouraging the acquisition of commercial items and components.
- **FAR Part 13, "Simplified Acquisition Procedures."** FAR Part 13 prescribes policies and procedures for the acquisition of supplies and services, including construction, research and development, and commercial items, the aggregate amount of which does not exceed the simplified acquisition threshold. Subpart 13.5 provides special authority for acquisitions of commercial items exceeding the simplified acquisition threshold but not exceeding \$5.5 million (\$11 million for acquisitions as described in 13.500(e)), including options.

**FAR Part 15, "Contacting by Negotiation."** FAR Part 15 prescribes policies and procedures governing competitive and noncompetitive negotiated acquisitions.

**FAR Part 16, "Types of Contracts."** FAR Part 16 describes types of contracts that may be used in acquisitions. It prescribes policies and procedures and provides guidance for selecting a contract type appropriate to the circumstances of the acquisition.

FAR Part 52, "Solicitation Provisions and Contract Clauses." FAR Part 52.000 (a) Gives instructions for using provisions and clauses in solicitations and/or contracts; (b) Sets forth the solicitation provisions and contract clauses prescribed by the FAR; and (c) Presents a matrix listing the FAR provisions and clauses applicable to each principal contract type or purpose (for example, fixed-price supply, cost-reimbursement research and development).

DFARS Subpart 207.103, "Agency-head responsibilities," March 31, 2003. DFARS Subpart 207.103 instructs the agency head to prepare written acquisition plans for acquisitions for production or services when the total cost of all contracts for the acquisition program is estimated at \$30 million or more for all years or \$15 million or more for any fiscal year. Written plans are not required in acquisitions for a final buy out or one-time buy. The terms "final buy out" and "one-time buy" refer to a single contract that covers all known present and future requirements. This exception does not apply to a multiyear contract or a contract with options or phases.

\_

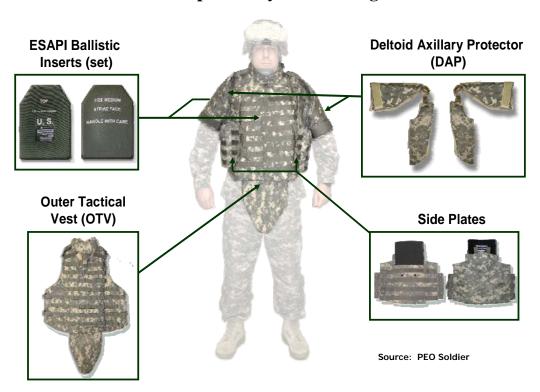
<sup>&</sup>lt;sup>13</sup> DFARS Subpart 207.103, March 31, 2003, was in effect at the time the Army awarded contract W91CRB-04-D-0014. The revision issued March 27, 2007, raised the dollar thresholds.

### Appendix E. Interceptor Body Armor

Currently, soldiers and Marines use IBA, the model name for multiple-threat body armor. Body armor is designed to offer increased protection to the soldier by stopping or slowing bullets and fragments and reducing the number and severity of wounds.

The modular pieces of IBA consist of the Outer Tactical Vest (OTV); Small Arms Protective Inserts/Enhanced Small Arms Protective Inserts (SAPIs)/(ESAPIs); Deltoid and Axillary Protectors (DAPs); and the Enhanced Side Ballistic Inserts (ESBIs), labeled "Side Plates" in the diagram. The body armor, which is unisex, is equipped with removable throat and groin protectors, as well as with front and back removable plates, which can defeat rifle-fired threats. See the diagram for the various components of IBA.

#### **Interceptor Body Armor Diagram**



# Appendix F. Summary of Interceptor Body Armor Contracts Reviewed

Contract /Order <u>Number</u>	Contractor	Product	FAT	Market Research	Acquisition <u>Plan</u>	Source - Selection <u>Plan</u>	Discounts Requested
Army Contracts							
W91CRB-04-D-0014	Point Blank Body Armor Inc.	DAPs	×		*	**	*X
W91CRB-04-D-0039	Ceradyne Inc.	SAPIs		×			
W91CRB-04-D-0040	Armor Works, LLC.	SAPIs	×	×			
W91CRB-04-D-0041	ForceOne, LLC.	SAPIs		X			
W91CRB-04-D-0042	Simula, Inc.	SAPIs	X	X			
W91CRB-04-D-0043	Cercom, Inc.	SAPIs	X	X			
W91CRB-04-D-0044	Composix Co	SAPIs	X	X			
W91CRB-04-D-0045	Armacel Armor Corp.	SAPIs	×	×			
W91CRB-04-F-0126	Point Blank Body Armor Inc.	OTVs	X		X		

Deficiencies Identified

X Inadequate documentation was in the contract file to support decisions made by contracting officials. \*\* No documentation was included in the contract file.

Δ Product procured was either OTV conversion kits or OTV conversion services (CNV).

**Deficiencies Identified** 

Contract /Order <u>Number</u>	Contractor	Product	FAT	Market Research	Acquisition Plan	Source Selection <u>Plan</u>	Discounts Requested
W91CRB-04-P-0169	Point Blank Body Armor Inc.	DAPs					
W91CRB-05-D-0003	Point Blank Body Armor Inc.	OTV	×				
W91CRB-05-F-0072	Point Blank Body Armor Inc.	DAPs	×				*
W91CRB-05-F-0086	Protective Material Group	SAPIs					
W91CRB-05-P-0147	Simula Inc.	SAPIs					
W91CRB-05-P-0148	Cercom, Inc.	SAPIs					
W91CRB-05-P-0159	Armacel Armor Corp	SAPIs					
W91CRB-05-P-0191	Patriot Performance	SAPIs					
W91CRB-05-P-0204	Point Blank Body Armor Inc.	$\operatorname{OTV}_{\Delta}$	X				
W91CRB-05-P-0215	Point Blank Body Armor Inc.	$\operatorname{OTV}_{\Delta}$					

X Inadequate documentation was in the contract file to support decisions made by contracting officials. \* No documentation was included in the contract file.
Δ Product procured was either OTV conversion kits or OTV conversion services (CNV).

Deficiencies Identified

Contract /Order <u>Number</u>	Contractor	Product	FAT	Market Research	Acquisition <u>Plan</u>	Source Selection <u>Plan</u>	Discounts Requested
W91CRB-06-C-0002	Ceradyne Inc.	SAPIs	×				
W91CRB-06-D-0004	Protective Material Group	SAPIs					
W91CRB-06-D-0024	Point Blank Body Armor Inc.	OTV CNV <sup>A</sup>	×				
W91CRB-06-D-0027	UNICOR Federal Prison	$\overset{OTV}{CNV}^{\vartriangle}$					
W91CRB-06-D-0028	Ceradyne Inc.	ESBIs & Carriers					
W91CRB-06-D-0029	Armor Works LLC.	ESBIs & Carriers	×				
W91CRB-06-D-0030	Point Blank Body Armor Inc.	OTV CNV <sup>A</sup>					
W91CRB-06-D-0031	Specialty Defense	$\overset{\mathbf{OTV}}{CNV}^{\vartriangle}$					
W91CRB-06-F-0098	Point Blank Body Armor Inc.	ESBIs & Carriers		X			
Army Subtotal			13	∞	7	П	7

X Inadequate documentation was in the contract file to support decisions made by contracting officials. \* No documentation was included in the contract file.

Δ Product procured was either OTV conversion kits or OTV conversion services (CNV).

**Deficiencies Identified** 

Contract /Order <u>Number</u>	Contractor	Product	<u>FAT</u>	Market Research	Acquisition <u>Plan</u>	Source Selection <u>Plan</u>	Discounts Requested
Marine Corps Contracts	racts						
M67854-04-D-3005	Armor Works LLC.	SAPIs					
M67854-04-D-3116	Ceradyne Inc.	SAPIs					
M67854-04-D-3117	Simula Inc.	SAPIs					
M67854-04-D-3118	Armor Works LLC.	SAPIs					
M67854-05-C-3062	Ceradyne Inc.	ESBIs					
M67854-05-C-3063	Source One Distributors	ESBIs & Carriers					
M67854-05-C-3065	Diamondback Tactical	ESBIs					
M67854-06-C-3019	Ceradyne Inc.	ESBIs					
M67854-06-C-3020	Source One Distributors	ESBIs & Carrier					

X Inadequate documentation was in the contract file to support decisions made by contracting officials. \* No documentation was included in the contract file.

Δ Product procured was either OTV conversion kits or OTV conversion services (CNV).

Deficiencies Identified

Contract /Order <u>Number</u>	Contractor	Product	FAT	Market <u>Research</u>	Acquisition <u>Plan</u>	Source Selection <u>Plan</u>	<b>Discounts Requested</b>
M67854-06-D-3031	Simula Inc.	ESBIs & Carriers					
M67854-06-D-3071	Armor Works, LLC.	ESBIs & Carriers					
M67854-06-D-3072	Armor Works, LLC.	ESBIs & Carriers					
Marine Corps Subtotal	al		0	0	0	0	0
Service Total			13	<b>&amp;</b>	2	1	2

X Inadequate documentation was in the contract file to support decisions made by contracting officials.

\* No documentation was included in the contract file.

 $\Delta$  Product procured is either OTV conversion kits and/or OTV conversion services (CNV).

## **Appendix G. Management Comments on the Draft Report and Audit Response**

Management comments on the draft report and finding from the Program Executive Office (PEO) Soldier and U.S. Army Research, Development and Engineering Command, and our detailed response to the comments, follows. The complete text of these comments is in the Management Comments section of the report.

#### The Program Executive Office Soldier Comments on the Draft Report and Audit Response

The PEO Soldier (hereafter the PEO), also the Commanding General, Natick Soldier Systems Center, provided management comments on the draft report.

**PEO Comments.** The PEO stated that the Army requires and conducts FAT and lot acceptance tests, which verify performance parameters of ballistic limit and resistance to penetration. These tests also verify that body armor meets Army standards before it is issued to soldiers and ensure that the production processes remain in check. The PEO also stated that the Army conducts post-issue surveillance testing to ensure no degradation of body armor performance over time. The PEO acknowledged that lot acceptance tests and surveillance testing were not in the scope of this audit, but stated that they are a critical part of the body armor testing program. In an additional meeting with Army officials, the PEO stated that the Army has no evidence of deaths that can be attributed to defective body armor.

The PEO nonconcurred with the report's finding that the Army did not conduct FAT after contract award on 15 of 28 contracts reviewed 14. He stated that the FAR does not mandate a specific time to conduct FAT to ensure body armor meets standards. The PEO also stated that the FAR defines "first article" as an initial production sample, and FAT as a testing and evaluation process to determine whether a proposed product conforms to contract requirements before the initial stage of production. He further stated that the Army complied with the FAR by conducting FAT on initial production samples and verified contract specifications of every delivered lot prior to Army acceptance through lot acceptance tests.

Further, with regard to conducting FAT on every new body armor design, the PEO stated that if a body armor item had a previous FAT qualification, the contracting officer would provide a waiver by issuing a letter verifying a previous

•

<sup>&</sup>lt;sup>14</sup> We identified deficiencies in 15 of 28 contracts and orders that did not include requirements for or perform FAT on body armor components in our draft report. Based on comments and evidence received after our review, we updated the report to remove one contract and one order from our list, Contract W91CRB-04-D-0039 and Order W91CRB-05-F-0086.

FAT qualification, as authorized by the FAR. Specifically, the FAR states that the Government may waive the requirement for first article approval test where supplies identical or similar to those called for in the schedule have been previously furnished by the offeror/contractor and have been accepted by the Government. The PEO stated that all Army contracts to procure body armor have been in strict compliance with the FAR, which grants authority to the contracting officer to grant a waiver for FAT. The PEO stated that, although disputed by the DoD IG, FAT was conducted or waived by the contracting officer for each of the following 15 contracts:

- 1. <u>W91CRB-06-C-0002 (ESBI)</u> verification of FAT was certified by the contracting officer in a letter dated February 1, 2006.
- 2. <u>W91CRB-04-D-0039 (SAPI)</u> verification of previous FAT was certified by the contracting officer in a letter dated March 11, 2003 (supplies and manufacturing processes are identical).
- 3. <u>W91CRB-04-D-0040 (SAPI)</u> verification of previous FAT was certified by the contracting officer in a letter dated February 24, 2003 (supplies and manufacturing processes are identical).
- 4. W91CRB-04-D-0042 (SAPI/ESAPI) verification of previous FAT (SAPI) was certified by the contracting officer in a letter dated December 29, 2003 (supplies and manufacturing processes are identical). The PEO also stated that subsequent verification of FAT on ESAPI was certified by the contracting officer in a letter dated February 24, 2005.
- 5. W91CRB-04-D-0043 (SAPI) no FAT letter was issued by the contracting officer; FAT was verified by test data from H.P. White Laboratory, Incorporated, an independent National Institute of Justice-certified ballistic laboratory, from July 13 to 17, 2004 (supplies and manufacturing processes are identical).
- 6. W91CRB-04-D-0044 (SAPI) FAT was verified by test data from H.P. White Laboratory, Incorporated from July 13 to 16, 2004. The PEO also stated that the contracting officer waived FAT after the fact in a letter dated December 20, 2004.
- 7. <u>W91CRB-04-D-0045 (SAPI/ESAPI)</u> verification of FAT was certified by the contracting officer in a letter dated September 6, 2005.
- 8. <u>W91CRB-04-F-0126 (OTV)</u> no FAT letter was issued by the contracting officer; FAT was verified by test data from H.P. White Laboratory, Incorporated on March 13, 2003 (supplies and manufacturing processes are identical).
- 9. W91CRB-05-D-0003 (OTV) FAT was conducted on December 3, 2004, at H.P. White Laboratory, Incorporated and was certified after the fact by the contracting officer in a letter dated June 16, 2006 (supplies and manufacturing processes are identical).

- 10. W91CRB-05-F-0072 (DAPs)<sup>15</sup> FAT was conducted on December 3, 2004, at H.P. White Laboratory, Incorporated and was certified after the fact by the contracting officer in a letter dated June 16, 2006 (supplies and manufacturing processes are similar).
- 11. <u>W91CRB-05-F-0086 (ESAPI)</u> verification of FAT was certified by the contracting officer in a letter dated September 7, 2005.
- 12. W91CRB-04-D-0204 (OTV Retrofit) FAT was conducted on December 3, 2004, at H.P. White Laboratory, Incorporated and was certified after the fact by the contracting officer in a letter dated June 16, 2006 (supplies and manufacturing processes are similar).
- 13. W91CRB-04-D-0014 (DAPs) no FAT letter was issued by the contracting officer, and FAT was verified by test data from H.P. White Laboratory, Incorporated on March 13, 2003 (supplies and manufacturing processes are similar).
- 14. W91CRB-06-D-0024 (OTV Retrofit) previous FAT was conducted on December 3, 2004, at H.P. White Laboratory, Incorporated and was certified after the fact by the contracting officer in a letter dated June 16, 2006 (supplies and manufacturing processes are similar).
- 15. <u>W91CRB-06-D-0029 (ESBI and Carrier)</u> verification of FAT was certified by the contracting officer in a letter dated August 16, 2006.

**Audit Response.** FAR Subpart 4.8, "Government Contract Files," states that contract files shall be sufficient to constitute a complete history of the transaction, furnishing essential facts in the event of litigation or congressional inquiries. We evaluated contract files for FAR compliance with regard to FAT, to include approvals or disapprovals of waivers or deviation from contract requirements. There was no evidence of this kind in contracting files for 15 of 28 contracts and orders during our review.

In his management comments, the PEO stated that the Army complied with the FAR by conducting FAT on initial production samples, and also stated that if a body armor item had a previous FAT qualification, the contracting officer would provide a waiver by issuing a letter verifying a previous FAT qualification. The PEO provided an explanation of the FAT conducted or waivers granted for the 15 contracts and orders in question (as seen in 1 through 15 above); below is our response to the PEO's explanation.

1. W91CRB-06-C-0002 (ESBI) – The PEO stated that a FAT was verified and certified by the contracting officer in a letter dated February 1, 2006. However, this contract did not contain the FAR clause requiring FAT to be conducted. Additionally, this letter was not maintained in the contracting file.

\_

<sup>&</sup>lt;sup>15</sup> Although the PEO indicated that this order was for OTV Conversion Kits, it was originally awarded on June 3, 2005, for deltoid protector outershell, universal camouflage pattern. So, we grouped this order with DAPs. The order was subsequently modified on June 10, 2005, to cancel the original line and add a new line ordering OTV Conversion Kits.

Further, documentation obtained from the PEO states that FAT and lot acceptance tests were both conducted on January 31, 2006. According to a test facility official, lot acceptance tests of production Lot 0001 were conducted on January 31, 2006, even though the contracting officer did not authorize production as a result of the FAT until February 1, 2006. Because the FAR defines FAT as a testing and evaluating process to determine whether the proposed product conforms to contract requirements before or in the initial stage of production, it is clear that the contracting officer did not conform to the FAR requirements for contract W91CRB-06-C-0002.

- 2. <u>W91CRB-04-D-0039 (SAPI)</u> The PEO stated that verification of previous FAT was certified by the contracting officer in a letter dated March 11, 2003. This contract was awarded from a May 2004 solicitation. In this solicitation, we believe that the Army intended to obtain first article approval by requesting prospective offerors to submit PDM samples along with their bids for evaluation. However, after the contract was awarded, the contracting officer did not follow FAR Subpart 9.308 requiring the contracting officer to insert one of two clauses. Specifically, the FAR states that the contracting officer should use the clause specified in FAR 52.209-3, "First Article Approval—Contractor Testing" when it is intended that the contract require first article approval conducted by the contractor; or the clause specified in FAR 52.209-4, "First Article Approval—Government Testing" when it is intended that the contract require first article approval conducted by the Government. Although FAT was not a requirement in the contract, the PEO stated that verification of a previous FAT was certified in a letter dated March 11, 2003; however, this letter and documentation to support the FAT results were not included in the contracting file; the letter was provided by the PEO after we completed our review. As stated in our draft report, we evaluated contract files for approvals or disapprovals of requests for waivers or deviation from contract requirements. Although the contracting officer has the option to request a waiver, there was no evidence in the contract file of any formal waiver procedure. However, we updated the report to remove this contract from the list of contracts that did not complete FAT.
- 3. W91CRB-04-D-0040 (SAPI) The PEO stated that verification of previous FAT was certified by the contracting officer in a letter dated February 24, 2003. The verified FAT letter states that the product was evaluated against specifications defined in the purchase description (CO/PD 00-03A). However, the solicitation, issued on May 19, 2004, stated that CO/PD 00-03D included the specifications against which the offeror's product should be evaluated. Based on FAR Subpart 9.303, the contractor should have furnished a product for FAT because there were subsequent changes in the specifications.
- 4. W91CRB-04-D-0042 (SAPI/ESAPI) The PEO stated that verification of previous FAT (SAPI) was certified by the contracting officer in a letter dated December 29, 2003. This contract was awarded with two contract line numbers: line 0001 for the SAPI and line 0002 for overweight SAPI. The PEO provided verification of a previous FAT for the SAPI, and that

- verification was in the contract file. However, there was no verification of FAT conducted on the overweight SAPI, and no evidence of a waiver for FAT on the overweight SAPI in the contract file.
- 5. W91CRB-04-D-0043 (SAPI) The PEO stated that no FAT letter was issued by the contracting officer, and that FAT was verified by test data from H.P. White Laboratory, Incorporated from July 13 to 17, 2004. However, this occurred prior to contract award on August 19, 2004. Additionally, for this contract, the contracting officer used the PDMs submitted under the solicitation to authorize production. However, FAR Subpart 14.202-4 states that PDMs will be used to determine only the responsiveness of the bid and will not be used to determine a bidder's ability to produce the required items. For this contract, the bid sample was evaluated as part of source selection, and the first article was not tested. There is no evidence in the contracting file of FAT for this design after contract award.
- 6. W91CRB-04-D-0044 (SAPI) The PEO stated that FAT was verified by test data from H.P. White Laboratory, Incorporated from July 13 to 16, 2004. However, this occurred prior to contract award on August 19, 2004. Additionally, for this contract, the contracting officer used the PDMs submitted under the solicitation to authorize production. However, FAR Subpart 14.202-4 states that PDMs will be used to determine only the responsiveness of the bid and will not be used to determine a bidder's ability to produce the required items. For this contract, the bid sample was evaluated as part of source selection, and the first article was not tested. The PEO also stated that the contracting officer waived FAT after the fact in a letter dated December 20, 2004. During our review, there was no evidence of this waiver in the contracting file.
- 7. W91CRB-04-D-0045 (SAPI/ESAPI) The PEO stated that verification of FAT was certified by the contracting officer in a letter dated September 6, 2005. This contract was originally awarded on August 19, 2004, with contract line number 0002 for overweight SAPI. Our review of the contracting file showed that FAT on the overweight SAPI was based on PDM testing conducted prior to the contract award. Contract line number 0002 was subsequently cancelled on February 23, 2005, and contract line number 0003 for ESAPI was added on August 15, 2005. The FAT letter that the PEO mentioned referred to the FAT conducted on the ESAPI. There was no verification of FAT conducted on the overweight SAPI in the contract file and no evidence of a waiver for FAT.
- 8. W91CRB-04-F-0126 (OTV) The PEO stated that no FAT letter was issued by the contracting officer, and that FAT was verified by test data from H.P. White Laboratory, Incorporated on March 13, 2003. However, the contracting file and additional documentation collected from RDECOMAC did not provide evidence of FAT. RDECOMAC contracting officials stated that testing and evaluation was performed by GSA because this order was placed against GSA Contract GS-07F-8942D. To validate the contracting officials' statement, we contacted a GSA official who said it is the responsibility of the customer to verify that a product meets specifications.

Based on this information and the lack of documentation in the contracting file, we cannot validate the PEO's statement that FAT was verified on March 13, 2003.

- 9. <u>W91CRB-05-D-0003 (OTV)</u> The PEO stated that FAT was conducted on December 3, 2004, at H.P. White Laboratory, Incorporated and was certified after the fact by the contracting officer in a letter dated June 16, 2006. We agree that a test was conducted on a PDM sample on December 3, 2004, as part of the source-selection process. However, the purchase description, which is part of the contract, requires a complete item to be tested as a first article. Specifically, the purchase description states that after FAT an alternative simulant/shoot pack<sup>16</sup> may be used for testing purposes. However, the contracting officer accepted a PDM as contractually compliant prior to contract award. The purchase description also states, "Current production items submitted with qualifying FAT data may be considered in the determination of reducing additional FAT verification by the Government." This contract language indicates that the FAT may be reduced, not eliminated, and our review of the contract file indicated the FAT was never performed after contract award. As a result, although the contracting file included the FAT letter that the PEO mentioned, we do not believe it met the intent of the FAR or the requirements of the purchase description.
- 10. <u>W91CRB-05-F-0072 (DAPs)</u><sup>17</sup> The PEO stated that FAT was conducted on December 3, 2004, at H.P. White Laboratory, Incorporated and was certified after the fact by the contracting officer in a letter dated June 16, 2006. See No. 9 for our audit response.
- 11. W91CRB-05-F-0086 (ESAPI) The PEO stated that verification of FAT was certified by the contracting officer in a letter dated September 7, 2005. As stated in our draft report, we looked through contract files for approvals or disapprovals of requests for waivers or deviation from contract requirements. This letter and documentation to support the FAT results were not included in the contracting file; the letter was provided by the PEO after we completed our review. Although we were not able to validate the test results, we updated the report to remove this order from the list of contracts that did not complete FAT.
- 12. <u>W91CRB-04-D-0204 (OTV Retrofit)</u> The PEO stated that FAT was conducted on December 3, 2004, at H.P. White Laboratory, Incorporated and was certified after the fact by the contracting officer in a letter dated June 16, 2006. See No. 9 for our audit response.
- 13. <u>W91CRB-04-D-0014 (DAPs)</u> The PEO stated that no FAT letter was issued by the contracting officer, and that FAT was verified by test data from H.P.

1

<sup>&</sup>lt;sup>16</sup> A simulant/shoot pack system is an alternative to the OTV that can be used to represent the ballistic resistant materials of the OTV for testing purposes.

<sup>&</sup>lt;sup>17</sup> Although the PEO indicated that this order was for OTV Conversion Kits, it was originally awarded on June 3, 2005, for deltoid protector outershell, universal camouflage pattern. So, we grouped this order with DAPs. The order was subsequently modified on June 10, 2005, to cancel the original line and add a new line ordering OTV Conversion Kits.

White Laboratory, Incorporated on March 13, 2003. This order contained no purchase description to accompany the contract; therefore, if testing was completed, the test facility would not have known what specifications to test against. Based on this information and the lack of documentation in the contracting file, we cannot validate the PEO's statement that FAT was verified on March 13, 2003.

- 14. <u>W91CRB-06-D-0024 (OTV Retrofit)</u> The PEO stated that previous FAT was conducted on December 3, 2004, at H.P. White Laboratory, Incorporated and was certified after the fact by the contracting officer in a letter dated June 16, 2006. See No. 9 for our audit response.
- 15. W91CRB-06-D-0029 (ESBI and Carrier) The PEO stated that a FAT was verified and certified by the contracting officer in a letter dated August 16, 2006. For this contract, the FAT "production is authorized" certification was based on PDM samples submitted to the testing facility on May 12, 2006, prior to contract award. As noted in the report, the FAR states that PDMs will be used to determine only the responsiveness of the bid and not to determine a bidder's ability to produce the required items. Further, the contract states, "The contractor shall deliver 35 unit(s) of lot/item ESBI within 90 calendar days from the date of this contract to the Government at H.P. White Laboratory or U.S. Test Laboratory for first article tests." Our review of the contract file indicated that this action was never completed, and the contract file did not contain any documentation to indicate the required FAT was waived.

#### The U.S. Army Research, Development and Engineering Command Comments on Draft Report and Audit Response

The Commander, U.S. Army Research, Development, and Engineering Command (hereafter the Commander) provided comments on the draft report and the finding.

Comments on the Adequacy of Management Controls. The Commander nonconcurred with the statement in the draft report that RDECOMAC had an internal control weakness in regards to not following the FAR in testing body armor and documenting contract decisions. The Commander stated that U.S. Army Research Development, and Engineering Command officials specifically nonconcur with the testing of body armor, and that the problem is that the contracting files may not have been documented to reflect the testing decisions and results, which RDECOMAC had planned to document no later than February 29, 2008. The Commander requested that the report be changed to remove the assertions that the RDECOMAC had an internal control weakness.

**Audit Response.** Based on the Commander's comments, we revised the discussion on internal controls in the final report. The report now states, "Specifically, we reviewed body armor component contract files to determine whether they contained the elements required by the FAR. We identified material internal control weaknesses at RDECOMAC, as defined by DoD Instruction 5010.40, "Managers' Internal Control (MIC) Program Procedures," January 4,

2006. The weaknesses related to the documentation of FAT requirements and results in 13 of 28 Army contracts reviewed. Although RDECOMAC had internal control procedures in place, we identified weaknesses resulting in decisions not always being properly documented in the contract files. Specifically, RDECOMAC officials did not follow the FAR in maintaining contract files to support FAT decisions and results. Implementing our recommendations will improve the quality of the contract files to support informed decisions. A copy this report was provided to the senior official in charge of internal controls at RDECOMAC."

Comments on Market Research. The Commander nonconcurred with the statement in the draft report that market research was not documented as required by the FAR. The Commander stated that FAR Part 10 prescribes policies and procedures that agencies must take with regard to market research. Specifically, FAR 10.002(e) states that agencies should document the results of market research in a manner appropriate to the size and complexity of the acquisition. Further, FAR 4.803 provides examples of records normally contained in contract files and, while market research is not specifically mentioned, acquisition planning information is mentioned. The Commander stated that, in accordance with the FAR, PM SEQ is the appropriate body for conducting and maintaining documentation on body armor market research, and a RDECOMAC review of the contract files indicated that market research was conducted and documented as required.

Audit Response. Market research is the foundation for building an effective solicitation and a successful contract. FAR 10.002(a) states, "Acquisitions begin with a description of the Government's needs stated in terms sufficient to allow conduct of market research." Because market research is the foundation for building an effective solicitation and a successful contract, agencies are required to conduct market research at the earliest stages in the acquisition process. The goal of market research is to develop the most suitable approach to acquiring, distributing, and supporting supplies and services.

Given the value for the eight contracts and orders identified in the report (approximately \$2.9 billon), and the complexity of the body armor components purchased, the information provided in the respective acquisition plans does not adequately describe the most suitable approach for acquiring, distributing, and supporting body armor components. The respective acquisition plans merely stated that market research was conducted; the statement does not satisfy FAR requirements to document the results of market research in a manner appropriate to the size and complexity of this acquisition. Specifically, market research should summarize the activities undertaken by those conducting the market research so that the contracting files constitute a complete history of the actions taken and provide a basis for informed decisions made during the acquisition. To accomplish this, market research should, for example, document the methodology used for compiling and refining the lists of potential suppliers, a summary of the industry sources contacted, the types of information obtained, the price ranges discovered, the possible reasons for variations, and the potential for determining a fair market price.

Comments on Source Selection. The Commander nonconcurred with the determination in the draft report that the Request for Quote (solicitation) for FSS Order W91CRB-04-D-0014 contained inadequate evaluation factors. The Commander stated that the solicitation and an amendment to the solicitation together provided the offerors with a purchase description and evaluation factors, which were considered adequate by the contracting officer and the customer.

**Audit Response.** The Request for Quote is a request for information, used in simplified acquisitions, to communicate Government requirements to prospective contractors. The Request for Quote describes what the Government is buying, what information the offeror must provide, and what strategy will be used to evaluate proposals.

FAR Subpart 15.3 states that the source-selection authority shall approve the source-selection strategy before the solicitation is released, a step that was not evident during our review of this FSS order. Specifically, evaluation factors were not issued until May 12, 2004, in an amendment to the solicitation. It is understood that solicitations and amendments reflect total information regardless of their effective dates. However, such inconsistencies may result in less advantageous offers, delay the acquisition, or undermine offerors' confidence in the process. Therefore, we stand behind the statement made in the draft report. Issuing these evaluation factors during the solicitation facilitates an equitable, impartial, and comprehensive evaluation against the solicitation requirements.

Comments on Price Reasonableness and Requesting Discounts. The Commander nonconcurred with our statements that Army officials did not actively request a discount and document why one was not requested, and that there was no evidence that the price was reasonable for two orders. The Commander specifically stated that the Army requested and received discounts and encouraged discounts from all vendors, and that the price the Army received was reasonable with sufficient evidence to support the decision.

The Commander stated that the awardee for W91CRB-04-P-0169 proposed a unit price of \$285.00, which was already discounted from the FSS published price of \$325.00 per unit, resulting in a 12.3-percent discount. For Contract W91CRB-04-D-0014, the Commander stated that the documentation indicated that four offers were received. The awardee was the only offeror determined technically acceptable, and the awardee's price further reflected a 12.3-percent discount from its FSS historical published price. The Commander also stated that the awardee further discounted the price by maintaining it for the entire 36-month contract period, thereby absorbing all price increases for inflation in materiel, subcontractor wages, and shipping and testing. The Commander stated that RDECOMAC also considered the Army's critical need for the DAPs and the fact that the awardee was the only vendor technically qualified to meet the Army's accelerated delivery schedule. According to the Commander, the awardee of Contract W91CRB-04-D-0014 offered multiple discounts; hence, any further requests for discounts would have been futile. The Commander stated that the contracting officer determined that the awardees price was fair and reasonable based on a comparison of the competitive prices received and the discounts offered. As a result, the Commander disagreed with the statement that RDECOMAC contracting officials were not prudent in price determination and

the use of Government funds. He concluded that the contracting officer exercised sound business judgment in all business cases, ensuring that the interests of the taxpayer and the warfighter were well served.

Audit Response. Contracting officials have the responsibility to ensure that fair and reasonable prices are paid. For fixed-price contracts, the evaluation is usually as simple as comparing the offered prices to ensure they are fair and reasonable. Fixed-price contracts should also be evaluated for appropriateness to what is being offered. During our review, we determined that contracting officials inadequately determined price reasonableness for Contract W91CRB-04-D-0014 based on the price history of Contract W91CRB-04-P-0169, a contract that did not require price analysis because it was awarded using simplified acquisition procedures. While there was evidence the previous price was used, there was no evidence in the contract file that the historical price was fair and reasonable. Because we have only statements from the Commander and other officials regarding the discounts and price determination, we cannot determine whether a fair and reasonable price was paid.

### **Appendix H. Report Distribution**

#### Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics Director, Acquisition Resources and Analysis Director, Defense Procurement and Acquisition Policy

#### **Joint Staff**

Director, Joint Staff

#### **Department of the Army**

Assistant Secretary of the Army (Acquisition, Logistics, and Technology)
Assistant Secretary of the Army (Financial Management and Comptroller)
Auditor General, Department of the Army
Program Executive Officer, Soldier
Commander, U.S. Army Research, Development and Engineering Command
U.S. Army Research, Development and Engineering Command Acquisition Center

#### **Department of the Navy**

Naval Inspector General Auditor General, Department of the Navy

#### **Combatant Commands**

Commander, U.S. Central Command Commander, U.S. Joint Forces Command Inspector General, U.S. Joint Forces Command Commander, U.S. Special Operations Command

#### **Other Defense Organizations**

Director, Defense Logistics Agency

### Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Homeland Security and Governmental Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Oversight and Government Reform

House Subcommittee on Government Management, Organization, and Procurement, Committee on Oversight and Government Reform

House Subcommittee on National Security and Foreign Affairs,

Committee on Oversight and Government Reform

The Honorable Louise M. Slaughter

# Assistant Secretary of the Army (Acquisition, Logistics, and Technology) Comments



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
ACQUISITION LOGISTICS AND TECHNOLOGY
103 ARMY PENTAGON
WASHINGTON DC 20310-0103

MAR 0 4 2008

SAAL-PP

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE, 400 ARMY NAVY DRIVE, ARLINGTON, VA 22202

SUBJECT: United States Army Comments on Report on DoD Procurement Policy for Body Armor Project No. D2007-D000LA-0054.000, December 21, 2007

As requested by the Department of Defense Office of Inspector General (DoD OIG), the following comments are provided by the Office of the Assistant Secretary of Army (Acquisition, Logistics, and Technology) (ASA(ALT)) in response to the subject audit's Recommendation 3.

Recommendation 3: The DoD OIG recommended the following: a. Require contracting officers who conduct direct acquisition for amounts greater than the simplified acquisition threshold:

- (1) Determine whether the use of non-DoD contracts is in the best interest of the Government, and verify that the required goods cannot be obtained as conveniently or economically by using a DoD contract. The contracting officer or another official designated by the agency head should document those conclusions in writing.
- (2) Request discounts when placing orders from the Federal Supply Schedule contracts.
- (3) Document their requests for discounts. If discounts were received, document how the discounts were determined to be fair; if discounts were not received, explain why the vendor was chosen.
- (4) Fully document decisions not to consider all potential sources when awarding orders using the Federal Supply Schedules.

Response: Concur. Recommendation 3 already is fully in place. Guidance on acquiring supplies and services through contracts or orders issued by non-DoD agencies is contained in Defense Federal Acquisition Regulation Supplement (DFARS) Subpart 217.78, Contracts or Delivery Orders issued by a Non-DoD Agency; United States Army Federal Acquisition Regulation Supplement (AFARS) Subpart 5117.78, Contracts or Delivery Orders issued by a Non-DoD Agency; and policy issued by the DoD and the United States Army. The United States Army policy is contained in Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology)

memorandum, Proper Use of Non-Department of Defense (Non-DoD) Contracts, dated July 12, 2005. The policy requires, subject to certain exceptions a written certification for using a non-DoD contract vehicle when procuring supplies or services on or after January 1, 2005, for amounts greater than the simplified acquisition threshold (SAT). The head of the requiring activity (O6/GS-15 level or higher) must execute a written certification prior placing a direct or assisted acquisition order, certifying that the order is in the best interest of the United States Army considering the factors of availability of a suitable DoD contract vehicle; ability to satisfy customer requirements; delivery schedule; cost effectiveness and price (including any discounts and fees); contract administration (including ability to provide contract oversight); socio-economic opportunities; the comparative costs of using a DoD, as opposed to non-DoD, contractual instrument—to include administrative fees charged by the non-DoD activity; and any other applicable considerations. The recently published Interagency Agreements Reference Tool of November 1, 2007, underscores the need for the required certifications and includes checklists.

Guidance on requesting discounts is contained in Federal Acquisition Regulation (FAR) 8.404, Use of Federal Supply Schedules, and Office of the Under Secretary of Defense (Acquisition, Technology and Logistics) memorandum, subject: Use of Federal Supply Schedules and Market Research, dated January 28, 2005. The memorandum reminds contracting officers to seek discounts for orders exceeding the maximum order threshold. Contracting officers also must explain in the contract file how the discount was determined to be fair and reasonable and, if applicable, the reason for not obtaining a discount. The memorandum also discusses the importance of conducting market research for acquisitions above the SAT and advises contracting officers that they "should document the contract file on the market research efforts conducted in support of each acquisition."

Deputy Assistant Secretary of the Army
(Policy and Procurement)

Enclosure

#### **Program Executive Office Soldier Comments**



DEPARTMENT OF THE ARMY PROGRAM EXECUTIVE OFFICE SOLDIER 5901 PUTNAM ROAD, BLDG 328 FORT BELVOIR VA 22060-5422

SFAE-SDR

MAR 3 2008

MEMORANDUM FOR ACTING ASSISTANT INSPECTOR GENERAL, OFFICE OF THE INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

SUBJECT: Program Executive Office Soldier's Response to the Department of Defense Inspector General (DoD IG) Draft Report "Procurement Policy for Body Armor-Project No. D2007-D000LA-0054.000, Dated: December 21, 2007"

The U.S. Army conducts rigorous and extensive testing of body armor to ensure that it meets Army standards and is safe for use by Soldiers in combat. The U.S. Army requires two levels of performance verification prior to acceptance of body armor to issue to Soldiers; First Article Test (FAT) and Lot Acceptance Test (LAT). FAT and LAT verify two key ballistic performance parameters for body armor, Ballistic Limit and Resistance to Penetration. These two test requirements verify that body armor meets U.S. Army standards before being issued to Soldiers and ensure production processes remain in check. Furthermore, the U.S. Army conducts post issue surveillance testing to ensure no degradation of body armor performance over time. LAT and surveillance testing were not in the scope of this audit but are a critical part of the body armor testing program. All body armor test data is available for review at Project Manager Soldier Equipment (PM SEQ).

PEO Soldier non-concurs with the following findings in the report:

- a. The DoD IG noted that the U.S. Army did not conduct FAT after contract award on 15 of 28 contacts reviewed. The FAR does not mandate a specific time as to when FAT should be conducted. As stated in the DoD IG report on page 2, to ensure body armor meets standards: "FAR Subpart 2.1, Definition, March 9, 2005, defines 'first article' as an initial production sample, and FAT as a testing and evaluation process to determine whether a proposed product conforms with contract requirements before the initial stage of production." The U.S. Army complied with the FAR by conducting FAT on initial production samples and verified contract specifications of every delivered lot prior to Army acceptance through LAT.
- b. The FAT is conducted on every new body armor design. If a body armor item is presented that has a previous FAT qualification, the contracting officer will provide a waiver by issuing a letter verifying a previous FAT qualification. Also, as prescribed in FAR Subpart 9.3, FAR Part 52.209-4 "First Article Approval-Government Testing" authorizes the Contracting Officer to award a contract based on a previous FAT qualification and waive a subsequent FAT requirement. This clearly authorizes discretion and is not a mandate. The DoD IG report also validates the contracting officer's' authority on page 2, which states: "The FAR allows contracting officials to use their judgment as to when to require the FAT." In all U.S. Army body armor procurement contracts, the FAR was followed. As stated in FAR "The Government may waive the requirement for first article approval test where supplies identical or similar to those called for in the schedule have been previously furnished by the Offeror/Contractor and have been accepted by the Government. The Offeror/Contractor may request a waiver." FAR Part 52.209-

- 4, First Article Approval Government Testing. This authority is meant to rely on the judgment of the contracting officer and technical experts. The Army has been in strict compliance with the requirement. Although disputed by the DoD IG, FAT was conducted or waived by the contracting officer for each contract cited below:
- 1. W91CRB-06-C-0002, Enhanced Side Ballistic Insert (ESBI), contract award date 11 January 2006, verification of FAT certified by contracting officer on letter dated 1 February 2006.
- W91CRB-04-D-0039, Small Arms Protective Insert (SAPI) contract award date 19
  August 2004, verification of previous FAT certified by contracting officer on letter dated 11 March
  2003 (supplies and manufacturing processes are identical).
- 3. W91CRB-04-D-0040, SAPI, contract award date 19 August 2004, verification of previous FAT certified by contracting officer on letter dated 24 February 2003 (supplies and manufacturing processes are identical).
- 4. W91CRB-04-D-0042, SAPI, Enhanced Small Arms Protective Insert (ESAPI) contract award date 19 August 2004, verification of previous FAT (SAPI) certified by contracting officer on letter dated 29 December 2003 – (supplies and manufacturing processes are identical). Subsequent verification of FAT (ESAPI) certified by contracting officer on letter dated 24 February 2005, prior to acceptance of any ESAPI.
- 5. W91CRB-04-D-0043, SAPI, contract award date 19 August 2004, no FAT letter issued by the contracting officer, FAT verified by test data from H.P. White Laboratory, Incorporated, an independent National Institute of Justice certified ballistics laboratory, 13-17 July 2004 (supplies and manufacturing processes are identical).
- 6. W91CRB-04-D-0044, SAPI, contract award date 19 August 2004, FAT verified by test data from H.P. White Laboratory, Incorporated, an independent National Institute of Justice certified ballistics laboratory, 13 -16 July 2004. Contracting officer waived FAT after the fact on letter dated 20 December 2004.
- 7. W91CRB-04-D-0045, SAPI/ESAPI, contract award date 19 August 2004 [only ESAPI procured], verification of FAT (ESAPI) certified by contracting officer on letter dated 6 September 2005, prior to acceptance of any ESAPI.
- 8. W91CRB-04-F-0126, Outer Tactical Vest (OTV), contract award date 19 August 2004, no FAT letter issued by the contracting officer, FAT [Pathfinder Soft Armor Ballistics Package] verified by test data from H.P. White Laboratory, Incorporated, an independent National Institute of Justice certified ballistics laboratory, 13 March 2003 (supplies and manufacturing processes are identical).
- 9. W91CRB-05-D-0003, OTV, contract award date 22 December 2004, FAT [Pathfinder-S Soft Armor Ballistics Package] conducted 3 December 2004 at H.P. White Laboratory, Incorporated, an independent National Institute of Justice certified ballistics laboratory and certified after the fact by the contracting officer on letter dated 16 June 2006 (supplies and manufacturing processes are identical).

Revised pages 31 & 39

- 10. W91CRB-05-F-0072, OTV Conversion Kit, contract award date 3 June 2005, FAT [Pathfinder-S Soft Armor Ballistics Package] conducted 3 December 2004 at H.P. White Laboratory, Incorporated, an independent National Institute of Justice certified ballistics laboratory and certified after the fact by the contracting officer on letter dated 16 June 2006 (supplies and manufacturing processes are similar).
- 11. W91CRB-05-F-0086, ESAPI, contract award date 1 August 2005, verification of FAT certified by contracting officer on letter dated 7 September 2005.
- 12. W91CRB-04-D-0204, OTV Retrofit, contract award date 26 September 2005, FAT [Pathfinder-S Soft Armor Ballistics Package] conducted 3 December 2004 at H.P. White Laboratory, Incorporated, an independent National Institute of Justice certified ballistics laboratory and certified after the fact by the contracting officer on letter dated 16 June 2006 (supplies and manufacturing processes are similar).
- 13. W91CRB-04-D-0014, Deltoid Axillary Protector (DAP), contract award date 7 June 2004, no FAT letter issued by the contracting officer, FAT [Pathfinder Soft Armor Ballistics Package] verified by test data from H.P. White Laboratory, Incorporated, an independent National Institute of Justice certified ballistics laboratory, 13 March 2003 (supplies and manufacturing processes are similar).
- 14. W91CRB-06-D-0024, OTV Retrofit, contract award date 16 June 2006, previous FAT [Pathfinder-S Soft Armor Ballistics Package] conducted 3 December 2004 at H.P. White Laboratory, Incorporated, an independent National Institute of Justice certified ballistics laboratory and certified after the fact by the contracting officer on letter dated 16 June 2006 (supplies and manufacturing processes are similar).
- 15. W91CRB-06-D-0029, ESBI and Carrier, contract award 1 July 2006, verification of FAT certified by contracting officer on letter dated 16 August 2006.

PEO Soldier comments on DoD IG recommendations:

 Recommendation: Direct testing and evaluation of the first article for conformation with contract requirements before the initial stage of production on all contracts for body armor components.

PEO Soldier comment: No action required, already a regular and consistent current business practice in accordance with the FAR.

Update the purchase description to identify the appropriate first article and the number of units to be furnished.

No action required, already a regular and consistent current business practice in accordance with the FAR.

Revised pages 32 & 41

3. Provide adequate documentation to support all contractual actions, including waivers for first article testing.

PEO Soldier comment: No action required, already a regular and consistent current business practice in accordance with the FAR.

My point of contact is Project Manger Soldier Equipment, COL John McGuiness, e-mail: john.mcguiness@us.army.mil, (703) 704-3322.

R. MARK BROWN

Rrigadier General USA

R. MARK BROWN /
Brigadier General, USA
Commanding General, Natick Soldier Systems
Center and Program Executive Officer Soldier

### U.S. Army Research, Development and **Engineering Command Comments**



DEPARTMENT OF THE ARMY HEADQUARTERS, U.S. ARMY MATERIEL COMMAND 9301 CHAPEK ROAD FORT BELVOIR, VA 22060-5527

AMCIR 14 February 2008

MEMORANDUM FOR Mr. David Lawson, Chief, The Army Audit Liaison Office, U. S. Army Audit Agency, 3101 Park Center Drive, Alexandria, VA 22302-1596

SUBJECT: DODIG Draft Report, Audit of DOD Procurement Policy for Body Armor, D2007-D000LA-0054.000, D0703

Headquarters, U.S. Army Materiel Command (HQ AMC) has reviewed the subject draft report and the U.S. Army Research, Development and Engineering Command's (RDECOM) comments, and endorses RDECOM's comments. Point of contact for this action is Mr. Joseph Adetunji (703) 806-9834.

FOR THE COMMANDER:

Encl

Turan C Muloy SUSAN C. McCOY Director, Internal Review and Audit Compliance Office

Revised

Revised

page 17

page 3



#### DEPARTMENT OF THE ARMY US ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND 5183 BLACKHAWK ROAD ABERDEEN PROVING GROUND MD 21010-5424

AMSRD-CG

3 1 JAN 2008

MEMORANDUM THRU US Army Materiel Command, Internal Review, AMCIR, 9301 Chapek Road, Fort Belvoir, VA 22060-5527

FOR Deputy Inspector General for Auditing, Department of Defense Inspector General, ODIG-AUD, 400 Army Navy Drive, Arlington, VA 22202-4704

SUBJECT: US Army Research, Development and Engineering Command's Response to the DODIG Draft Report "DoD Procurement Policy for Body Armor - Project No. D2007-D000LA-0054.000, dated 21 December 2007"

- 1. The US Army Research, Development and Engineering Command (RDECOM) concurs with the recommendations in the draft report, as written, and plans to have corrective actions in place by 29 February 2008. However, we non-concur with the finding in the draft report which states the US Army RDECOM Acquisition Center (AC) had an internal control weakness in regards to not following the FAR in testing body armor and documenting contract decisions. Additional facts for the non-concurrence are discussed in the enclosed command comments.
- 2. Based on the additional facts and comments, RDECOM recommends that the report be changed to remove the assertions that the RDECOM AC had an internal control weakness with regards to testing of body armor and documenting contract decisions. The only problem the RDECOM AC may have is that not all contract decisions were fully documented.
- 3. Please note that the recommendation in the draft report should be changed to read, "the Commander, US Army Research, Development and Engineering Command directs that the US Army Research, Development and Engineering Command Acquisition Center" show the correct command structure.
- 4. The point of contact for this action is David Hodge, Internal Review and Audit Compliance, COMM 410- 436-2127, DSN 584-2127, or email at david.liodge2@us.army.mil

Encl

FRED D. ROBINSON, JR. Major General, USA

Commanding

### COMMAND COMMENTS DoDIG Draft Report – Project Number D2007-D000LA-0054 DoD Procurement Policy for Body Armor

Objective: The overall audit objectives were to evaluate: (i) the procurement history of body armor and (ii) the effect that the Army's decision to ban the use of personally purchased body armor had on the safety of Service members.

Conclusion: The Army awarded contracts for body armor components without testing and evaluating the first articles against contract requirements before the items went into production. Those procedures would have assisted Army officials in determining whether the contractor could furnish an acceptable product. The Army should ensure that the body armor provided to its forces meets standards. We cannot determine whether all of the body armor components purchased meets Army standards because the Army did not conduct First Article Testing (FAT) on all contracts for body armor components. Further, as FAT is one part of the effective contract documentation mandated by the FAR and DFARS, the Army should maintain contract files in compliance with the FAR and DFARS. Doing so would have enabled the Army to obtain the best value for the items procured. Contracting officials need to ensure that testing occurs for items such as body armor in order to obtain the best value for DoD. Recommendations made in this report relate to procurements of future products to prevent similar problems from occurring again as the period of performance for the contracts reviewed has ended.

Recommendation 2: We recommend that the Commander, U.S. Army Research, Development and Engineering Command direct that the Research, Development and Engineering Command Acquisition Center:

a. Require contracting officers to include specific instructions in acquisition documents for the first article testing when required, and maintain documentation to support contractual actions in accordance with the Federal Acquisition Regulation Part 4, "Administrative Matters."

Command Comments. Concur. Guidance regarding such will be issued to contracting officers no later than 29 February 2008.

b. Require contracting officers to require body armor manufacturers and subcontractors to provide pre-production body armor components for testing and evaluation before the Government authorizes production.

Command Comments. Concur in those instances where there is a requirement for body armor manufacturers and subcontractors to provide pre-production body armor components for testing and evaluation before the Government authorizes production. Guidance regarding such will be issued to contracting officers no later than 29 February 2008.

Revised page 17

c. Re-evaluate the circumstances surrounding the price determination for orders W91CRB-04-D-0014 and W91CRB-04-P-0169 to determine whether administrative remedies are necessary or available.

Command Comments. Concur. Re-evaluation and determination will be accomplished by 29 February 2008.

#### ADDITIONAL FACTS AND COMMENTS:

Draft Report (page 2): RDECOM AC officials did not follow the FAR in testing body armor and documenting contract decisions.

RDECOM AC Response: We non-concur with the testing of body armor. The only problem here is that the contracting files may not have been documented to reflect the testing decisions and results. The files will be documented to reflect the First Article decisions and results NLT 29 Feb 08.

Draft Report (page 13): The only documented evidence in 8 of the 28 contract files was a statement by program officials that market research had been performed; the research was not documented as required by the FAR.

RDECOM AC Response: We non-concur. The FAR Part 10 prescribes policies and procedures agencies must take in regard to market research. FAR 10.002(e) states that agencies should document the results of market research in a manner appropriate to the size and complexity of the acquisition. Further, FAR 4.803 provides examples of the records normally contained in contract files. While market research is not specifically mentioned, acquisition plauning information is mentioned. In accordance with the FAR, PMSEQ is the appropriate body for conducting and maintaining documentation on body armor market research. The RDECOM AC review of the contract files indicates that market research was conducted and documented as required.

Draft Report (page 14): The Request for Quote (RFQ) for FSS order W91CRB-04-D-0014 contained inadequate evaluation factors but these were later included by an amendment to the solicitation. It goes on to state that the amendment did not provide criteria or a purchase description as a basis for the technical evaluation.

RDECOM AC Response: We non-concur. The solicitation and the amendment together provided the offerors with a purchase description and evaluation factors which were considered adequate by the contracting officer and the customer.

Draft Report (page 14): The Army placed two orders from the FSS without requesting discounts even though the orders exceeded the maximum order threshold. The solicitation stated that discounts were encouraged however, the vendor did not offer a discount on the quoted price, nor did the Army officials actively request a discount or document why one was not requested.

RDECOM AC Response: We non-concur. The Army did request and receive discounts. The solicitation encouraged discounts from all vendors. The awardce Point Blank Body Armor, Inc (PBBA) proposed a unit price \$285.00. At that time their FSS published historical price was \$325.00 per unit. The Army received a 12.3% discount from PBBA.

Draft Report (page 15): There was no evidence that the price was reasonable in orders W91CRB-04-D-0014 and W91CRB-04-P-0169.

RDECOM AC Response: We non-concur. We feel that the price was reasonable and there is sufficient evidence to support this. Review of contract file W91CRB-04-D-0014 for the purchase of DAPS, over a 36 month period, revealed documentation that four offers were received as follows:

PBBA	\$285.00
Reliance Armor	\$254.00
R&R Ltd	\$329.10
Gov't Suppliers	\$780.00

PBBA was the only offeror determined technically acceptable. Their price reflected a 12.3% discount off of their FSS historical published price. PBBA further discounted their price by maintaining it for the entire 36 month contract period thereby absorbing all price increases for inflation costs in materiel, subcontractor, wages, shipping and testing. Additional factors considered were the Army's critical need for the DAPS and the fact that PBBA was the only technically qualified vendor able to meet the Army's accelerated delivery schedule. PBBA offered multiple discounts hence any further requests for discounts would have been futile. The contracting officer determined based on a comparison of the competitive prices received and the discounts offered that PBBA's price was fair and reasonable.

Based on the above we greatly disagree with the statement that RDECOM AC contracting officials were not prudent in price determination and the use of Government funds.

In conclusion, we feel that the contracting officer exercised sound business judgment in all cases and ensured that the interests of both the taxpayer and the warfighter were well served.

#### **Team Members**

The Department of Defense Office of the Deputy Inspector General for Auditing, Joint and Overseas Operations prepared this report. Personnel of the Department of Defense Office of Inspector General who contributed to the report are listed below.

Paul J. Granetto
Robert F. Prinzbach II
Donald A. Bloomer
Deborah G. Crosier
Melinda M. Oleksa
Kenneth W. Sokol
Shaun B. Jeffery
Andrea L. Hill
Leon D. Bryant
Jessica R. Frederick
Bryan M. Chavez
Alan J. Woolard
Jessica R. Crotts
Monica L. Noell
Allison E. Tarmann

