## Expeditionary Fire Support System and Internally Transportable Vehicle Programs

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<thead>
<tr>
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<th>b. ABSTRACT</th>
<th>c. THIS PAGE</th>
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Acronyms and Abbreviations
CDD    Capability Development Document
EFSS   Expeditionary Fire Support System
FAR    Federal Acquisition Regulation
GAO    Government Accountability Office
GDOTS  General Dynamics Ordnance and Tactical Systems
IOC    Initial Operational Capability
IOT&E  Initial Operational Test and Evaluation
ITV    Internally Transportable Vehicle
KPP    Key Performance Parameter
MCCDC  Marine Corps Combat Development Center
MCOTEA Marine Corps Operational Test and Evaluation Activity
MCSC   Marine Corps Systems Command
RDT&E  Research, Development, Test and Evaluation
SSA    Source Selection Authority
SSAC   Source Selection Advisory Council
SSEB   Source Selection Evaluation Board
TEB    Technical Evaluation Board
MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION,
TECHNOLOGY, AND LOGISTICS
NAVAL INSPECTOR GENERAL
COMMANDER, MARINE CORPS SYSTEMS COMMAND

SUBJECT: The Expeditionary Fire Support System and Internally Transportable Vehicle
Programs (Report No. D-2009-041)

We are providing this report for your information and use. We performed the audit in response to
a request from Senator Carl Levin, Chairman, Senate Committee on Armed Services. We
considered management comments on a draft of the report in preparing the final report.

Comments on the draft of this report conformed to the requirements of DoD Directive 7650.3 and
left no unresolved issues. Therefore, we do not require any additional comments.

We appreciate the courtesies extended to the staff. Questions should be directed to me at
(703) 604-9200 (DSN 664-9200).

Richard B. Jolliffe
Assistant Inspector General
Acquisition and Contract Management
Results in Brief: The Expeditionary Fire Support System and Internally Transportable Vehicle Programs

The Expeditionary Fire Support System (EFSS) is a direct-support weapon system for the vertical assault element of a ship-to-objective maneuver force. The Internally Transportable Vehicle (ITV) program fields expeditionary vehicles to ground units to support various operations. The EFSS and ITV have been developed for use with and transport in the MV-22 Osprey.

What We Did
We determined whether contract competition and program administration for the U.S. Marine Corps EFSS and ITV programs were in accordance with the Federal Acquisition Regulation and supporting DoD guidance. We conducted this audit in response to a request from Senator Carl Levin, Chairman of the Senate Committee on Armed Services, who forwarded constituent concerns made by a prospective EFSS/ITV subcontractor.

What We Found
Although our audit did not substantiate most of the constituent’s concerns, we found problems with EFSS and ITV program management and contract award. The Marine Corps Milestone Decision Authority approved the entrance of the EFSS and ITV programs into the Production and Deployment Phase (Milestone C) before the systems had demonstrated acceptable performance in developmental test and evaluation. As a result, the schedule for initial operational capability has slipped 22 months for the EFSS and 17 months for the ITV, while the average unit cost has risen by 86 percent for the EFSS and by 120 percent for the ITV. However, the Marine Corps has corrected most EFSS and ITV technical problems as reflected in 2008 operational test and evaluation effectiveness determinations.

The Marine Corps Systems Command did not award the EFSS and ITV contract in accordance with the Federal Acquisition Regulation. Specifically, Command source selection personnel did not adequately document and disclose all technical evaluation criteria in the solicitation and did not prepare a price negotiation memorandum. As a result, the Command’s source selection decision did not meet Federal Acquisition Regulation tests of fairness, impartiality, and equitable treatment.

The Marine Corps Systems Command internal controls were not adequate. We identified internal control weaknesses over contract competitions and the acquisition system’s program planning and execution process.

What We Recommend
We recommend that the Commander, Marine Corps Systems Command improve specific contracting and acquisition internal controls highlighted in the findings.

Client Comments and Our Response
The Assistant Secretary of the Navy (Research, Development and Acquisition) and the Commander, Marine Corps Systems Command provided comments in response to this report that disagreed with some report findings, but generally agreed with the recommendations. The comments were responsive.
## Recommendations Table

<table>
<thead>
<tr>
<th>Client</th>
<th>No Additional Comments Required</th>
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</thead>
</table>
Table of Contents

Results in Brief i

Introduction 1

Objective 1
Background 1
Congressional Request for Inspector General Audit 2
Review of Internal Controls 2

Finding A. Program Management 3

Client Comments on the Finding 12
Recommendations, Client Comments, and Our Response 12

Finding B. Contract Award 14

Client Comments on the Finding 19
Recommendations, Client Comments, and Our Response 19

Appendices

A. Scope and Methodology 21
   Prior Coverage 21
B. Congressional Request 23
C. Congressional Constituent Concerns and Audit Response 25
D. Summary of Client Comments and Audit Response 33

Client Comments

Department of the Navy Comments 39
Introduction

Objective
Our objective was to determine whether contract competition and program administration for the U.S. Marine Corps Expeditionary Fire Support System and Internally Transportable Vehicle programs were in accordance with the Federal Acquisition Regulation (FAR) and supporting DoD guidance. See Appendix A for a discussion of the Scope and Methodology and prior coverage.

Background
The Expeditionary Fire Support System (EFSS) will be the direct-support weapon system for vertical assault maneuvers. EFSS comprises two vehicles, ammunition, and crew. One vehicle, the prime mover, carries a launcher; the other vehicle carries ammunition for the launcher. EFSS will be manned and supported by the Marine artillery regiment involved in the maneuver. As a critical element of the ground fire triad (which includes the high-mobility artillery rocket system, the M777E1 lightweight 155-millimeter towed howitzer, and the EFSS), the EFSS will provide the Marine Air-Ground Task Force commander more flexibility in tailoring the fire support systems to the plan of maneuver. EFSS will provide increased speed, tactical agility, and vertical transportability to ranges that mirror those of a vertical force, with minimal tradeoffs in lethality. The EFSS will be capable of 110-nautical-mile lift inside the MV-22 Osprey aircraft and the CH-53E helicopter.

The Internally Transportable Vehicle (ITV) will be used by the U.S. Marine Corps ground units to support various operations. The ITV will provide a deployed Marine Air-Ground Task Force with a ground vehicle that is internally transportable in the MV-22 Osprey and CV-22 tilt-rotor aircraft, as well as in a CH-53 helicopter, and an MH-47 aircraft. The vehicle will serve primarily as a high-mobility weapons-capable platform to support a variety of operations and provide ground units equal or greater mobility than the Marine Air-Ground Task Force maneuver elements they support, thereby enhancing their mission performance and survivability.

On November 10, 2004, the Marine Corps Systems Command (MCSC) awarded indefinite-delivery, indefinite-quantity contract M67854-05-D-6014 with firm-fixed-price and cost-plus-award-fee contract line-item numbers for a base year and up to 6 option years to General Dynamics Ordnance and Tactical Systems (GDOTS) for $12,057,159 for procurement of 66 EFSSs and up to 650 ITVs. MCSC selected GDOTS over two other offerors. As of July 2008, the contract was valued at $107.9 million. In March 2008, the EFSS successfully completed follow-on operational test and evaluation. A May 2008, Marine Corps Operational Test and Evaluation Activity (MCOTEA) report concluded the EFSS was operationally effective and operationally suitable. In June 2008, the Milestone Decision Authority approved the full-rate production and fielding decision for the EFSS Program.
In March 2008, the ITV successfully completed initial operational testing and evaluation, and a June 2008 MCOTEA report concluded the ITV was operationally effective and operationally suitable. In July 2008, the Milestone Decision Authority approved the full-rate production and fielding decision for the ITV Program.

**Congressional Request for Inspector General Audit**

On September 20, 2007, Senator Carl Levin, Chairman of the Senate Committee on Armed Services, requested that the DoD IG initiate an audit of alleged improprieties in the competition of the U.S. Marine Corps’ EFSS and ITV programs. Senator Levin noted that the request was made on behalf of a constituent, Rae-Beck Automotive, LLC, a Michigan company that was a subcontractor to one of the losing offerors. See Appendix B for a copy of Senator Levin’s request and Appendix C for a summary of eight congressional constituent concerns and our audit response to each.

**Review of Internal Controls**

We determined that material internal control weaknesses in the MCSC existed as defined by DoD Instruction 5010.40, “Managers’ Internal Control (MIC) Program Procedures,” January 4, 2006. Implementing Recommendations A. and B. will improve MCSC internal controls over contract competitions and the acquisition system’s program planning and execution process. We will provide a copy of this report to the senior official responsible for internal controls in the Department of the Navy.
Finding A. Program Management

The Marine Corps Milestone Decision Authority approved the entrance of the EFSS and ITV programs into the Production and Deployment Phase (Milestone C) before the systems had demonstrated acceptable performance in developmental test and evaluation. Premature approval occurred because the Marine Corps miscategorized the EFSS and ITV as nondevelopmental items and underestimated the development effort required to modify the EFSS and ITV to meet system performance requirements. As a result, the schedule for initial operational capability has slipped 22 months for the EFSS and 17 months for the ITV, and the average unit cost has risen by 86 percent for the EFSS and by 120 percent for the ITV. However, the Marine Corps has corrected most EFSS and ITV technical problems as reflected in 2008 MCOTEA determinations that the systems are operationally effective and suitable.

Acquisition Guidance

Federal Acquisition Regulation (FAR)

FAR Part 2, “Definitions of Words and Terms,” defines a nondevelopmental item as any previously developed item of supply used exclusively for governmental purposes. A nondevelopmental item requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the system performance requirements.

DoD Guidance


- Milestone A is the Technology Development Phase and is used to determine the appropriate set of technologies to be integrated into a new system.
- Milestone B is the System Development and Demonstration Phase and is used to develop a system or an increment of capability, reduce integration and manufacturing risk, and ensure operational supportability. It is intended to integrate subsystems, complete detailed design, reduce system-level risk, and demonstrate the ability of the system to operate within the approved key performance parameters (KPPs), the operational requirements considered essential for mission accomplishment. At Milestone B, the program manager establishes the acquisition program baseline, which identifies the program goals for performance, schedule, and cost.
- Milestone C is the Production and Deployment Phase. Its goal is to achieve an operational capability that satisfies mission needs. Initial operational test and
evaluation (IOT&E) determines the operational effectiveness and operational suitability of the system. However, entrance into Milestone C depends on acceptable performance in development, test and evaluation, and operational assessment and on having no significant manufacturing risks.

Initial operational capability (IOC) is attained when units scheduled to receive the system receive it and have the ability to employ and maintain it.

**EFSS and ITV Acquisition Background**

On February 27, 2004, the MCSC released a request for proposals to produce both the EFSS and the ITV. On November 10, 2004, the MCSC Commanding General, who was also the Milestone Decision Authority, approved the entrance of the EFSS and ITV programs into the System Development and Demonstration Phase (Milestone B), and designated both the EFSS and the ITV as Acquisition Category III programs. An Acquisition Category III program has an estimated total dollar value less than $140 million in research, development, test and evaluation (RDT&E) funds and less than $660 million in procurement funds in FY 2000 constant dollars. The Milestone Decision Authority is designated by the DoD Component acquisition executive.

On November 10, 2004, the MCSC awarded an indefinite-delivery, indefinite-quantity contract (M67854-05-D-6014) for procurement of 66 EFSSs and up to 650 ITVs. The contract award showed an EFSS average unit cost of $578,782 and an ITV average unit cost of $94,770. The original EFSS and ITV program schedules called for an IOC date of June 2006 for the EFSS and an IOC date of September 2006 for the ITV. The program manager established the EFSS and ITV acquisition program baseline based on user-identified performance, schedules, and cost requirements. The Milestone Decision Authority approved the entrance of the EFSS and ITV programs into the Production and Deployment (Milestone C) Phase on June 14, 2005.

**EFSS System Performance Requirements**

The EFSS capability development document (CDD), November 2, 2004, identified four KPPs. KPPs are the users’ minimum acceptable requirements for the system. Table 1 shows the four KPPs for the EFSS.

<table>
<thead>
<tr>
<th>Key Performance Parameters</th>
<th>Objective</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal air transportability of 110 nautical miles</td>
<td>MV-22 and CH-53E</td>
<td>MV-22 and CH-53E</td>
</tr>
<tr>
<td>Mortar range</td>
<td>14 kilometers</td>
<td>7 kilometers</td>
</tr>
<tr>
<td>Accuracy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probability of range error</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Probability of detection error</td>
<td>0.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Network ready</td>
<td>Data</td>
<td>Voice</td>
</tr>
</tbody>
</table>
The KPPs for the EFSS have not changed since program inception. The KPP objective value is an operationally significant increment above the KPP threshold, and the threshold is a minimum acceptable operational value below which the utility of the system becomes questionable.

**ITV System Performance Requirements**

The January 27, 2004, ITV joint operational requirements document identified four KPPs for the ITV. The KPPs for the ITV have not changed since program inception. Table 2 shows the four KPPs for the ITV.

<table>
<thead>
<tr>
<th>Key Performance Parameters</th>
<th>Objective</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal air transportation</td>
<td>One in an MV-22</td>
<td>One in an MV-22</td>
</tr>
<tr>
<td>Longitudinal slope operation</td>
<td>60% (tractive effort to weight ratio = or &gt; 0.53)</td>
<td>60% (tractive effort to weight ratio = or &gt; 0.53)</td>
</tr>
<tr>
<td>Primary weapon ready to fire after exiting aircraft</td>
<td>45 seconds</td>
<td>60 seconds</td>
</tr>
<tr>
<td>Gross vehicle weight</td>
<td>(\leq 7,800) pounds</td>
<td>(\leq 7,800) pounds</td>
</tr>
</tbody>
</table>

**Premature Milestone C Approval**

The approval to enter Milestone C should not be granted without acceptable performance in developmental testing and evaluation and no significant manufacturing risks. The Marine Corps Milestone Decision Authority approved the entrance of the EFSS and ITV programs into the Production and Deployment (Milestone C) Phase before the systems had integrated subsystems, completed detailed design, reduced system-level risk, and demonstrated ability to operate within the approved KPPs. EFSS and ITV detailed design was not completed, nor had the programs demonstrated acceptable performance in developmental test and evaluation. In addition, no developmental test reports were issued prior to the June 2005 Milestone C approval.

The Naval Surface Warfare Center performed EFSS developmental testing in March 2006 and May 2007, well after the Milestone C decision. Neither developmental testing round evaluated all EFSS requirements or resulted in the EFSS meeting all requirements that were evaluated. The Naval Surface Warfare Center performed ITV developmental testing in May 2007; however, all requirements were not met or evaluated.

A complete and properly assembled system is required to ensure a configuration that can meet the operational and performance requirements. The inability of the EFSS and ITV systems to demonstrate acceptable performance in developmental testing showed that the systems were not technically mature and should not have been approved for entrance into Milestone C. Their not meeting the system performance requirements during developmental testing in 2006 and 2007 leads to questions about whether the EFSS and ITV were accurately defined as nondevelopmental items.
Categorization of EFSS and ITV as Nondevelopmental

The EFSS and ITV systems were miscategorized as nondevelopmental items. The FAR defines a nondevelopmental item as one that was previously developed and states a nondevelopmental item should require only minor modification to meet the system performance requirements. The Marine Corps used a modified nondevelopmental item acquisition strategy for the EFSS and ITV programs to take advantage of solutions available in the marketplace. Though portions of the EFSS, such as the mortar, ammunition, and the ammunition trailer, were nondevelopmental items, the vehicles for both the EFSS and ITV programs required more than minor modifications to meet system requirements and constituted developmental items.

EFSS and ITV prototype vehicles did not meet all KPPs before contract award. The August 2004, June 2005, and August 2007 ITV Single Acquisition Management Plans all stated that, in awarding the EFSS and ITV contract, the Government assumed cost risk in ensuring EFSS and ITV program requirements would later be met. In May 2004, contract bidders submitted prototypes as part of the EFSS and ITV source selection to allow the Marine Corps to evaluate their ability to meet the system requirements. These evaluations assessed the offered systems’ ability to meet selected system-critical operational requirements and KPPs. In July 2004, the Naval Surface Warfare Center stated in the EFSS Source Selection Demonstration Evaluation Report that none of the offerors’ proposed vehicles met the MV-22 Osprey transportability requirements. As a result, the EFSS and ITV prototype vehicles required more development effort than anticipated.

EFSS and ITV Estimated Development Effort

The Marine Corps underestimated the development effort required to modify the EFSS and ITV to meet size and weight limitations for MV-22 Osprey transportability, as well as EFSS and ITV performance specifications for durability and reliability. The original schedules called for a June 2006 IOC for the EFSS and a September 2006 IOC for the ITV. Development problems were acknowledged in a June 2007, low-rate initial production contract modification that stated many major subsystems still required continuous monitoring and critical analysis and that EFSS and ITV subsystem design changes posed significant challenges because of minimum size, weight, and center of gravity constraints mandated by the MV-22 Osprey transportability requirements. The May 2008, limited-rate initial production contract modification stated that a number of design changes had affected the major subsystems of the EFSS and ITV since commencement of low-rate initial production. The design changes included suspension, rear steering, transmission, power steering, and power brakes. As a result of the development problems, the IOT&E for the EFSS and ITV were delayed.

The primary objective of IOT&E is to test and evaluate the operational effectiveness and operational suitability of the EFSS and ITV. The EFSS and ITV must meet the performance requirements in the approved EFSS CDD or ITV Joint Operational Requirements Document before the Milestone Decision Authority approves a full-rate production decision.
**EFSS Operational Testing**
Because of system development problems, the MCOTEA did not begin the IOT&E for the EFSS until May 2007. A September 2007 MCOTEA operational test report concluded the EFSS was “operationally effective with limitations” and “operationally suitable with limitations.” The operational test report recommended that all development testing be completed before fielding and that other areas of concern identified in the operational test be addressed and retested.

MCOTEA performed a follow-on operational test and evaluation on the EFSS from February through March 2008. A May 16, 2008, MCOTEA follow-on report concluded the EFSS was operationally effective and operationally suitable.

**ITV Operational Testing**
In the spring of 2007, the Marine Corps determined the ITV was not ready for IOT&E. As a result, MCOTEA performed an ITV operational assessment from May through July 2007. A September 2007 MCOTEA operational assessment report noted that the ITV met many effectiveness and suitability requirements but did not meet other requirements and warranted further testing. The MCOTEA operational assessment report stated that, even though the ITV met KPP requirements, the ITV was unreliable.

MCOTEA began the IOT&E for the ITV in February 2008. In March 2008, the ITV successfully completed IOT&E, and a June 5, 2008, MCOTEA report concluded the ITV was operationally effective and operationally suitable.

**EFSS and ITV Schedule and Cost Changes**
As shown above, MCOTEA expressed concerns about the quality of production of both the EFSS and ITV systems. The development of the EFSS and ITV systems was caught in a cycle of design, test, and redesign and test. EFSS and ITV system redesign affected many major subsystems of the vehicles, which needed to be modified to meet system performance requirements. These systems include the vehicle suspension, rear steering, transmission, power steering, and power brakes. In August 2007, the EFSS and ITV program office completed production readiness reviews and physical configuration audits. At that time, the EFSS and ITV had not completed developmental or operational testing, or incorporated design changes to address safety, reliability, and performance issues in production detailed design drawings.

EFSS and ITV problems meeting the identified system requirements have caused repeated schedule delays and cost increases. Now that the EFSS and ITV programs have passed operational testing, the program office must ensure that design changes are properly incorporated in the production process and that the systems are subject to new physical configuration audits and production readiness reviews. In addition, previously produced EFSS and ITV systems should be brought up to the new configuration.

**EFSS and ITV Schedule Changes**
The EFSS schedule requirement goals have slipped many times because of delays in meeting the system performance requirements. The original November 4, 2004, EFSS
acquisition program baseline document called for an IOC objective date of June 2006 and a threshold date of September 2006. A May 29, 2008, EFSS acquisition program baseline revision called for an IOC objective date of June 2008 and a threshold date of December 2008.

As of July 31, 2008, the EFSS IOC schedule had slipped 22 months from the original threshold date of September 2006 and missed the current program objective date of June 2008, but had not yet passed the current threshold date of December 2008. The June 2008 Milestone Decision Authority full-rate production decision was 17 months later than the original January 2007 threshold date.

The ITV schedule has also slipped many times because of delays in meeting performance requirements. The original November 4, 2004, ITV acquisition program baseline called for an IOC objective date of September 2006 and a threshold date of February 2007. A July 14, 2008, ITV acquisition program baseline revision called for an IOC objective date of January 2009 and a threshold date of June 2009.

As of July 31, 2008, the ITV IOC date had slipped 17 months from the original threshold date of February 2007. If the ITV accomplishes the new January 2009 IOC objective date, it will be 23 months behind schedule.

**EFSS and ITV Cost Growth**

EFSS and ITV problems in meeting system requirements have increased overall costs.

**Program Management and Engineering Costs**

The EFSS and ITV programs have encountered significant growth in program management and engineering costs. Program management and engineering costs include all of the program management labor; engineering labor; and materials necessary to support the development, integration, test and evaluation of the system’s capabilities. Design deficiencies and changes to meet the system performance specifications have increased EFSS and ITV program management and engineering costs by 162 percent to $21 million for a 34-month period ending September 30, 2007. Table 3 shows the increase in costs of program management and engineering for the EFSS and ITV programs for FYs 2005 through 2007.
Table 3. Increase in Program Management and Engineering Costs for EFSS and ITV

<table>
<thead>
<tr>
<th>Contract Line Item</th>
<th>Cost as of November 10, 2004</th>
<th>Cost as of September 30, 2007</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Management and Engineering FY 2005</td>
<td>$3,611,905</td>
<td>$4,358,915</td>
<td>21</td>
</tr>
<tr>
<td>Program Management and Engineering FY 2006</td>
<td>2,396,840</td>
<td>9,670,848</td>
<td>303</td>
</tr>
<tr>
<td>Program Management and Engineering FY 2007</td>
<td>1,990,934</td>
<td>6,899,499</td>
<td>247</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$7,999,679</strong></td>
<td><strong>$20,929,262</strong></td>
<td><strong>162</strong></td>
</tr>
</tbody>
</table>

In addition to the above program management and engineering costs, the EFSS and ITV program office added a new contract line item for ITV production support valued at $17,152,971 in place of a previously unexercised $1,792,920 contract option for FY 2008 program management and engineering costs. The above amounts may be subject to further increase based on negotiation of a $1.8 million contractor engineering change proposal from the contractor for operational testing and a $1.5 million proposal for program management and engineering in support of testing.

**Contractor Logistic Support Costs**

Design deficiencies and changes to meet the system performance specifications have increased contractor logistic support costs for EFSS and ITV. Costs have increased by 74 percent to $11.8 million for a 44-month period ending July 30, 2008. Table 4 shows the cost growth in contractor logistic support for the EFSS and ITV programs.

Table 4. Increase in Costs of Contractor Logistics Support for EFSS and ITV

<table>
<thead>
<tr>
<th>Contract Line Item</th>
<th>Cost as of November 10, 2004</th>
<th>Cost as of July 30, 2008</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor Logistic Support FY 2005</td>
<td>$1,594,843</td>
<td>$1,575,453</td>
<td>-1</td>
</tr>
<tr>
<td>Contractor Logistic Support FY 2006</td>
<td>1,487,918</td>
<td>1,868,696</td>
<td>26</td>
</tr>
<tr>
<td>Contractor Logistic Support FY 2007</td>
<td>1,612,713</td>
<td>4,028,598</td>
<td>150</td>
</tr>
<tr>
<td>Contractor Logistic Support FY 2008*</td>
<td>2,126,856</td>
<td>4,400,000</td>
<td>107</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,822,330</strong></td>
<td><strong>$11,872,747</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

*The current Contractor Logistic Support costs for FY 2008 are the costs proposed by the contractor to complete the FY 2008 work required under this contract.

MCSC officials stated that not all cost increases were the result of cost growth. Some increases stemmed from an increase in the scope of work—for example, providing training on new equipment to units receiving the EFSS and ITV. MCSC officials did not provide a breakdown of cost growth and scope increases.
Growth in the Unit Cost of the EFSS

Numerous design deficiencies, design changes, and schedule delays have increased the unit cost of the EFSS. Table 5 shows the increase in the EFSS unit cost from the contract award date of November 10, 2004, through July 30, 2008.

### Table 5. Increases in EFSS Unit Cost

<table>
<thead>
<tr>
<th>Contract Line Item</th>
<th>November 10, 2004</th>
<th>July 30, 2008</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>Unit Cost</td>
<td>Quantity</td>
</tr>
<tr>
<td>EFSS System Development and Demonstration Units</td>
<td>3</td>
<td>$1,476,792</td>
<td>3</td>
</tr>
<tr>
<td>EFSS Low-Rate Initial Production</td>
<td>6</td>
<td>811,783</td>
<td>6</td>
</tr>
<tr>
<td>EFSS Limited Production</td>
<td>12</td>
<td>511,261</td>
<td>6</td>
</tr>
</tbody>
</table>

In addition to Table 5 EFSS unit costs, the average EFSS unit cost for purchase of 66 production systems and 3 System Development and Demonstration Units over a base year and 6 option years was $578,782 at contract award. As of July 2008, EFSS unit cost for the same systems had risen to $1,077,726, an increase of 86 percent. EFSS development problems also resulted in the purchase of an additional system design development and demonstration unit at a cost of $662,283.

MCSC program officials stated that the increase in the EFSS unit cost was related to the high cost and schedule risk caused by development problems and design changes required to meet system requirements. The officials noted that, because the design has been validated by operational testing, the prices should not increase for full-rate production and could even decrease. However, the program office did not have a current validated estimate for the EFSS full-rate production costs.

Growth in the Unit Cost of the ITV

Numerous design deficiencies, design changes, and schedule delays have increased the unit cost of the ITV. Table 6 shows the increase in the unit cost for the ITV from the contract award date of November 10, 2004, through July 30, 2008.

### Table 6. Increases in ITV Unit Cost

<table>
<thead>
<tr>
<th>Contract Line Item</th>
<th>November 10, 2004</th>
<th>July 30, 2008</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td>Unit Cost</td>
<td>Quantity</td>
</tr>
<tr>
<td>ITV System Development and Demonstration Units</td>
<td>4</td>
<td>$274,544</td>
<td>4</td>
</tr>
<tr>
<td>ITV Low-Rate Initial Production</td>
<td>8</td>
<td>186,266</td>
<td>15</td>
</tr>
<tr>
<td>ITV Limited-Rate Initial Production</td>
<td>Not Applicable</td>
<td>66</td>
<td>208,938</td>
</tr>
</tbody>
</table>
In addition to Table 6 ITV unit costs, the average ITV unit costs for the 650 production systems over a base year and 6 option years was $94,770 at contract award. As of July 2008, ITV average unit cost for the same systems had risen to $208,938, an increase of 120 percent. The original contract did not have an option for limited-rate initial production, but as a result of development problems, a new contract line item was added. Development problems also resulted in the purchase of 12 additional development and demonstration ITV systems at an average unit cost of $258,197.

MCSC program officials stated that the increase in the ITV unit cost stems from the high cost and schedule risk caused by development problems and design changes required to meet system requirements. The officials noted that, because the ITV design has been validated by operational testing, full-rate production will bring economies of scale, and the unit costs should decrease. However, the program office did not have a current validated estimate for the ITV full-rate production costs.

Conclusion
The Marine Corps Milestone Decision Authority approved the entrance of the EFSS and ITV programs into the Production and Deployment Phase (Milestone C) before the systems had demonstrated acceptable performance in developmental test and evaluation and had no significant manufacturing risks as required by DoD Instruction 5000.2. The Marine Corps miscategorized the EFSS and the ITV as nondevelopmental items and underestimated the modifications required to meet the EFSS and ITV system performance requirements. In particular, meeting the MV-22 transportability KPPs required more development than anticipated. The increased development time and effort resulted in significant schedule delays and cost growth for the EFSS and ITV programs. The management and mitigation of technology risk are a crucial part of overall program management and are especially relevant to meeting cost and schedule goals.
Client Comments on the Finding
The Commander, MCSC disagreed with the finding. See Appendix D for a summary of the comments and our response.

Recommendations, Client Comments, and Our Response
A. We recommend that the Commander, Marine Corps Systems Command require the Expeditionary Fire Support System and Internally Transportable Vehicle Program Manager to:

1. Perform new physical configuration audits and production readiness reviews on the Expeditionary Fire Support System and the Internally Transportable Vehicle before awarding a full-rate production contract modification.

Department of the Navy Comments
The Assistant Secretary of the Navy (Research, Development and Acquisition) and the Commander, MCSC agreed with the recommendation. The Commander, MCSC stated that the EFSS/ITV program office completed production readiness reviews and production configuration audits on September 30, 2008. The Commander, MCSC stated that all changes have been incorporated utilizing a configuration management process and that all EFSS and ITV systems will be in line with current configuration prior to fielding.

Our Response
The comments of the Assistant Secretary of the Navy and the Commander, MCSC were responsive and conformed to requirements; no additional comments are needed.

2. Complete new life-cycle cost estimates for both the Expeditionary Fire Support System and Internally Transportable Vehicle programs before awarding a full-rate production contract modification.

Department of the Navy Comments
The Assistant Secretary of the Navy (Research, Development and Acquisition) and the Commander, MCSC partially agreed with the recommendation. Both the Assistant Secretary and the Commander, MCSC stated that an EFSS and ITV life-cycle cost estimate was prepared for each program’s production and deployment decisions. The Commander, MCSC agreed to update the ITV portion of the life-cycle cost estimate prior to entering into the sustainment phase of acquisition. The Commander, MCSC also stated that, although the remainder of the life-cycle cost estimate appeared to be valid, MCSC would review and update it if necessary.
Our Response
The comments of the Assistant Secretary of the Navy and the Commander, MCSC were responsive and conformed to requirements; no additional comments are needed.

3. Ensure that full-rate production contract modifications are definitized at the time of issuance.

Department of the Navy Comments
The Assistant Secretary of the Navy (Research, Development and Acquisition) and the Commander, MCSC agreed with the recommendation. The Commander, MCSC stated that there are no open, undefinitized contractual actions for the EFSS or ITV systems and no plans to award any undefinitized contractual actions for future EFSS/ITV production.

Our Response
The comments of the Assistant Secretary of the Navy and the Commander, MCSC were responsive and conformed to requirements; no additional comments are needed.

4. Modify Expeditionary Fire Support System and Internally Transportable Vehicle systems already produced to the most current configuration before fielding them.

Department of the Navy Comments
The Assistant Secretary of the Navy (Research, Development and Acquisition) and the Commander, MCSC agreed with the recommendation. The Commander, MCSC stated that MCSC was upgrading the EFSS and the ITV to the current configuration and that the upgrades would be completed prior to fielding.

Our Response
The comments of the Assistant Secretary of the Navy and the Commander, MCSC were responsive and conformed to requirements; no additional comments are needed.
Finding B. Contract Award

The MCSC did not award the EFSS and ITV contract in accordance with the FAR. Specifically, MCSC source selection personnel did not:

- adequately document and disclose all technical evaluation criteria in the solicitation, or
- prepare a price negotiation memorandum.

These omissions occurred because MCSC source selection personnel inexplicably ignored FAR guidance. As a result, the MCSC’s award of the EFSS and ITV contract to GDOTS did not meet FAR tests of fairness, impartiality, and equitable treatment.

EFSS and ITV Technical Evaluation

The MCSC did not award the EFSS and ITV contract in accordance with the FAR. The MCSC source selection personnel did not adequately document and disclose all technical evaluation criteria in the solicitation.

Request for Proposals

On February 27, 2004, the MCSC issued solicitation number M67854-04-R-6014 for the procurement of 66 EFSSs and up to 650 ITVs. In response to the solicitation, the MCSC received three proposals.

The solicitation noted the evaluation criteria consisted of four noncost factors and a cost and price factor. The four noncost factors were technical capability, mutuality (see Appendix C), past performance, and business management approach. The technical capability factor consisted of 15 subfactors. The offeror’s technical proposals would be evaluated against the performance specifications.

The technical evaluation used five color codes to depict the rating for each factor and subfactor. The threshold requirement was to be met if the requirement statement contained the word “shall.” Failure to meet any threshold requirement containing a “shall” statement would result in a “red-unacceptable” rating for the subfactor, disqualifying the offeror from consideration for award. Failure to satisfy a threshold requirement that contained the word “should” would result in a “yellow-marginal” rating for that subfactor and possibly the rejection of the offer. Fully satisfying the threshold requirement would result in a “green-acceptable” rating for that subfactor. Exceeding the threshold requirement would result in a “purple-good” rating for that subfactor. Meeting or exceeding the objective requirement would result in a “blue-exceptional” rating for that subfactor.

An overall factor rating of red, yellow, green, purple, or blue for that offeror’s technical proposal would be applied at each factor level based on the evaluation team’s assessment of the overall collective merits of the subfactors within each factor. There was one overall rating on the technical capability factor for an offeror’s proposal. Factor 1,
technical capability, was more important than factor 2. Factor 2, mutuality, was more important than factor 3. Factor 3, past performance, was more important than factor 4, business management approach. The subfactors under technical capability were listed in descending order of importance; and subfactors listed at the same level were of equal importance.

The solicitation noted the price evaluation would determine whether each offeror’s proposed price to the Government was reasonable, realistic, and complete. The proposed pricing was to be consistent with the technical and management portions of the offer and represent a sound business strategy. The solicitation also noted there would be no advantage to an offeror submitting an unrealistically low offer.

**Proposal Evaluation Ratings**

On August 19, 2004, the Source Selection Evaluation Board (SSEB), the Technical Evaluation Board, and the Business Management Evaluation Board briefed the Source Selection Authority (SSA) and the Source Selection Advisory Council (SSAC) on the proposal ratings. The SSAC minutes noted that the SSAC recommended Offeror A, which it believed presented the best overall value to the Government. The SSA did not accept the recommendation and directed the contracting officer to establish a competitive range including Offeror A and Offeror B (GDOTS), which had the most highly rated proposals, and reopen discussion to address significant weaknesses. The SSA also asked for further physical validation regarding GDOTS’ ability to meet the transportability requirements.

On October 14, 2004, the SSEB, the Technical Evaluation Board, and the Business Management Evaluation Board briefed the SSA and the SSAC on the second evaluation of proposals. The SSAC minutes noted there was concern over the unacceptability of the GDOTS external lift concept. However, the SSAC recommended that Offeror A and GDOTS be considered equal on all evaluation factors except cost. The SSA did not accept the recommendation and directed the contracting officer to modify the solicitation by removing the Light Armored Vehicle-Mortar option because it was unsuccessful in the Program Objective Memorandum process and reopen discussions with Offerors A and B to address remaining weaknesses.

On November 7, 2004, the SSEB, the Technical Evaluation Board, and the Business Management Evaluation Board briefed the SSA and the SSAC on the third evaluation of proposals. The SSAC minutes noted that the ratings for each offeror would stand and that the analysis of the cost figures was limited to the evaluated costs without the ammunition adjustments. The SSAC felt that GDOTS ammunition certification would cost the Government more, but there was no way to accurately quantify the cost. Following open discussions of the evaluation results, the SSA announced that GDOTS was his best-value determination.

The November 7, 2004, chart showing technical factor ratings for the GDOTS external vertical transportability concept noted that it failed to meet threshold requirements. However, source selection personnel stated to us, that the chart was incorrect and that GDOTS used a double-slung load, which was acceptable. The double-slung load was
authorized by Field Manual 10-450-3, “MultiService Helicopter Slingload: Basic Operations and Equipment,” April 1997. In addition, source selection personnel stated that the Technical Evaluation Board considered the external vertical transportability concept an element, not a subfactor. Source selection personnel stated that individual performance specifications, which were referred to as elements, did not rise to the level of subfactors unless the specification was a KPP.

The solicitation evaluation criteria did not disclose that a performance specification did not rise to the level of a subfactor unless the specification was a KPP. FAR 15.303, “Responsibilities,” states the SSA “shall ensure consistency among the solicitation requirements, notices to offerors, proposal preparation instructions, evaluation factors and subfactors, solicitation provisions or contract clauses, and data requirements.” Source selection personnel should have documented and disclosed the importance of the performance specifications to the subfactors in the solicitation to avoid a misunderstanding of the evaluation criteria among the contract offerors.

**EFSS and ITV Price Evaluation**

The contracting officer did not prepare a price negotiation memorandum to document that the negotiation was fair and reasonable.

**Price Negotiation Memorandum**

The contracting officer did not prepare a price negotiation memorandum in accordance with FAR 15.406-3, “Documenting the Negotiation.” Therefore, the principal elements of the negotiation were not documented. The contracting officer prepared a price and cost analysis for the EFSS and ITV source selection. However, the price and cost analysis did not include required documentation: (1) the current status of any contractor systems that were considered in the negotiation; (2) a summary of the contractor’s proposal and the Government’s negotiated objective and negotiated position; (3) the significant facts or considerations controlling the establishment of the prenegotiation objectives and the negotiated agreement, including explanations of significant differences; (4) the basis for the profit or fee prenegotiation objective and the profit or fee negotiated; and (5) documentation of fair and reasonable pricing. The contracting officer stated he knew the FAR requirement for the price negotiation memorandum and that the contracting officer was responsible for documenting that the Government received a fair and reasonable price. The contracting officer could not explain why a price negotiation memorandum was not prepared.

MCSC officials stated that a business clearance memorandum, which meets the Navy and Marine Corps requirement for a price negotiation memorandum, was prepared, but a copy of the signed business clearance memorandum could not be located. However, the MCSC could find only an unsigned business clearance memorandum, dated December 14, 2004, which was incomplete and did not contain all the required information of a price negotiation memorandum. MCSC officials stated to us that they have taken action to preclude a similar breakdown in administrative record keeping in the future.
**ITV Proposed Price**
Offeror A submitted a proposal price of $300.1 million, of which $113.6 million was for the ITV. GDOTS submitted a proposal price of $279.4 million, of which $61.6 million was for the ITV. The difference in price between the two offerors for the ITV was $52 million.

Jacobs Sverdrup Technology, Inc. prepared an October 2004 ITV life-cycle cost estimate 1 month before the contract award. The total estimated ITV cost for RDT&E and procurement was $89.6 million. The contracting officer stated that he thought the ITV life-cycle cost estimate was prepared after the award and that he did not have it during source selection. The contracting officer stated he did not consider the GDOTS price on the ITV an underbid because GDOTS had a lower cost technical solution on a vehicle that was already built. The contracting officer stated that no Government personnel questioned the GDOTS proposal price even though there was a large difference between the offerors’ prices on the ITV portion of the solicitation. FAR 15.404-1(a) (1), “Proposal Analysis,” states the contracting officer is responsible for evaluating the reasonableness of the offered prices. The contracting officer stated that he relied on competition to determine a fair and reasonable price. Although not required, the program office did not prepare an independent Government cost estimate.

The average unit price for the ITV at the time of award was approximately $94,770. The contracting officer stated that the final production price for an ITV could range from $180,000 to $200,000. In fact, with current average unit prices, if the MCSC procures up to 650 ITVs, the price would range from $117 million to $130 million. The original price for the ITV was subject to change because the ITV would need extensive modifications to meet program requirements. Therefore, the SSA should have selected a contractor based on technical merit and then negotiated price.

**Source Selection Decision**
The SSA stated in his source selection decision memorandum that the GDOTS solution provided the best overall value to the Marine Corps. The SSA concluded that the technical advantages related to mobility, deployability, transportability, and noncritical mission performance attributes of Offeror A did not sufficiently increase its value enough to merit Offeror A’s additional $20 million in total price.

**MCSC Implementation of FAR Guidance**
MCSC source selection personnel inexplicably ignored FAR guidance during the EFSS and ITV source selection process. Source selection personnel could not explain to us why all the evaluation criteria were not included in the solicitation, FAR proposal analysis requirements were not complied with, or contract offerors were not ensured fair treatment.

**Evaluation Criteria**
FAR 15.303 requires the SSA to ensure consistency among the solicitation requirements and evaluation factors and subfactors. Because the importance of the performance specifications to subfactors was not documented in the solicitation evaluation criteria, the
solicitation was not consistent in the way solicitation performance specifications were evaluated. They could not explain why they did not document and disclose the importance of the performance specifications to the subfactors in the solicitation. Disclosing all evaluation criteria in the solicitation is critical to ensuring that offerors understand the relative importance of the evaluation criteria and receive impartial, fair, and equitable treatment.

**Proposal Analysis**

FAR 15.404-1(a) (1) requires the contracting officer to evaluate the reasonableness of the offered prices. The contracting officer stated that he did not prepare a price negotiation memorandum or document that the Government received a fair and reasonable price as required by FAR 15.406-3. Furthermore, the contracting officer stated he was unaware of the ITV life-cycle cost estimate, which was prepared 1 month before the EFSS and ITV contract award. The contracting officer could not explain why the FAR proposal analysis requirements were not complied with.

**Treatment of Offerors**

FAR 1.602-2, “Contracting Officer Responsibilities,” states that contracting officers are responsible for ensuring performance of all necessary actions for effective contracting and for safeguarding the interests of the United States in its contractual relationships. To perform these responsibilities, contracting officers should be allowed wide latitude to exercise business judgment and are to:

- ensure that all requirements of law, executive orders, regulations, and all other applicable procedures, including clearances and approvals, have been met before a contract shall be entered into;
- ensure that contractors receive impartial, fair, and equitable treatment; and
- request and consider advice of specialists in audit, law, and other fields, as appropriate.

However, the contracting officer did not ensure that contractors received impartial, fair, and equitable treatment with respect to documenting and disclosing all technical evaluation criteria in the solicitation. Training contracting officers to ensure familiarity with their responsibilities and authority will alert them to these circumstances in the source selection process.

**Conclusion**

The MCSC did not award the EFSS and ITV contract in accordance with the FAR. MCSC source selection personnel did not adequately document and disclose all technical evaluation criteria in the solicitation and did not prepare a price negotiation memorandum. Training is needed to ensure source selection personnel comply with source selection procedures in the FAR to achieve fair treatment for offerors. As a result, the MCSC’s award of the EFSS and ITV contract to GDOTS did not meet FAR tests of fairness, impartiality, and equitable treatment.
Client Comments on the Finding
The Commander, MCSC, disagreed with the finding. See Appendix D for a summary of the comments provided and our response.

Recommendations, Client Comments, and Our Response
B. We recommend that the Commander, Marine Corps Systems Command:

1. Train contracting officers to ensure their familiarity with their authority and responsibilities as set forth in Federal Acquisition Regulation 1.602-2, “Contracting Officer Responsibilities.”

Department of the Navy Comments
The Assistant Secretary of the Navy (Research, Development and Acquisition) and the Commander, MCSC agreed with the recommendation. The Commander, MCSC stated that MCSC appoints contracting officers only after a rigorous review process to ensure trained qualified individuals are vested with the right level of authority after demonstrating the ability to execute sound business judgment and uphold the requirements of the regulations and policies of the Government, DoD, and the Navy/Marine Corps.

Our Response
The comments of the Assistant Secretary of the Navy and the Commander, MCSC were responsive and conformed to requirements; no additional comments are needed.

2. Perform an administrative accountability review regarding the contracting official’s performance in awarding the Expeditionary Fire Support System and Internally Transportable Vehicle contract, and consider appropriate remedial action.

Department of the Navy Comments
The Assistant Secretary of the Navy (Research, Development and Acquisition) and the Commander, MCSC agreed with the recommendation. The Commander, MCSC stated that after a review of the facts leading to the lack of a documented price negotiation memorandum, he does not believe there was evidence of any deliberate avoidance of the pertinent regulations by MCSC contracting staff. There was a breakdown in administrative record keeping. The Commander stated that the MSCS Assistant Commander for Contracts has completed four specific actions to preclude a repeat of the MCSC contracting events by: 1) ensuring MCSC contracting personnel have adequate workspaces including file cabinets, 2) ensuring that all workstations leased via contract are controlled by the Assistant Commander to prevent the potential loss of contracting information from transferring workstations, 3) recording the review and approval of contract support documents with the MCSC Contracts Directorate, and 4) providing computer hard drives and training on backing up critical data files to prevent the inadvertent loss of critical files and data resulting from workstation failures. The
Commander also recognized the importance of and responsibility to maintain proper records as specified in the FAR and would ensure that the current contracting team supporting the EFSS/ITV program provides training in a lessons learned or similar format with the rest of the contracting competency to ensure that the entire Command is made aware of the potential consequences of poor record keeping.

**Our Response**

The comments of the Assistant Secretary of the Navy and the Commander, MCSC were responsive and conformed to requirements; no additional comments are needed.
Appendix A. Scope and Methodology

We conducted this performance audit from December 2007 through September 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence dated from October 1992 through August 2008, 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 reviewed the United States Marine Corps’ contract competition and program administration of the EFSS and ITV programs for compliance with the FAR and supporting DoD guidance. Specifically, we examined sections of the FAR, the Defense FAR Supplement, DoD Directive 5000.1, “The Defense Acquisition System,” DoD Instruction 5000.2, “Operation of the Defense Acquisition System,” the DoD Acquisition Guidebook, Secretary of the Navy Instructions, source selection and overall contract documentation specific to the contract, program testing, current status, and acquisition documentation. In response to Senator Levin’s request, we also reviewed eight constituent concerns regarding the EFSS and ITV programs. We discussed the concerns with the constituent and reviewed related documentation provided by the constituent.

While conducting this audit, we visited the MCSC in Quantico, Virginia; Marine Corps Combat Development Command, Quantico; Marine Corps Operational Test and Evaluation Agency in Twenty-nine Palms, California; and the Nevada Automotive Test Center in Carson City, Nevada. At the MCSC we interviewed program management personnel, the contracting officer, source selection officials, and engineers for the EFSS-ITV program. At the Marine Corps Combat Development Command, we interviewed the user representative and action officer for the ITV. At the Marine Corps Operational Test and Evaluation Agency, we interviewed the user and operational testers, and we witnessed testing on the ITV. At the Nevada Automotive Test Center, we interviewed the developmental testers for the EFSS and the ITV. We calculated EFSS and ITV schedule delays by comparing the original acquisition program baseline thresholds with the current program objectives.

Use of Computer-Processed Data

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

Use of Technical Assistance

We obtained assistance from engineers in the Technical Assessment Directorate, Office of Inspector General in understanding the technical requirements of the EFSS and ITV.

Prior Coverage

During the last 5 years, the Government Accountability Office (GAO) has issued three reports discussing the EFSS. No reports have been issued during the last 5 years.
regarding the ITV. Unrestricted GAO reports can be accessed over the Internet at http://www.gao.gov.

**GAO**


Appendix B. Congressional Request

United States Senate
COMMITTEE ON ARMED SERVICES
WASHINGTON, DC 20510-6050

September 20, 2007

Honorable Claude M. Kicklighter
Inspector General
Department of Defense
400 Army Navy Drive, Suite 1000
Arlington, VA 22202

Dear Mr. Kicklighter:

I received the enclosed letter, documents, and electronic data card from a company located in Michigan, Rae-beck Automotive, LLC, alleging improprieties in the competition of the U.S. Marine Corps Expeditionary Fire Support System and Internally Transportable Vehicle programs.

Please review these allegations and provide me with a report. To ensure that you fully understand the improprieties alleged by Rae-beck, I ask that you have your staff interview Jerry and Elizabeth Bazinski of Rae-beck Automotive as part of your investigation.

Thank you for your prompt attention to this request.

Sincerely,

Carl Levin

Enclosures

Cc: Mrs. Elizabeth Bazinski, Rae-beck Automotive, LLC
Appendix C. Congressional Constituent Concerns and Audit Response

On September 20, 2007, Chairman of the Senate Committee on Armed Services Carl Levin requested we review allegations of improprieties in the competition of the United States Marine Corps EFSS and ITV programs. Senator Levin forwarded a July 16, 2007, constituent letter from Rae-Beck Automotive, LLC, noting eight areas of concern regarding the EFSS and ITV program competition. Senator Levin requested we review and report on the constituent concerns. Each of the eight concerns is synopsized below and followed by an audit response.

**Mobility, Deployability, and Transportability Subfactor Evaluation**

Rae-Beck claimed that the GDOTS external lift concept failed to meet EFSS and ITV mobility, deployability, and transportability threshold requirements and that GDOTS inappropriately received an “acceptable” rating for mobility, deployability, and transportability. Rae-Beck claimed that GDOTS should have received a “red” rating, which could have resulted in disqualification.

**Audit Response**

The concern was partially substantiated. The MCSC November 7, 2004, technical factor ratings mentioned, “the consensus of the TEB (Technical Evaluation Board) that the offeror’s (GDOTS) external lift concept still fails to meet threshold requirements.” However, the Technical Factor Ratings also included a chart noting a “green” acceptable rating for the GDOTS on the mobility, deployability, and transportability subfactor. MCSC source selection personnel told us that the technical subfactor color-coded ratings were correct, but that the supporting discussion regarding the GDOTS external lift concept was written incorrectly. The MCSC personnel also told us that GDOTS had indeed demonstrated an acceptable approach for external vertical transportability using a double-slung load method, which was supported by Field Manual 10-450-3, “MultiService Helicopter Slingload: Basic Operations and Equipment.”

MCSC source selection personnel stated that the GDOTS external lift concept was an “element” and did not rise to the level of a subfactor, which could result in the disqualification of an offeror. As noted in finding B, the MCSC solicitation evaluation criteria did not disclose that the individual performance specifications did not rise to the level of subfactors unless the specification was a KPP. We concluded that MCSC source selection personnel should have documented and disclosed the relative importance of the performance specifications to the subfactors in the solicitation to avoid a misunderstanding of the evaluation criteria among potential offerors.

**Systems Demonstration Evaluations**

Rae-Beck stated that during a systems demonstration of the EFSS, Rae-Beck’s prime contractor, Offeror A, received a deficiency notice of noncompliance because the EFSS
was unable to drive on or off the MV-22 in reverse. Rae-Beck stated that Offeror A was given 48 hours to correct the noncompliance, and was also required to demonstrate compliance after resolution; otherwise, the threshold requirement would have resulted in a transportability failure. Conversely, Rae-Beck claimed that GDOTS was given preferential treatment and as much time as necessary to comply with any deficiencies, even after the close of the official system demonstrations.

**Audit Response**

The concern was not substantiated. Both Offeror A and GDOTS were given specific dates and times for performing official system demonstrations. If they were unable or unwilling to perform the demonstration at the specific time, they were given 48 hours to correct the deficiency. Both Offeror A and GDOTS received deficiency notices for system demonstrations. Failure to perform a demonstration did not mean the offeror would fail the applicable subfactor. Rather, failing to perform a demonstration would result in a discussion item, which would explain the deficiency and how it would be resolved in the final proposal revision.

MCSC generated discussion items to notify Offeror A of a potential deficiency as part of demonstration testing of vertical transportability. Offeror A’s response to the discussion items included further proposal revisions that led to an “Acceptable” rating for the Offeror A vertical transportability subfactor.

GDOTS also had discussion items resulting from its vertical transportability demonstration. GDOTS had to change its internal transportability concept in its first final proposal revision. Because the revised transportability concept was different from the initial demonstration, GDOTS had to return to Patuxent River, Maryland, to demonstrate the new internal transportability approach. This led to an “Acceptable” rating for the GDOTS vertical transportability subfactor. We concluded that GDOTS did not receive preferential treatment.

**Mutuality Factor Evaluation**

Rae-Beck stated that both bidders’ proposals were rated “Good” by the SSEB for mutuality. Rae-Beck claimed Offeror A had no mutuality weaknesses but that the GDOTS offer lacked commonality between its proposed mortar and munitions and those used within DoD. Rae-Beck questioned how a GDOTS “Good” rating was achieved when the MCSC technical evaluation stated that Offeror A provided a significant benefit in commonality with Army ammunition, while stating the GDOTS proposal provided no benefit of commonality to the Marine Corps.

**Audit Response**

The concern was not substantiated. November 7, 2004, SSEB mutuality factor evaluation charts rated both competing proposals as “Purple-Good.” MCSC source selection personnel stated that the mutuality factor related to commonality of hardware items, specifications, management processes, and applications, and was not limited to commonality with Army programs and processes. A “Purple-Good” rating addressed mutuality across both the EFSS and ITV programs to provide good benefits to the Marine Corps.
Corps. The TEB Chairman stated that the GDOTS mortar used ammunition based on a NATO-certified French design and was domestically produced. Thus, MCSC did not deem mutuality of the GDOTS ammunition as a problem that would affect the evaluation. We concluded that the mutuality ratings for the two offerors were consistent with the evaluation.

**Evaluation of Safety and Survivability Subfactors**

Rae-Beck questioned the basis of the SSEB conclusion that the two offerors’ vehicles were deemed equal on safety and survivability subfactors. Rae-Beck noted that MCSC deemed Offerors A’s platform as enhancing the crew’s survivability.

**Audit Response**

The concern was not substantiated. The MCSC TEB Chairman stated that both vehicles were evaluated against performance specifications and found acceptable for safety. MCSC also noted that while Offeror A provided a proposal that contained interesting safety features, the features were not significant enough in the TEB’s assessment to raise the proposed approach to the next level of evaluation. Thus, the TEB November 7, 2004, technical factor ratings showed that both offerors were rated “Green-Acceptable” for the safety and survivability subfactors. We concluded that the ratings for the two subfactors were consistent with the evaluation criteria.

**Ammunition Certification Costs**

Rae-Beck noted that the November 7, 2004, SSAC minutes stated, “It was felt that Offeror B [GDOTS] would be higher cost to the Government for ammunition certification, but there was no acceptable way to quantify those costs accurately for this evaluation.” Rae-Beck questioned why the SSA subsequently removed approximately $18 million proposed for ammunition certification from the GDOTS final proposal.

**Audit Response**

The concern was not substantiated. The contracting officer stated that ammunition certification costs were not included in the solicitation as an evaluation element and the Government would separately pay for ammunition certification as a Government requirement. Neither GDOTS nor Offeror A proposed any ammunition certification costs. An MCSC cost analyst made a rough estimate of GDOTS ammunition certification costs at $18 million, and Offeror A’s ammunition certification costs at $1 million. The contracting officer noted that ammunition costs were considered a programmatic rather than a contractual cost and that estimating the certification cost for either offeror was uncertain because of multiple Government testing and certification variables. As a result, MCSC did not include the ammunition certification costs in the formal price and costs analysis and did not consider them in the Government price reasonableness comparison.

**Capabilities Development Document**

Rae-Beck stated that, during a January 2004 industry day, MCSC promised in response to numerous industry requests to post a draft CDD on its EFSS Web Site. The CDD was
not issued until November 2, 2004, one day before the November 3, 2004, deadline for proposal revisions. Rae-Beck questioned why MCSC held the final CDD until 5 days before the award decision, what changes and updates were made in the final CDD, and when such changes were made.

**Audit Response**

The concern was not substantiated. The CDD is used to support program initiation and provides the detailed operational performance parameters necessary to design the proposed system. However, the February 27, 2004, EFSS and ITV request for proposals used performance specifications to define system requirements. The CDD was not part of the request for proposals, but the draft CDD supported the preparation of the performance specifications. The EFSS and ITV contracting officer told us that the CDD belongs to the MCCDC and that he did not want to release a draft of the CDD to industry. The contracting offer also stated that the CDD was not available to MCSC until released by the MCCDC in final form on November 2, 2004, when MCSC posted it on its EFSS public Web Site.

MCSC and the MCCDC stated that draft versions of the CDD used to support the preparation of the draft and final request for proposals were no longer available. However, the KPPs and critical system requirements for the EFSS and ITV identified in the final CDD and final Operational Requirement Document were not materially changed from those in the request for proposals performance specification. Thus, we found no indication that the final CDD was materially changed before its November 2, 2004, release.

**August and October 2004 SSAC Evaluation Findings**

Rae-Beck questioned why the SSA did not award the contract to Offeror A based on the initial August 19, 2004, SSAC results chart, which rated the overall Offeror A technical proposal as “Green” and the GDOTS proposal as “Yellow.” Rae-Beck also questioned why the SSA did not award the contract to Offeror A after revised proposals were evaluated by the SSAC for technical capability on October 14, 2004. Rae-Beck stated that the October 2004 SSAC results showed that Offeror A had substantially exceeded thresholds with a cost almost 8 percent less than GDOTS’.

**Audit Response**

The concern was not substantiated. The August 19, 2004, SSAC results briefing recommended the SSA award the EFSS/ITV contract to Offeror A as the best value to the Government because Offeror A’s higher rated technical approach offset a lower price proposed by Offeror B (GDOTS). The SSA did not accept the August 2004 SSAC recommendation and directed the contracting officer to establish a competitive range and open discussions with Offeror A and GDOTS to address technical weaknesses and deficiencies and provide revised proposals. The SSA directed that Offeror C be excluded from the competitive range because of significantly higher proposed pricing, combined with a significantly lower and noncompetitive technical rating that would not likely improve with further discussions.
October 14, 2004, SSAC minutes did not recommend either offeror to the SSA for selection but noted that both offerors were considered equal for all technical evaluation factors, with cost being the only difference. The SSAC also noted concerns over lack of funding for the Light Armored Vehicle-Mortar, an all-terrain vehicle that provides indirect fire support to light infantry. As a result, the SSA directed the contracting officer to amend the solicitation to remove the Light Armored Vehicle-Mortar option because removal of the option would have a cost impact on both proposals. The SSA directed the contracting officer to reopen discussions with both offerors to address remaining perceived weaknesses in both offerors’ proposals. We concluded that the SSA acted within his authority as required by the FAR.

**Rae-Beck Comments Regarding MCSC Information Paper**

Rae-Beck made seven comments regarding the contents of a February 27, 2007, EFSS and ITV program information paper prepared by MCSC for the Marine Corps Commandant. Rae-Beck stated that the former MCSC Commander was the Milestone Decision Authority, had created the mutuality factor, had linked the EFSS and ITV programs in a single procurement, and had the final say on whether a contract would be awarded.

Rae-Beck was also concerned that the information paper indicated that the original schedule for the EFSS full-rate production decision (IOC) was late FY 2007, which was inconsistent with the CDD call for an IOC in FY 2006.

Rae-Beck implied that the former Commander of MCSC had a potential conflict of interest regarding the EFSS and ITV programs because he allegedly championed a particular mortar while Commander of the Marine Corps War Fighting Laboratory.

Rae-Beck also stated that a 2003 MSCS ITV feasibility study was performed under a contract with Jacobs-Sverdrup Corporation. Rae-Beck implied that American Growler Inc. had performed work on the Jacobs-Sverdrup contract and therefore had an unfair advantage in the EFSS and ITV contract.

Three other of the seven Rae-Beck comments dealt with August and October 2004 SSAC evaluation concerns noted above.

**Audit Response**

The former Commander, MCSC was the EFSS and ITV Milestone Decision Authority. The Deputy Commander, MCSC was the SSA for the EFSS and ITV. The SSA made the decision to adopt mutuality as an evaluation factor for this procurement at the direction of the Commander, MCSC. As a result, the MCSC request for proposals and source selection plans for the EFSS and ITV incorporated the mutuality approach and included mutuality as an evaluation factor along with technical capability, past performance, business management approach, and cost or price. See above for Rae-Beck questions and audit discussion of the mutuality factor evaluation process.
On November 10, 2004, the Milestone Decision Authority designated the EFSS and ITV as Acquisition Category III programs and approved their entry into Milestone Phase B, Systems Development and Demonstration. As described in finding A, the EFSS program schedule has slipped 22 months because of development problems. The initial 2004 CDD and the acquisition program baseline documents noted an IOC date in FY 2006. A May 29, 2008, EFSS acquisition program revision 3 called for an IOC objective date of June 2008 and a threshold date of December 2008. On June 2, 2008, the Milestone Decision Authority approved full-rate production of the EFSS.

The following concerns were not substantiated. On November 10, 2004, the MCSC contracting officer awarded contract M67854-05-D-6014 to GDOTS. An MCSC decision memorandum stated that the SSA determined that the GDOTS offer provided the best overall value to the Marine Corps. The SSA stated to us that he based the contract award on the information provided by the SSEB and was not influenced by the Milestone Decision Authority. On March 30, 2005, the Defense Hotline referred to the Marine Corps Inspector General a complaint alleging misconduct of the MCSC Commander during the source selection and contract award of the EFSS and ITV programs. An August 10, 2005, Marine Corps Inspector General report concluded there was no evidence that the MCSC Commander used his position to influence the source selection and contract award and that the allegations were not substantiated. On July 28, 2008, the Naval Criminal Investigative Service closed a subsequent investigation concluding that no evidence was revealed to support allegations that the former MCSC Commander influenced the EFSS/ITV award to GDOTS.

The following concerns were partially substantiated. On March 28, 2003, MCSC contracted through contract M67854-99-D-3011, task order 0073 with Jacob Sverdrup Technology, Inc., to perform an ITV requirements verification study. The objective of the study was to analyze the ITV joint operational requirements and determine the feasibility and risk of meeting requirements with representative commercial, off-the-shelf utility vehicles. The approach used three screening criteria: whether a vehicle was internally transportable in the MV-22 Osprey, whether it was diesel powered, and whether it was commercially available or a nondevelopmental item. Jacob Sverdrup was to perform the requirements analysis and limited vehicle testing on two representative commercial, off-the-shelf vehicles.

An undated ITV requirements verification study report prepared by Jacobs-Sverdrup identified potential commercial off-the-shelf or nondevelopmental item alternatives for the ITV requirement. The report stated that, while 33 vendors responded to the request for information, 2 would meet the criteria upon availability of a diesel option. Jacobs Sverdrup Technology, Inc. identified three vendors that did not respond to the request for information and were requested to provide information on their vehicles and their capabilities. American Growler, Inc. responded to the request for information, but the report stated the American Growler vehicle was too wide and thus did not meet the MV-22 Osprey internal transport criteria.

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1 M67854-99-D-3011, task order 0073, was valued at $1,035,901 through final modification 5 of July 10, 2003.
MCSC officials stated that Jacobs-Sverdrup performed limited vehicle testing during 2003 as part of the requirements verification study using two American Growler vehicles purchased from an American Growler subsidiary, Carolina Growler. MCSC officials stated that American Growler, Inc. was not involved in the testing and did not have access to the results of the testing. MCSC officials could not provide detailed documentation on the specifics of the Jacobs-Sverdrup testing and were unable to explain why the American Growler vehicle was selected for the limited vehicle testing when the American Growler vehicle did not meet the screening criteria stated in the requirements analysis.
Appendix D. Summary of Client Comments and Audit Response

General Client Comments on the Audit Report

Navy Comments
The Assistant Secretary of the Navy (Research, Development and Acquisition) commented that the Department of the Navy recognizes that the DoD Office of the Inspector General provides a much-needed service to the DoD and that differences in the interpretation of the FAR are part of the process in accomplishing these types of audits. The Assistant Secretary said he believed it was important for us to recognize and include the Marine Corps’ point of view regarding this report.

Our Response
We believe the report fairly presents FAR requirements regarding EFSS/ITV acquisition and contracting issues in findings A and B. We have fully considered Navy and Marine Corps comments in preparing this report. On August 29, 2008, we received extensive written comments from the Commander, MCSC on an August 22, 2008, discussion draft version of this report. We analyzed and fully considered the MCSC comments in preparing our September 25, 2008, draft report. We have fully considered further, extensive comments from the Commander, MCSC dated November 10, 2008—comments made under the cover of the November 14, 2008, Assistant Secretary of the Navy memorandum to us. Further, we believe the report fairly presents the Marine Corps’ disagreement with the findings. The disagreements and our response are elaborated in the following entries.

Marine Corps Comments
The Commander, MCSC, disagreed with both audit report findings, stating that it was evident the audit team did not consider all the facts provided by the EFSS program office and misapplied the relevant law, regulation, and policy. The Commander believed the report facts and findings were refuted in detail by MCSC in meetings with the audit team at the close of the review and that the findings were extrapolated from isolated facts rather than based on the totality of the information provided by MCSC.

The comments of the Commander, MCSC included a 69-page enclosure of detailed responses and source documentation relating to draft report findings. The Commander noted that the enclosure provided amplifying and clarifying information to assist the audit and asked that the information be reviewed, incorporated into our findings, and strongly considered in our final audit report.

Our Response
The Client Comments section of this report includes the November 14, 2008, memorandum from the Assistant Secretary of the Navy and the November 10, 2008,
comments of the MCSC Commander on the report findings and recommendations. We have not included the 69-page MCSC enclosure in this report because of its length and because the MCSC enclosure statements for the most part repeat what we considered during the audit. However, we do highlight and address the major client comments below. (In some cases in which the MCSC comments provided new information, we revised the report discussion as noted below.) The 69-page enclosure included source documents previously reviewed by the audit team and reiterated Marine Corps conclusions and opinions about the EFSS and ITV program management and contract award.

We strongly disagree with the MCSC Commander’s premise that the audit team did not consider all the facts provided by the EFSS program office or misapplied relevant law, regulation, or policy. Our audit and technical staff weighed all Marine Corps comments and information in crafting this final report, as reviewed by our Office of General Counsel for legal sufficiency. We disagree that MCSC meeting representations refuted report statements or that report findings were extrapolated from isolated facts.

**Client Comments on Finding A**

**Marine Corps Comments on EFSS and ITV Program Challenges and Accomplishments**

The Commander, MCSC stated the audit report should acknowledge the major challenges and accomplishments of the EFSS and ITV programs, including that the EFSS and ITV are the only systems certified for internal MV-22 Osprey transport and that EFSS is the first and only major caliber ammunition system to obtain Insensitive Munitions compliance certification.

**Our Response**

We agree that the EFSS and ITV programs have been certified by the Naval Air Systems Command for MV-22 Osprey internal transport and that the EFSS has been certified compliant by the Weapon System Explosive Safety Review Board. In addition, we have added information to the background and finding A to show the Marine Corps has corrected most EFSS and ITV technical problems as reflected in 2008 MCOTEA determinations that the systems are operationally effective and suitable and that the Milestone Decision Authority approved the full-rate production and fielding decision for the EFSS and ITV programs.

**Marine Corps Comments on EFSS and ITV System Development**

The Commander, MCSC stated that EFSS and ITV system development efforts integrated existing technology available on the commercial market and that the systems therefore constituted nondevelopmental items as defined by the FAR. The Commander stated the EFSS/ITV request for proposal required offerors to submit a production representative sample, not prototypes, and the proposed EFSS/ITV systems demonstrated at the time of source selection that they could meet the MV-22 transportability KPP. The
Commander also stated that the systems did not require major additional vehicle design development to meet MV-22 KPPs.

**Our Response**

We agree that many aspects of the EFSS and ITV systems are nondevelopmental items and so state in the report. However, the EFSS and ITV vehicles required major redesign (not minor modification) to meet KPPs. As noted in our report, the EFSS demonstration test report showed that no vehicle candidate met the vertical transportability KPP. The ITV Single Acquisition Management Plan stated the request for proposal required offerors to submit a production-representative sample vehicle. But because of the compressed nature of the solicitation, offerors submitted prototype vehicles that had to evolve to meet program requirements. By accepting those vehicles, the Government has assumed a degree of cost risk in ensuring that the EFSS and ITV systems can meet program requirements. Development problems were also acknowledged in a June 2007, low-rate initial production contract modification that stated many major subsystems still required continuous monitoring and critical analysis and that EFSS and ITV subsystem design changes posed significant challenges because of minimum size, weight, and center of gravity constraints mandated by the MV-22 Osprey transportability requirements.

**Marine Corps Comments on EFSS and ITV Milestone C Approval**

The Commander, MCSC disagreed with the report conclusion that the Milestone C decision should not have been approved. The Commander stated that, by May 2007, all EFSS and ITV KPPs and critical requirements had been successfully demonstrated, and MV-22 and CH-53 flight certifications had been approved. The Commander also stated that MCSC continues to work with the Defense Contract Management Agency and the contractor to address areas of manufacturing quality. He noted the EFSS and ITV programs now have stable designs and that changes can be made only following the configuration management process.

**Our Response**

The Marine Corps Milestone Decision Authority approved the entrance of the EFSS and ITV programs into the Production and Deployment (Milestone C) Phase before the systems had integrated subsystems, completed detailed design, reduced system-level risk, and demonstrated ability to operate within the approved KPPs. Because EFSS and ITV detailed design was not complete and the systems had not demonstrated acceptable performance in developmental test and evaluation, approval to enter Milestone C should not have been granted. Although MCOTEA had completed successful testing of all KPPs and critical requirements by May 2007, the testing occurred long after the June 2005 Milestone C approval. Naval Air Systems Command certification of EFSS and ITV for MV-22 and CH-53 internal transportability also occurred after the Milestone C approval. We agree that the EFSS and ITV now have achieved stable designs after completion of MCOTEA testing and the establishment of the product baselines. We modified the finding discussion to note that the Marine Corps has corrected most EFSS and ITV technical problems as reflected in 2008 MCOTEA determinations that the systems are operationally effective and suitable.
**Marine Corps Comments on EFSS and ITV Acquisition Program Baselines**

The Commander, MCSC stated that all Acquisition Program Baseline schedule and cost growth changes were submitted to and approved by the Milestone Decision Authority. The Commander noted that several EFSS/ITV costs, including contractor logistics support, EFSS follow-on test and evaluation, and new equipment training, were based on scope increases. The Commander also stated that the estimate for EFSS and ITV unit costs contained in the life-cycle cost estimates completed in December 2006 were still valid.

**Our Response**

We agree that the Milestone Decision Authority was aware of the status of the programs and approved changes to the Acquisition Program Baseline. However, the MCSC EFSS/ITV program office was not responsive to our requests for a breakdown of cost growth and scope increases. While we agree that operational assessment and follow-on test and evaluation costs could be viewed as scope increases, those costs also directly tie to in-scope work required to correct and verify design deficiencies. We indicated in the report that training on new equipment was a scope increase. We also agree that the December 2006 life-cycle cost estimate is still valid.

**Client Comments on Finding B**

**Marine Corps Comments on EFSS and ITV Technical Evaluations**

The Commander, MCSC disagreed with report statements that MCSC did not award the EFSS and ITV contract in accordance with the FAR and that MCSC source selection personnel did not adequately document and disclose all technical evaluation criteria in the solicitation. The Commander noted that all evaluation criteria and their relative importance were set forth in the solicitation and in the source selection plan in compliance with the FAR. The Commander also noted that the EFSS program was conducted in strict accord with applicable acquisition laws and regulations. The Commander stated that our report focused on the EFSS vehicle. He noted that the final procurement decision was reasonable and defensible and implied that we would have reached that conclusion had our audit recognized that the EFSS system was made up of a number of components, including the vehicle and the attached weapon. He also noted that the solicitation and underlying evaluation criteria required assessment of the total system. The Commander stated that the EFSS/ITV program’s cost growth and schedule slippage did not alter the reasonableness of the initial procurement decision. The Commander also stated that, although the program’s assessment of risk could be questioned, it was different to state that the contract had been awarded in violation of law.

**Our Response**

Our report does not state that the contract was awarded in violation of the law. We do state that MCSC did not award the EFSS and ITV contract in accordance with the FAR.
because EFSS/ITV solicitation evaluation criteria did not disclose that a performance specification did not rise to the level of a subfactor unless the specification was a KPP. Therefore, source selection personnel did not adequately document and disclose the importance of the performance specifications to the subfactors in the solicitation. The SSA should have ensured consistency among the solicitation requirements and evaluation factors and subfactors in accordance with FAR 15.303 to avoid a misunderstanding of the evaluation criteria among the contract offerors. In addition, the MCSC could produce only an unsigned business clearance memorandum that was incomplete and did not state that the Government received a fair and reasonable price. We do not agree that our report specifically focused on the EFSS vehicle at the expense of other EFSS/ITV system components. We reviewed the proposals, the underlying evaluation criteria, and source selection documents for the entire EFSS program, which included the vehicle and all components of the weapon system. Our analysis of the initial procurement decision was independent and did not take into consideration the subsequent EFSS/ITV program cost growth and schedule slippage.

**Marine Corps Comments on Unbalanced Pricing**

The Commander, MCSC disagreed with draft report statements that MCSC source selection personnel did not adjust or eliminate the GDOTS offer for an apparent underbid and unbalanced pricing on the ITV portion of the contract. The Commander noted that, in accordance with the FAR, cost realism analysis may be used in performance risk assessments and responsibility determinations, but that offered prices should not be adjusted by the Government as a result of the analysis.

**Our Response**

Based on the MCSC comments, our Office of General Counsel performed further legal analysis of FAR requirements and applicable case law regarding unbalanced pricing. As a result, we deleted from the final report statements regarding the apparent underbid and potential unbalanced pricing.

**Client Comments on Appendix C**

**Marine Corps Comments on Audit Response to Rae-Beck**

The Commander, MCSC, stated the July 16, 2007, Rae-Beck letter contained allegations, questions, and observations. The Commander believed that our audit response merely verified facts involved in the program and did not substantiate Rae-Beck allegations. The Commander stated that it was the SSA who made the decision to adopt “mutuality” as an evaluation factor for this procurement. The Commander also disagreed with our statement that American Growler did not meet screening criteria listed in the requirements analysis and noted that the Jacob Sverdrup purchase of two vehicles for testing was from Carolina Growler, not American Growler, Inc.
**Our Response**

We revised the final report Audit Response to the Rae-Beck comments regarding the MCSC information paper to eliminate confusion between our analysis of the Rae-Beck concerns and statements of fact. We amended the report to state the SSA made the decision to adopt mutuality as an evaluation factor for this procurement at the direction of the Commander, MCSC. We also noted the Jacobs-Sverdrup vehicle purchase was from the American Growler subsidiary, Carolina Growler. In discussions with the audit team about the purchase and testing of the two test vehicles, MCSC personnel used the terms Carolina Growler and American Growler interchangeably. As stated in our report, the ITV Requirements Analysis Report noted that the American Growler vehicles did not meet the screening criteria in the requirements analysis. MCSC was unable to provide documentation or an explanation as to why the American Growler vehicles were chosen for the limited vehicle test.
MEMORANDUM FOR DEPARTMENT OF DEFENSE ASSISTANT INSPECTOR GENERAL FOR AUDITING


The Department of the Navy (DON) has reviewed the DoDIG Draft Report D2008-D000AB-0091.000 and concurs with all of the DoDIG’s recommendations except the recommendation relating to the life-cycle cost estimates, with which we partially concur. We believe life-cycle cost estimates were prepared for the EFSS and ITV programs Production and Deployment decisions. The list of recommendations and DON responses, along with general comments, is provided in the attachment.

The DON recognizes the DoDIG provides a much needed service to the DoD and that differences of opinion over the interpretation of the Federal Acquisition Regulation are part of the process in accomplishing these types of audits. I believe it is important to recognize the USMC’s point of view regarding this DoDIG Report and request it be included in the final report.

Sean J. Stackley

Attachments:
As stated
1. We have thoroughly reviewed the draft audit report and although we partially concur with the recommendations, we disagree with the findings. It is evident to us that the audit team did not consider all the facts provided by the EFSS Program and misapplied the relevant law, regulation and policy. What remains is the extrapolation of specific findings from isolated facts rather than a considered report which weighs the totality of the information provided. The audit team included in the report facts and findings which were refuted in detail in meetings held at the close of the investigation.

2. The enclosure provides specific and detailed responses to the draft DoDIG audit findings. These responses provide amplifying and clarifying information to assist the DoD IG. The EFSS Program was conducted strictly in accordance with the applicable acquisition law and regulation. Absent from the audit report was the recognition that the EFSS was a system made up of a number of components including the vehicle and weapon. It is understandable that the report focused on the vehicle aspect of the program since the initial complaint arose from an unsuccessful subcontractor responsible for designing and manufacturing the vehicle, but the request for proposals and underlying evaluation criteria required assessment of the total system. In that context, the final procurement decision is reasonable and defensible. The fact that the program experienced cost growth and schedule slip thereafter does not alter that conclusion. In retrospect, we can question the program’s assessment of risk; that is very different from finding that the EFSS contract was awarded in violation of law.
Subj: DoDIG DRAFT AUDIT RESPONSE

3. I hope that this information will be reviewed, incorporated into your findings, and strongly considered in your final audit report of the EFSS-ITV program.

M. M. Berger
Commander
Marine Corps Systems Command

Copy to:
ASN (RDA)
CMC (P&R)
MCSC (DFM)
1. The Marine Corps has reviewed the draft report and the following comments are provided:

**Recommendation A.1.** DODIG recommends the Commander, Marine Corps Systems Command require the Expeditionary Fire Support System and Internally Transportable Vehicle Program Manager to perform new physical configuration audits and production readiness reviews on the Expeditionary Fire Support System and the Internally Transportable Vehicle before awarding a full-rate production contract modification.

*Marine Corps Response:* Concur. The Program Office completed Production Readiness Reviews and Production Configuration Audits on 30 September 2008 with very positive results. All changes have been incorporated utilizing the Configuration Management Process and all EFSS and ITV systems will be in line with the current configuration prior to fielding.

**Recommendation A.2.** DODIG recommends the Commander, Marine Corps Systems Command require the Expeditionary Fire Support System and Internally Transportable Vehicle Program Manager to complete new life-cycle cost estimates for both the Expeditionary Fire Support System and Internally Transportable Vehicle programs before awarding a full-rate production contract modification.

*Marine Corps Response:* Partially concur. An EFSS and ITV life-cycle cost estimate was prepared for each program’s Production and Deployment decisions. We agree to update the ITV portion of the life cycle cost estimate prior to entering into the Sustainment Phase of Acquisition. The remainder of the life cycle cost estimate appears to be valid, but we will review and update it if necessary.

**Recommendation A.3.** DODIG recommends the Commander, Marine Corps Systems Command require the Expeditionary Fire Support System and Internally Transportable Vehicle Program Manager to ensure that full-rate production contract modifications are definitized at the time of issuance.

*Marine Corps Response:* Concur. There are no open undefinitized contractual actions (UCA) for the EFSS or ITV systems and no plans to award any UCAs for future production.
Recommendation A.4. DODIG recommends the Commander, Marine Corps Systems Command require the Expeditionary Fire Support System and Internally Transportable Vehicle Program Manager to modify Expeditionary Fire Support System and Internally Transportable Vehicle systems already produced to the most current configuration before fielding them.

Marine Corps Response: Concur. We are upgrading the EFSS and ITV to the current configuration. The upgrades will be completed prior to fielding.

Recommendation B.1. DODIG recommends the Commander, Marine Corps Systems Command train contracting officers to ensure their familiarity with their authority and responsibilities as set forth in Federal Acquisition Regulation 1.602-2, "Contracting Officer Responsibilities."

Marine Corps Response: Concur. MCSC Command appoints contracting officers only after a rigorous review process to ensure trained qualified individuals are vested with the right level of authority after demonstrating the ability to execute sound business judgment and uphold the requirements of the regulations and policies of the Government, Department of Defense, and the Navy/Marine Corps.

Recommendation B.2. DODIG recommends the Commander, Marine Corps Systems Command perform an administrative accountability review regarding the contracting official's performance in awarding the Expeditionary Fire Support System and Internally Transportable Vehicle contract, and consider appropriate remedial action.

Marine Corps Response: Concur. After a review of the facts leading to the lack of a documented BCM/price negotiation memorandum, we do not believe there is evidence of any deliberate avoidance of the pertinent regulations by our contracting staff. There was a breakdown in administrative record keeping. The current Assistant Commander for Contracts (AC/CT) has taken actions that should preclude a repeat of these events by: 1) ensuring adequate workspaces to include file cabinets are provided for all contracting personnel at MCSC; 2) ensuring that all workstations leased via the NMCI contract are controlled by the AC/CT rather than being provided by the supported program offices in order to prevent the potential loss of contracting information from transferring workstations to other personnel within the supporting programs; 3) recording the review and approval of contracts support documents with the

Enclosure (1)
Contracts Directorate and, 4) providing computer hard drives and training on backing up critical data files to prevent the inadvertent loss of critical files and data resulting from workstation failures. Additionally, we recognize the importance of and responsibility to maintain proper records as specified in the FAR. We will ensure that the current contracting team supporting the EFSS/ITV program provides training in a lessons learned or similar format with the rest of the contracting competency to ensure that our entire Command is made aware of the potential consequences of poor record keeping.

2. The following Marine Corps comments, imbedded within the draft report, are provided for consideration: