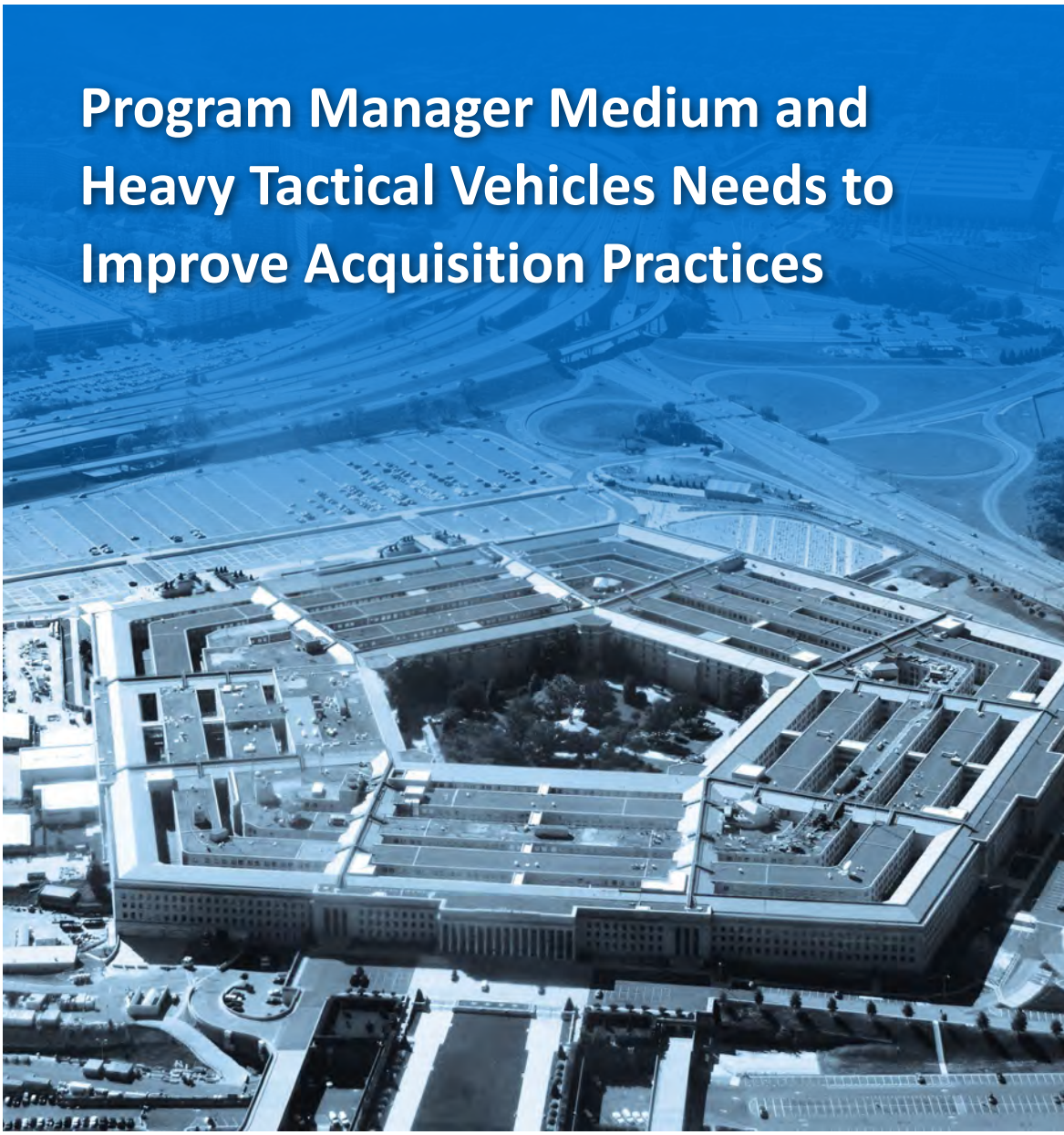
Report No. DODIG-2015-116

Inspector General

U.S. Department of Defense

MAY 5, 2015

Program Manager Medium and Heavy Tactical Vehicles Needs to Improve Acquisition Practices



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Results in Brief

Program Manager Medium and Heavy Tactical Vehicles Needs to Improve Acquisition Practices

May 5, 2015

Objective

The objective was to assess the propriety of allegations made to the Defense Hotline concerning acquisition practices at Program Executive Office Land Systems; Program Management Office, Medium and Heavy Tactical Vehicles. Specifically, we determined whether Command followed proper procedures for urgent acquisitions of the Automatic Fire Extinguishing Systems for the Medium Tactical Vehicle Replacement. We also assessed whether funding was based on well-defined and validated requirements. This is the second of two audits that addressed the acquisition practices in the Program Manager Medium and Heavy Tactical Vehicles (PM MHTV) office.

Findings

Of four allegations made to the Defense Hotline, we substantiated one, partially substantiated one, and did not substantiate two allegations. Specifically, we:

- substantiated that the PM MHTV office requested funding for unknown, future engineering change proposals;
- did not substantiate that the PM MHTV initiated acquisitions before there was a documented and validated requirement;
- partially substantiated the PM MHTV did not fully document acquisition decisions; or make sure they were made by the proper authority;
- did not substantiate that the PM MHTV committed to equipment solutions without considering life-cycle costs or other alternative solutions.

Findings (cont'd)

The PM MHTV plans to buy an additional 3,500 Automatic Fire Extinguishing System (AFES) units for the Medium Tactical Vehicle Replacement, at an estimated cost of $24 million, on a sole-source contract that was not justified. Also, the PM MHTV provided the milestone decision authority inaccurate and incomplete information to determine the system's suitability as an abbreviated acquisition program and its readiness to enter production. As a result, any cost reductions that could be achieved through competition for 3,500 additional units will be lost. In addition, there was no assurance that the Government will receive the best value.

Recommendations

We recommend the:

- Program Manager, Medium and Heavy Tactical Vehicles develop and implement procedures that document the process used to define, validate, fund, and execute requirements; provide documentation that the 3,500 additional AFES units will be purchased using full and open competition; and provide the milestone decision authority with the results of the live-fire testing before requesting approval to procure additional AFES units.
- Assistant Commander for Contracts, Marine Corps Systems Command, provide additional training to contracting staff that emphasizes the Federal Acquisition Regulations for determining price reasonableness and documenting those decisions in the contract files.

Management Comments and Our Response

Program Executive Officer Land Systems, Marine Corps agreed with Recommendations A.1, A.2, B.1, and B.3. Although Program Executive Officer disagreed with Recommendation B.2, proposed actions meet the intent of the recommendation and no further comments are required. Please see the Recommendations Table on the back of this page.

Recommendations Table

Management	Recommendations Requiring Comment	No Additional Comments Required
Program Manager, Medium and Heavy Tactical Vehicles		A.1, and B.1, B.2, and B.3.
Assistant Commander for Contracts, Marine Corps Systems Command		A.2.

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

May 5, 2015

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS
NAVAL INSPECTOR GENERAL

SUBJECT: Program Manager Medium and Heavy Tactical Vehicles Needs to Improve Acquisition Practices (Report No. DODIG-2015-116)

We are providing this report for your information and use. This audit is the second of two audits conducted in response to allegations made to the Defense Hotline about acquisition practices in the office for the Program Manager Medium and Heavy Tactical Vehicles (PM MHTV). We substantiated the allegation that the PM MHTV requested funding for unknown, future engineering change proposals. We did not substantiate allegations that PM MHTV initiated acquisitions before there was a documented and validated requirement. We partially substantiated the PM MHTV did not fully document acquisition decisions or make sure they were made by the proper authority. We did not substantiate PM MHTV committed to equipment solutions without considering life-cycle costs or other alternative solutions. We also found the PM MHTV plans to procure 3,500 additional Automatic Fire Extinguishing System units on a sole-source contract that did not meet one responsible source criteria and was based on inaccurate and incomplete information presented to the milestone decision authority. We conducted this audit in accordance with generally accepted government auditing standards.

We considered comments when preparing the final report. Comments from the Program Executive Officer Land Systems Marine Corps, responding for the PM MHTV and the Assistant Commander for Contracts, Marine Corps Systems Command, conformed to the requirements of DoD Directive 7650.3; therefore, we do not require additional comments.

We appreciate the courtesies extended to the staff. Please direct questions to me at (703) 604-9077 (DSN 664-9077).

Jacqueline L. Wicecarver
Jacqueline L. Wicecarver
Assistant Inspector General
Acquisition, Parts, and Inventory

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INSPECTOR GENERAL

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Introduction

Objective

The objective was to assess the propriety of allegations made to the Defense Hotline concerning acquisition practices at Program Executive Office Land Systems; Program Management Office, Medium and Heavy Tactical Vehicles. Specifically, we determined whether Command followed proper procedures for urgent acquisitions of the Automatic Fire Extinguishing Systems for the Medium Tactical Vehicle Replacement. We also assessed whether funding was based on well-defined and validated requirements.

This audit discusses allegations made to the Defense Hotline that Program Manager Medium and Heavy Tactical Vehicles (PM MHTV):

- requested funding for unknown future engineering change proposals;
- initiated acquisitions without a documented and validated requirement;
- did not document acquisition decisions or that the proper authority made those decisions; and
- committed to equipment solutions without considering life-cycle costs or nonmaterial solutions[1] as alternative solutions.

This is a second of two audits conducted in response to allegations made to the Defense Hotline about acquisition practices in the office for the Program Manager Medium and Heavy Tactical Vehicles (PM MHTV). The first report[2] addressed environmental, safety, occupational and health problems associated with the acquisitions of the Automatic Fire Extinguishing System (AFES)[3] for the Medium Tactical Vehicle Replacement (MTVR). See Appendix A for a discussion of the scope and methodology and prior coverage.

Background

Program Executive Officer Land Systems Marine Corps

Program Executive Officer Land Systems (PEO LS) is located at Marine Corps Base Quantico, Virginia. PEO LS reports to the Assistant Secretary of the Navy for Research, Development and Acquisition and manages a portfolio valued at approximately $9 billion.

[1] Nonmaterial solutions include making changes to doctrine, organization, training, leadership and education, personnel, or facilities training to fulfill the stated requirement.

[2] DoD IG Report No. DODIG-2014-120, "Acquisition Practices Used at United States Marine Corps Program Executive Officer Land Systems: Program Manager Medium and Heavy Tactical Vehicles," September 22, 2014.

[3] AFES is an automatic system which extinguishes fires that enter into the crew compartment of the MTVR.

Program Manager Medium and Heavy Tactical Vehicle

The PM MHTV office is a component of PEO LS. The PM MHTV portfolio contains two tactical vehicle system programs; the MTVR, and the Logistics Vehicle System Replacement (LVSR), which are the focus of this report.

MTVR is a family of vehicles[4] that perform a growing variety of logistics and tactical functions. The vehicles were fielded in 2001 as replacements for the obsolete M813 series, M923 series, and M925 series vehicles. MTVR variants include:

- standard and extended wheel-base cargo trucks;
- dump trucks;
- tractors;
- wreckers (tow trucks); and
- high mobility, artillery-rocket-system resupply trucks.

The LVSR system serves as the "heavy logistics" counterpart to MTVR. LVSR replaces the Marine Corps' aging Logistics Vehicle System, which combined the MK 48/MK 48A1 front power unit with associated rear body units to transport large quantities of supplies around the battlefield. The LVSR includes three variants:

- MKR 18 Cargo;
- MKR 16 Tractor; and
- MKR 15 Wrecker.

The Oshkosh Corporation manufactures the MTVR and the LVSR.

Review of Internal Controls

DoD Instruction 5010.40, "Managers' Internal Control Program Procedures," May 30, 2013, requires DoD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls. We identified internal control weaknesses in PM MHTV implementing appropriate federal regulations and guidelines while managing contracts. We will provide a copy of the report to the senior official responsible for internal controls in the Department of the Navy.

[4] About half of these vehicles are armored.

Finding A

Defense Hotline Allegations

The Defense Hotline received a complaint about acquisition practices at the Program Executive Officer Land Systems (PEO LS): Program Manager, Medium and Heavy Tactical Vehicles (PM MHTV). After reviewing the four allegations made to the Defense Hotline, we substantiated one, partially substantiated one, and did not substantiate two. Specifically, we:

- substantiated that PM MHTV requested funding for unknown future engineering change proposals;
- did not substantiate that PM MHTV initiated acquisitions before there was a documented and validated requirement;
- partially substantiated that PM MHTV did not fully document acquisition decisions or make sure they were made by the proper authority; and
- did not substantiate that PM MHTV committed to equipment solutions without considering life-cycle costs or other alternative solutions.

Funding Requested For Unknown Future Engineering Change Proposals

We substantiated the hotline allegation that PM MHTV requested funding for future engineering change proposals[5] before a specific system alteration was identified. The complainant alleged PM MHTV requested funding for unknown future requirements in the budget submission. He characterized the requests as broad in nature so that funds received could be applied to unknown future requirements. The complainant also alleged that this practice resulted in unspent money and low execution rates. PM MHTV stated they used a 3-percent factor of MTVR and LVSR lifecycle costs to estimate future change orders in their budget request. We verified with the Army that this was an accepted estimating practice across the tactical vehicle community when preparing budget estimates. Cost analysts from Program Executive Office Combat Support and Combat Service Support stated the 3-percent factor was a best practice and Independent DoD and Army cost estimators had verified and approved the reliability and accuracy of the

[5] An engineering change order or proposal includes the costs of official alterations made to a system while it is still in the manufacturing process.

methodology. We found no evidence that PM MHTV requested excessive funding for MTVR and LVSR engineering change orders in FY 2012 and FY 2013; however, PM MHTV could not provide all requested supporting documentation. PM MHTV stated the incomplete or missing documentation was because the data had been lost or destroyed as a result of personnel turnover.

Acquisitions Initiated Based on Valid Requirements

We did not substantiate the allegation that PM MHTV initiated acquisitions before there was a documented and validated requirement. The complainant alleged the work performed on the MTVR vehicles was a modification. The complainant also alleged the work must be treated as a separate program with its own acquisition category or abbreviated acquisition program designation because the program was inactive. The complainant incorrectly interpreted the memorandum from the Under Secretary of Defense for Acquisition, Technology, and Logistics designating the MTVR as an Acquisition Category IC program and designating the MTVR program as inactive. Furthermore, the complainant incorrectly applied guidance from the Secretary of the Navy Instruction (SECNAVINST) 5000.2E[6] instead of SECNAVINST 5000.2C for modifications to the MTVR. As a result, the complainant incorrectly concluded that the work performed should have been treated as separate programs with their own acquisition category or abbreviated acquisition program designation.

The complainant relied on SECNAVINST 5000.2E to establish the definition of a "modification" as:

> Any configuration change to a produced configuration item regardless of cost or test requirements, [for example], engineering change proposals, pre-planned product improvements, upgrades, or technology enhancements.

SECNAVINST 5000.2E[7] defines an inactive program as one that is 90 percent complete in its deliveries or has expended 90 percent of its total program cost. The Instruction also states that a modification to an inactive acquisition category program should be treated as a separate program with its own assigned acquisition category or abbreviated acquisition program designation.

[6] SECNAVINST 5000.2E, "Department of Navy Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System," September 1, 2011.

[7] The specific paragraph within the SECNAVINST is 1.5.5, "Modifications."

The complainant supported that the MTVR program was inactive by providing an Under Secretary memorandum dated February 25, 2008, to the Navy Acquisition Executive. The memorandum designated the MTVR as an Acquisition Category IC program because it would exceed funding thresholds due to new wartime requirements.[8] The memorandum also stated that because the program was over 90 percent complete in regards to deliveries, selected acquisition reporting was not required.

The complainant also stated that the modifications to the MTVR were inappropriate based on funding levels. The complainant relied on SECNAVINST 5000.2E,[9] which states that abbreviated acquisition programs must not be initiated without a valid and documented requirement. However, SECNAVINST 5000.2E was not issued when the Under Secretary issued the memorandum on February 25, 2008. SECNAVINST 5000.2C, (November 19, 2004)[10] was in effect with different and less stringent rules. Specifically, the guidance provided under SECNAVINST 5000.2C stated that a program was no longer considered active once it ceased production.

We determined the MTVR program would not exceed 90 percent of its total deliveries until it delivered 144 vehicles. On February 15, 2013, PEO LS sent a memorandum to the Assistant Secretary of the Navy for Research, Development and Acquisition, to request removal of the MTVR program from the active acquisition category listing because the program had delivered over 90 percent of its total quantity in accordance with SECNAVINST 5000.2E.

Acquisition Decisions Properly Authorized

We partially substantiated the allegation that PM MHTV did not document acquisition decisions or that the proper authority made those decisions. We reviewed documentation for engineering change proposals that were for vehicle safety modifications and determined that the program manager had the authority to initiate modifications necessary for crew safety. Specifically, Military Handbook 61A[11] permits a modification to an acquisition program when the modification is not an increased capability but rather for survivability or a safety modification.

[8] The MTVR was previously an Acquisition Category II program with a procurement funding ceiling of $2.19 billion.

[9] The specific paragraph within the SECNAVINST is 1.4.6.1, "Weapon System and Information Technology (IT) System AAP Procedures."

[10] SECNAVINST 5000.2C, "Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System," November 19, 2004.

[11] Military Handbook 61A, "Configuration Management Guidance," February 7, 2001.

For example, safety modifications to the front axle of the MTVR were properly authorized at the program manager level. These modifications to the MTVR fleet were necessary to make the vehicle compliant with Federal motor vehicle safety standards, following engineering changes that added armor shielding to the vehicle. Because of the increased weight of the armor, the front axle of the MTVR could collapse, which could have jeopardized the safety of the crew and other motorists near the vehicle.

We concluded that the PM MHTV office had documentation to support a problem existed and the decisions made to fix the problem. We did not find evidence of improper authorization for the engineering change proposals we reviewed; however, we did find a lack of contract documentation for price reasonableness determinations.

We identified that the contracting officer did not document price reasonableness determinations for 9 of the 11 tasks awarded during FY 2013. The contracting officer provided three unsigned draft business clearance memorandums (BCMs). Contracting officers prepare a BCM to document the basis for approval of the action, and the basis for determining that the negotiated prices are fair and reasonable. Although the contracting officer awarded the three delivery orders, totaling $8.46 million, without a signed BCM, the Assistant Program Manager, Contracts, took corrective actions during our audit and signed the three BCMs. The contracting officer could not provide documentation of price reasonableness determinations for the remaining six tasks after multiple requests. Federal Acquisition Regulation requires contracting officers to purchase supplies and services from responsible sources at fair and reasonable prices.[12] The Federal Acquisition Regulation also requires the contracting officer to document the negotiated agreement in the contract file.[13] For example, the price negotiation memorandum must include documentation of fair and reasonable pricing. Navy Marine Corps Acquisition Regulation Supplement states that when a BCM is required, it must be completed before entering into contracts.[14] Generally, all significant contracting actions should be subject to some form of review before award.

[12] Federal Acquisition Regulation 15.402 – "Pricing Policy"

[13] Federal Acquisition Regulation 15.406-3 – "Documenting the Negotiation"

[14] Navy and Marine Corps Acquisition Regulation Supplement 5201.690 – "Requirements to be met before entering into contracts"

Program Management Office Considered Life-Cycle Costs or Other Alternatives

We did not substantiate the allegation the PM MHTV committed to equipment solutions without considering life-cycle costs or non-materiel solutions as alternatives. We reviewed budget documents[15] for the President's Budget 2013 which states:

> The MTVR Modification program line funds numerous and very important modifications and initiatives that are required to address operational priorities, engineering change proposals, safety concerns, support equipment inefficiencies, tool malfunctions, product quality deficiencies, beneficial suggestions and other issues that affect vehicle reliability, availability, maintainability and readiness. A proactive and focused approach ensures proper vehicle sustainment and life-cycle management and it allows the program office the flexibility to develop and implement improvements as needed to respond to the evolving needs of the Marine Corps.

The PM MHTV received $1.4 million in Research, Development, Test, and Evaluation funding[16] for FY 2012 and $2.5 million for FY 2013. PM MHTV requested the funds in support of:

- Engineering Change Proposal (ECP) Development;
- Integration;
- Safety Initiatives;
- Energy Efficiency; and
- Test and Evaluation for:
  - Modeling and Simulation;
  - Component Upgrade Prototyping Testing;
  - Operational Testing; and
  - Live Fire Testing.

We reviewed several ECPs for the MTVR program during our fieldwork. The program office initiated most ECPs to conduct feasibility studies or fix a problem with the MTVR. The resulting deliverable from the feasibility study was a proposal for how to solve the existing problem.

[15] Specifically, we reviewed Exhibit R-2A, Research, Development, Test and Evaluation Project Justification.

[16] Research, Development, Test, and Evaluation funding has 2-year availability for obligation.

We concluded that the PM MHTV considered life-cycle costs or nonmaterial solutions before committing to equipment solutions. PM MHTV requested funding to conduct feasibility studies during ECP development, modeling and simulation, prototype, and operational and live-fire testing activities. Those studies gave PM MHTV an opportunity to consider life-cycle costs and alternative solutions before it modified an existing program.

Conclusion

We substantiated the allegation that PM MHTV requested funding for unknown future engineering change proposals. We partially substantiated the allegation that PM MHTV did not document acquisition decisions or that the proper authority made those decisions after determining that the contracting officer could not provide documentation of price reasonableness determinations for six tasks after multiple requests.

We did not substantiate the allegations the PM MHTV:

- initiated acquisitions before there was a documented and validated requirement; or
- committed to equipment solutions without considering life-cycle costs or other alternative solutions.

Recommendations, Management Comments, and Our Responses

Recommendation A.1

We recommend the Program Manager Medium and Heavy Tactical Vehicles develop and implement procedures that document its process to define, validate, fund, and execute requirements.

United States Marine Corps Comments

The Program Executive Officer Land Systems Marine Corps, responding for PM MHTV, agreed, stating that in December 2014, PM MHTV formally established a process to identify and document internal business processes and procedures. These processes include the Program Objective Memorandum and Purchase Request procedures and will incorporate all appropriate Marine Corps Orders and Marine Corps System Command Letters of Instruction. The Program Executive Officer anticipates processes and procedures will be documented and implemented by December 2015.

Our Response

The Program Executive Officer addressed the specifics of the recommendation, and no further comments are required.

Recommendation A.2

We recommend the Assistant Commander for Contracts, Marine Corps Systems Command provide additional training to contracting staff that emphasizes the Federal Acquisition Regulations for determining price reasonableness and documenting those decisions in the contract files.

United States Marine Corps Comments

The Program Executive Officer Land Systems Marine Corps, responding for the Assistant Commander for Contracts, Marine Corps Systems Command, agreed, stating that the Assistant Commander for Contracts implemented a Kapstone Training curriculum in 2010, which is mandatory for all contracting personnel. The Contracts Competency Manager is currently developing a course titled "Contracts Documentation–Part B" with a pilot class expected no later than May 2015. The course will address the determination and documentation of price reasonableness within the Business Clearance Memorandum. Course participants will also receive training in Marine Corps Systems Command Contracts Policy Letter 14-02, "Contract File Checklist Policy," dated 25 September 2014 with an emphasis on maintaining complete files with signed and approved documentation.

Our Response

The Program Executive Officer addressed the specifics of the recommendation, and no further comments are required.

Finding B

Program Office Plans to Buy Additional Automatic Fire Extinguishing Systems as Sole Source

PM MHTV plans to buy 3,500 additional Automatic Fire Extinguishing System (AFES) units[17] for MTVR, at an estimated cost of $24 million, on a sole-source contract that was not justified.[18] The AFES units are based on a commercial FM-200 agent fire suppression system available from multiple vendors. In addition, the Marine Corps did not consider working directly with a subcontractor when planning to procure additional AFES units. The PM MHTV provided, and the milestone decision authority relied on, inaccurate and incomplete information to determine the system's suitability as an abbreviated acquisition program and its readiness to enter production.

These conditions occurred because PM MHTV officials wanted to procure the same AFES system previously procured to fulfill an urgent need for 926 MTVRs in Afghanistan to maintain commonality within the fleet. As a result, any cost reductions that could be achieved through competition for 3,500 additional units will be lost, and there was no assurance that the Government will receive the best value.

[17] AFES is an automatic system which extinguishes fires that enter into the crew compartment of the MTVR.

[18] Federal Acquisition Regulation, Subsection 6.302-1 defines circumstances permitting other than full and open competition when only one responsible source and no other supplies or services will satisfy agency requirements.

Improper Use of Justification and Approval for the Planned Procurement of Additional Automatic Fire Extinguishing Systems

The justification and approval did not support the need for additional AFES units

The PM MHTV planned to procure 3,500 additional AFES units using an improper justification on a sole-source MTVR production contract from the prime contractor, Oshkosh Corporation. The justification and approval did not support the need for additional AFES units or why there was only one responsible source for the production of AFES units.

PM MHTV officials stated that they planned to procure the AFES units from Oshkosh to maintain commonality between vehicles. In 2011, the PM MHTV purchased 926 AFES units from Oshkosh to fulfill

an urgent need. The 926 units were purchased under a sole-source contract which was justified based on an urgent and compelling need. There was no justification for procuring additional AFES units under a sole-source contract.

Commercially Available AFES Units

PM MHTV plans to buy 3,500 AFES units under the MTVR sole-source contract. AFES units are based on a commercial FM-200 agent fire suppression system available from multiple vendors. The prime contractor's proposal for the additional AFES units showed subcontractors performing more than 70 percent of the total cost of work under contract. Section 802 of the FY 2013 National Defense Authorization Act states the Government must determine whether to work through the primary contractor or directly with a subcontractor. The Government is encouraged to work directly with subcontractors if they are performing more than 70 percent of the total cost of work under contract. Although this law has yet to become official guidance or regulation, the PM MHTV should consider working directly with subcontractors responsible for a significant percentage of the cost of work. Doing so when the subcontractor is responsible for a significant percentage of the cost to perform the work will help to make sure the Government is receiving the best value. An unsigned November 2013 acquisition strategy for additional AFES units did not consider working directly with a subcontractor.

Milestone Decision Authority Follow-on Procurement Decision Based on Inaccurate and Incomplete Information

The milestone decision authority relied on inaccurate and incomplete information to determine the suitability of AFES as an abbreviated acquisition program and its readiness to enter production. PM MHTV prepared the Acquisition Category Program Designation Request for the AFES requirement, stating that AFES passed crew protection requirements with the initial procurement of AFES units.

The milestone decision authority relied on inaccurate and incomplete information to determine the suitability of AFES as an abbreviated acquisition program and its readiness to enter production.

However, several risks were identified during the initial procurement of AFES units from unmet crew protection requirements that were not included in the program designation request presented to the Milestone Decision Authority. These risks could result in a warfighter's disability, serious injury, or occupational illness

if AFES was used to extinguish a fire within the vehicle. In addition, support for the follow-on AFES procurement states that the Navy/Marine Corps Public Health Command and the Army Public Health Command analyzed and approved live-fire test results associated with the initial systems purchased.

The Navy/Marine Corps Public Health Command and the Army Public Health Command provided analyses for the live-fire testing; however, they did not approve the live-fire test results. In fact, the Navy/Marine Corps Public Health Command identified several medium to serious risks with carbon monoxide, acid gases, nitric oxide, discharge noise, and skin burn. Further, the Navy/Marine Corps Public Health Command did not consider the data provided to be reliable for a Stage I AFES assessment and elected to defer recommendations until a review of the full AFES system (including Stage II) was performed.

Also, the Army Public Health Command recommended "Marginal" hazard severity levels with low oxygen concentrations for several fireball-related test events and a "catastrophic" hazard severity level of toxic gases in test events related to threats from homemade fuel-based grenades (referred to as Molotov cocktails). For more details see DoDIG Report No. DoDIG-2014-120.

Conclusion

PM MHTV did not have a valid justification to buy 3,500 additional AFES units on a sole-source contract. Furthermore, the unsigned November 2013 acquisition strategy, did not consider working directly with subcontractors who were responsible for a significant percentage of the cost of the work. The acquisition strategy should require the contracting officer for any future AFES buys to determine whether the Government receives the best value buying from the prime contractor or directly from the subcontractor. As a result of DoDIG Report 2014-120, PM MHTV now plans to use full and open competition to buy any future AFES units.

In addition, the PM MHTV did not make the milestone decision authority aware of all information regarding identified safety risks from unmet crew protection requirements with the initial procurement of AFES units. The milestone decision authority should have been notified of all information related to safety risks associated with AFES when determining whether it was ready to become an abbreviated acquisition program and enter production. For any future AFES buys, the milestone decision authority needs to be informed of all risks and unmet requirements associated with the system before granting approval to start production of the system.

United States Marine Corps Comments on Finding B and Our Response

The Program Manager Medium and Heavy Tactical Vehicles provided technical comments on Finding B. A summary of the program manager's comments along with our response is in Appendix B.

Recommendations, Management Comments, and Our Responses

Recommendation B

We recommend that the Program Manager, Medium and Heavy Tactical Vehicles:

1. **Provide documentation showing that full and open competition is planned to buy future Automatic Fire Extinguishing Systems for the Medium Tactical Vehicle Replacement.**

United States Marine Corps Comments

The Program Executive Officer Land Systems Marine Corps, responding for the PM MHTV, agreed, stating that the PM MHTV will use full and open competition for any future AFES procurements. In addition, funds were not available within the PM MHTV FY 2015 or FY 2016 budget for nonurgent AFES. An initiative was submitted in the Program Objective Memorandum 2017 process to obtain funding in FY 2017 for nonurgent AFES. Planning to develop a revised AFES Acquisition Strategy is not expected until FY 2017.

Our Response

The Program Executive Officer addressed the specifics of the recommendation, and no further comments are required.

2. **Add language to the acquisition strategy that requires the contracting officer to consider a subcontractor instead of the prime contractor when the subcontractor performs a significant percentage of the work.**

United States Marine Corps Comments

The Program Executive Officer Land Systems Marine Corps, responding for the PM MHTV, disagreed with the recommendation. However, the PM MHTV will comply with all Federal Acquisition Regulations to support a full and open competition and to consider updates to the Federal Acquisition Regulations that incorporate Section 802 of the FY 2013 National Defense Authorization Act. Appropriate planning to develop a revised AFES acquisition strategy is not expected until FY 2017.

Our Response

The Program Executive Officer addressed the specifics of the recommendation, and no further comments are required.

3. **Provide the Milestone Decision Authority with information on any risks or unmet requirements that were identified before requesting approval to buy 3,500 additional Automatic Fire Extinguishing Systems units for the Medium Tactical Vehicle Replacement.**

United States Marine Corps Comments

The Program Executive Officer Land Systems Marine Corps, responding for the PM MHTV, agreed, stating that the PM MHTV will provide the milestone decision authority with information on any risks or unmet requirements before requesting approval to buy additional Automatic Fire Extinguishing Systems.

Our Response

The Program Executive Officer addressed the specifics of the recommendation, and no further comments are required.

Appendix A

Scope and Methodology

We conducted work used as a basis for this report from August 2013 through March 2014 under DoD IG Project No. D2013-D000AE-0218.000. In December 2013, we decided to issue multiple reports as a result of those efforts. In April 2014, we announced DoD IG Project No. D2014-D000AE-0158.000 and conducted this performance audit through March 2015, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We interviewed key personnel and performed fieldwork at the following organizations located in Quantico, Virginia:

- Program Management Office Medium and Heavy Tactical Vehicles;
- Marine Corps Systems Command; and
- Deputy Commandant, Combat Development and Integration.

We also interviewed cost analysts from Program Executive Office Combat Support and Combat Service Support located in Warren, Michigan.

We used the PEO LS FY 2013 budget plan to determine a universe of PM MHTV funded tasks. The budget plan consisted of 183 tasks valued at $426,561,941. We selected a nonstatistical sample of 24 tasks valued at $270,707,207 associated with the MTVR and LVSR programs. The MTVR and LVSR represent the two largest programs in terms of funding in the universe. Of the 24 tasks reviewed, work was performed on 11 during FY 2013 under the PM MHTV, 3 were executed with military interdepartmental purchase requests to another activity, and no work was performed during FY 2013 on the remaining 10, so they were carried forward into FY 2014.

We reviewed:

- funding requests for FY 2011 through FY 2013;
- Marine Corps Order 3900.15B, "Marine Corps Expeditionary Force Development System (EFDS)," March 10, 2008;
- draft "Marine Corps Enterprise Integration Plan;"
- SECNAVINST 5000.2E, SECNAVINST 5000.2C, and SECNAVINST 5000.2D, "Department of Navy Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System;" and
- memorandums from the Under Secretary of Defense (Acquisition, Technology and Logistics), and Program Executive Officer Land Systems.

Use of Computer-Processed Data

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

Use of Technical Assistance

We did not use technical assistance to perform this audit.

Prior Coverage

During the last 5 years, the Department of Defense Inspector General (DoD IG) issued one report discussing the hotline allegations. Unrestricted DoD IG reports can be accessed at http://www.dodig.mil/pubs/index.cfm.

DoD IG

Report No. DOD IG-2014-120, "Acquisition Practices Used at United States Marine Corps Program Executive Officer Land Systems: Program Manager Medium and Heavy Tactical Vehicles," September 22, 2014.

Appendix B

Additional Technical Comments on Finding B and Our Response

The PM MHTV provided additional technical comments to be considered as part of the official United States Marine Corps response.

Management Comments on inaccurate and incomplete information provided to the Milestone Decision Authority

PM MHTV did not agree the Milestone Decision Authority was presented with inaccurate and incomplete information for the follow-on procurement or that unmet crew protection requirement information was presented to the Milestone Decision Authority in the program designation request. In addition, PM MHTV stated that the Milestone Decision Authority did not base his determination to approve the acquisition designation solely on the designation request letter but also relied upon information listed as references in the acquisition designation request letter as well as program office briefings that presented all test results. Further, PM MHTV stated that an independent review of the practices PM MHTV used for the AFES tests, test results, test reporting, risk assessments, and assigned acceptance levels was conducted by a representative from the Marine Corps Systems Command, Office of the Deputy Commander for Systems Engineering, Interoperability, Architectures and Technology (DC SIAT) at the request of PEO LS. The independent review found no information was withheld from the Milestone Decision Authority.

Our Response

The information provided in the Acquisition Category Program Designation Request letter for the AFES was inaccurate and incomplete. Although PM MHTV stated that the Milestone Decision Authority did not base his determination to approve the acquisition category designation solely on the Acquisition Category Program Designation Request letter, the letter itself contained inaccurate and incomplete information. As mentioned in the draft report and confirmed by PM MHTV in their comments to the draft report, PM MHTV inaccurately stated in the Acquisition Category Program Designation Request letter that the AFES "passed" crew protection requirements for the initial procurement of AFES systems, when the requirements would have been more accurately represented as "partially met." In addition, PM MHTV stated that the Navy/Marine Corps Public Health Command and the Army Public health Command approved live fire test results associated with the initial systems purchased. Instead, the Navy/Marine Corps Public Health

Command identified several medium to serious risks and the Army Public Health Command reported a "catastrophic" hazard severity level of toxic gases associated with homemade fuel-based grenades (Molotov cocktails), all of which were from the results of live-fire testing.

PM MHTV also stated that no information was withheld from the Milestone Decision Authority as a result of the Marine Corps independent review. We asked for additional information to support that statement in January 2015 during a debrief of the discussion draft. No supporting documentation was provided. In response to our March 12, 2015, draft report PEO LS referred to the independent review but again did not provide the document with their comments dated April 1, 2015. A copy of the independent review dated August 26, 2014, was provided to the team on April 17, 2015, at our request. PEO LS requested the Deputy Commander, Systems Engineering, Interoperability, Architectures and Technology conduct an independent review after we issued our June 11, 2014, draft report finalized on September 22, 2014.[19] PEO LS made the request on July 15, 2014, nearly a year after he made his decision to authorize the program to enter into production as an abbreviated acquisition program. The independent review concluded the PEO LS decision to field the initial AFES stage 1 systems with its known risks was based on a disciplined engineering process executed by PM MHTV. However, this does not change the fact that the Acquisition Category Program Designation Request letter contained inaccurate and incomplete information.

[19] Report No. DODIG-2014-120, "Acquisition Practices Used at United States Marine Corps Program Executive Officer Land Systems: Program Manager Medium and Heavy Tactical Vehicles," September 22, 2014.

Management Comments

United States Marine Corps Comments

UNITED STATES MARINE CORPS
PROGRAM EXECUTIVE OFFICER
LAND SYSTEMS MARINE CORPS
2200 LESTER ST
QUANTICO, VA 22134-6050

IN REPLY REFER TO:
5041
PEO LS
01 APR 2015

From: Program Executive Officer Land Systems Marine Corps
To: Office of the Inspector General, Department of Defense

Subj: USMC RESPONSE TO DOD INSPECTOR GENERAL DRAFT REPORT DATED 12 MARCH 2015, PROJECT NUMBER D2014-D000AE-0158.000

Ref: (a) DOD Inspector General Draft Report Project No. D2014-D000AE-0158.000

Encl: (1) Program Manager Medium and Heavy Tactical Vehicles Response to DOD Inspector General Draft Report Project No. D2014-D000AE-0158.000

1. The USMC response from the Program Manager Medium and Heavy Tactical Vehicles provided in enclosure (1) is forwarded with concurrence per the instructions in reference (a).

2. My point of contact is [redacted], PEO LS Chief of Staff, at [redacted] or via email [redacted]

W. E. TAYLOR

Copy to:
PM M&HTV, PEO LS
files

United States Marine Corps Comments (cont'd)

DEPARTMENT OF DEFENSE INSPECTOR GENERAL (DODIG) DRAFT REPORT
DATED 12 MARCH 2015
PROJECT # D2014-D000AE-0158.000

"PROGRAM MANAGER MEDIUM AND HEAVY TACTICAL VEHICLES NEEDS TO IMPROVE ACQUISITION PRACTICES"

UNITED STATES MARINE CORPS COMMENTS
TO THE DODIG RECOMMENDATIONS

RECOMMENDATION A.1: DODIG recommends the Program Manager Medium and Heavy Tactical Vehicles develop and implement procedures that document its process to define, validate, fund, and execute requirements.

USMC RESPONSE: Program Manager Medium and Heavy Tactical Vehicles (PM MHTV) concurs with the recommendation.

In December 2014, PM MHTV formally established a Process Development Process to identify and document internal business processes and procedures. These processes include the Program Objective Memorandum (POM) and Purchase Request (PR) procedures and will incorporate all appropriate Marine Corps Orders and Marine Corps Systems Command Letters of Instruction. These processes and procedures are anticipated to be documented and implemented by December 2015.

RECOMMENDATION A.2: DODIG recommends the Assistant Commander for Contracts, Marine Corps Systems Command provide additional training to contracting staff that emphasizes the Federal Acquisition Regulations for determining price reasonableness and documenting those decisions in the contract files.

USMC RESPONSE: MCSC concurs with this recommendation.

The MCSC Assistant Commander for Contracts (AC CT) implemented a Kapstone Training curriculum in 2010, which is mandatory for all Contracts personnel. The Contracts Competency Manager is currently developing a course titled "Contracts Documentation – Part B" with a pilot class expected no later than May 2015. The course will address the determination and documentation of price reasonableness within the Business Clearance Memorandum. Course participants will also receive training in MCSC Contracts Policy Letter 14-02, "Contract File Checklist Policy," dated 25 September 2014 with an emphasis on maintaining complete files with signed and approved documentation.

RECOMMENDATION B.1: DODIG recommends the Program Manager, Medium and Heavy Tactical Vehicles: Provide documentation showing that full and open competition is planned to buy future Automatic Fire Extinguishing Systems for the Medium Tactical Vehicle Replacement.

USMC RESPONSE: PM MHTV concurs with the recommendation.

PM MHTV intends to utilize full and open competition for any future AFES procurement. Funds are not currently available within the PM MHTV FY15 or FY16 budget for non-urgent AFES. An initiative has been submitted in the POM17 process in an effort to obtain funding beginning

1

Enclosure [1]

United States Marine Corps Comments (cont'd)

Subj: USMC Response to DODIG D2014-D000AE-0158.000

in FY17 for non-urgent AFES. Appropriate planning to develop a revised AFES Acquisition Strategy is not expected until FY17.

RECOMMENDATION B.2: DODIG recommends the Program Manager, Medium and Heavy Tactical Vehicles add language to the acquisition strategy that requires the contracting officer to consider a subcontractor instead of the prime contractor when the subcontractor performs a significant percentage of the work.

USMC RESPONSE: PM MHTV non-concurs with the recommendation.

However, PM MHTV will comply with all Federal Acquisition Regulations to support a full an open competition which will allow industry to provide the best value to the Government and will consider FAR updates that incorporate Section 802 of FY 2013 National Defense Authorization Act. See response to B.1.

RECOMMENDATION B.3: DODIG recommends the Program Manager, Medium and Heavy Tactical Vehicles provide the Milestone Decision Authority with information on any risks or unmet requirements that were identified before requesting approval to buy 3,500 additional Automatic Fire Extinguishing Systems units for the Medium Tactical Vehicle Replacement.

USMC RESPONSE: PM MHTV concurs with the recommendation.

The recommended actions are part of the PM MHTV normal business practices within the acquisition process, which includes:

a) Conduct a safety assessment.
b) Identify risks in accordance with MIL-STD 882.
c) Develop a Safety Assessment Report (SAR).
d) Ensure risks are accepted at the appropriate level based on the Risk Acceptance Code as defined in DoD Instruction (DoDI) 5000.02.
e) Brief the MDA and User Community on test results, to include met, not met, and partially met criteria.
f) Participate in System Verification Review boards co-chaired by the Program Executive Officer Land Systems Chief Engineer and the Program Manager. These boards review and assess test results as compared to specifications, requirements and pass/fail criteria. Output of this board is a report to the MDA.
g) Participate in Acquisition Review Boards (ARB) chaired by the Deputy Program Executive Officer Land Systems prior to seeking MDA approval to proceed to the next phase of the acquisition process. The ARB reviews all acquisition criteria to include requirements, test results, documentation, risks and contracting strategy. Outcome of the ARB process is identification of shortfalls, if any, and authorization to proceed to a MDA review if warranted.

ADDITIONAL TECHNICAL COMMENTS:

On page 10 of the draft report, DOD IG states that the Milestone Decision Authority follow-on procurement decision was based on "inaccurate and incomplete information". On page 11, DOD IG further states that unmet crew protection requirements "were not included in the program designation request presented to the Milestone Decision Authority".

1

Enclosure [1]

United States Marine Corps Comments (cont'd)

Subj: USMC Response to DODIG D2014-D000AE-0158.000

PM MHTV Comment: PM MHTV does not concur with these assertions. As discussed during the DOD IG Exit Briefing and in the program office's written response to the working draft of this report, the statements on pages 10 and 11 are inaccurate. It is understood that the DoD IG made this determination based solely on the PM's designation request, and the program office recognizes the use of the word "pass" in the tables provided on the request letter should have been more accurately represented as "partially met". However, the MDA did not base his determination to approve the acquisition designation solely on the request letter, but also relied upon the information listed as references in the acquisition designation request letter and briefings provided by the program office that presented all test results. If the MDA was not fully aware of all aspects of the AFES system, its limitations and capabilities, then the request designation would not have been approved. Additionally, an independent review of the practices used by PM MHTV for the AFES tests, test results, test reporting, risk assessments and assigned acceptance levels was conducted by a representative from Marine Corps Systems Command, office of the Deputy Commander for Systems Engineering, Interoperability, Architectures and Technology (DC SIAT) at the request of PEO LS and found no information was withheld from the MDA.

The MDA was presented with all safety risks associated with the use of AFES via briefings during the course of system development and on the results of live fire testing. The MDA and PEO LS staff were also presented the Safety Assessment Report for review. Based on the information provided to the MDA, risk acceptance determination was made for the AFES.

2

Enclosure [1]

Acronyms and Abbreviations

AFES	Automatic Fire Extinguishing System
BCM	Business Clearance Memorandum
ECP	Engineering Change Proposal
LVSR	Logistics Vehicle System Replacement
MTVR	Medium Tactical Vehicle Replacement
PEO LS	Program Executive Officer Land Systems
PM MHTV	Program Manager Medium and Heavy Tactical Vehicles
SECNAVINST	Secretary of the Navy Instruction

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