

# Audit

# Report



OFFICE OF THE INSPECTOR GENERAL

CONTRACT FINANCING OF THE FAMILY OF  
MEDIUM TACTICAL VEHICLES PROGRAM

Report No. 96-228

September 24, 1996

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### **Acronyms**

ACO	Administrative Contracting Officer
DCAA	Defense Contract Audit Agency
FAR	Federal Acquisition Regulation
FMTV	Family of Medium Tactical Vehicles
GAO	General Accounting Office
LRIP	Low-Rate Initial Production
MAPICS	Material Accounting and Production Information Control System
MMAS	Material Management and Accounting System
VIR	Vehicle Inspection Report

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**INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-2884**



September 24, 1996

**MEMORANDUM FOR DIRECTOR, DEFENSE LOGISTICS AGENCY  
AUDITOR GENERAL, DEPARTMENT OF THE ARMY**

**SUBJECT: Audit Report on Contract Financing of the Family of Medium Tactical Vehicles Program (Report No. 96-228)**

We are providing this report for your review and comment. This report is the third of three reports addressing the acquisition of the Family of Medium Tactical Vehicles. Comments on a draft report were considered in preparing this report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. Therefore, we request that the Defense Logistics Agency, provide additional comments on Recommendations 1. and 2. by November 25, 1996.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. William D. Van Hoose, Acting Program Director, at (703) 604-9034 (DSN 664-9034) or Mr. Robert L. Shaffer, Project Manager, at (703) 604-9043 (DSN 664-9043). See Appendix I for the report distribution. The audit team members are listed inside the back cover.

*David K. Steensma*

David K. Steensma  
Deputy Assistant Inspector General  
for Auditing

## Office of the Inspector General, DoD

Report No. 96-228  
(Project No. 5AL-0003.03)

September 24, 1996

### Contract Financing of the Family of Medium Tactical Vehicles Program

#### Executive Summary

**Introduction.** This report is the third of three reports addressing the acquisition of the Family of Medium Tactical Vehicles (FMTV). The first report addressed the Army conditional acceptance of incomplete vehicles. The second report addressed matters concerning the performance of Stewart and Stevenson Services, Incorporated (the Contractor) and the Army funding of the FMTV Program. This report addresses progress payments and the Contractor material management and accounting system.

The Army medium tactical vehicle inventory, which consisted of approximately 95,460 2-1/2-ton and 5-ton vehicles, was costly to maintain and operate. Also, the 2-1/2-ton vehicle had key operational limitations. The Army planned to modernize the medium tactical vehicle inventory through the FMTV Program. The FMTV Program features non-developmental items whereby existing commercial components are modified as required and integrated into vehicles intended to meet military needs.

The FMTV Program was structured to acquire 85,401 medium tactical vehicles by FY 2021. The Army estimated that the total cost of the Program would be \$16.3 billion (then-year dollars). In October 1991, the Army awarded a 5-year, firm-fixed-price contract, valued at \$1.2 billion, to the Contractor, for the production of 10,843 vehicles. As of October 31, 1995, the FMTV Program was about 18 months behind the original schedule.

**Audit Objectives.** The overall audit objective was to evaluate the Army efforts to produce and field medium tactical vehicles. We used the Inspector General, DoD, critical program management element approach for a system in the production and deployment phase of the acquisition cycle. We also evaluated the adequacy of management controls related to the program management elements. The Army did not suggest additional or modified audit objectives.

**Audit Results.** The Administrative Contracting Officer approved \$43.6 million of excessive financing to the Contractor through progress payments as of September 30, 1995. The excessive financing resulted because the Contractor did not properly prepare its requests for progress payments and the Administrative Contracting Officer did not take actions that were necessary. The excessive financing could cost the Government about \$2.3 million each year in interest costs. Further, the excessive financing unnecessarily shifted \$43.6 million of cost risk from the Contractor to the Government.

The Defense Contract Audit Agency has made recommendations that, if implemented, should correct two conditions we observed. First, the Contractor material management and accounting system was inadequate. Second, the contract and program administrators and the Contractor for the FMTV Program did not know the specific parts that the Contractor needed to complete and retrofit about 2,758 vehicles (Appendix C).

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Recommendations in this report, if implemented, will help reduce financing costs and balance the risk between the Contractor and the Government. Appendix G summarizes the potential benefits of the audit.

**Summary of Recommendations.** We recommend suspending or reducing progress payments to the Contractor until the Contractor repays the excessive financing and provides complete information so that the Administrative Contracting Officer can properly evaluate the Contractor progress payment requests.

**Management Comments.** The Principal Deputy Director, Defense Logistics Agency, provided comments. The Principal Deputy Director did not agree with the amount of excessive progress payments that the auditors calculated. The Principal Deputy Director disagreed with how the auditors calculated the fair value of work-in-process, numbers and value of vehicles awaiting delivery, and the amount of nonrecurring costs included in the fair value calculation. However, the Principal Deputy Director agreed that the Contractor may have been paid excessive progress payments and stated that the Administrative Contracting Officer withheld an additional \$10.6 million of progress payments, increased the loss ratio, and formed an integrated product team on excessive inventory. The Principal Deputy Director further stated that it is not clear that the Contractor was paid excessive progress payments. However, if evaluations of nonrecurring costs and Contractor inventory determine that a reduction in progress payments is appropriate then the Administrative Contracting Officer will take action to suspend or reduce progress payments.

The Deputy Assistant Secretary of the Army (Procurement) stated that the Army was supportive of the Defense Contract Management Command and the Administrative Contracting Officer positions on the finding and recommendations.

**Audit Response.** The amount of excessive progress payments is a constantly changing amount because of actions by the Contractor and the Administrative Contracting Officer. We adjusted the quantities and contract costs of vehicles in our calculation of the excessive progress payments as a result of the comments to the draft report. We believe that the methodology behind our calculation accurately reflected the financing status of the contract for the FMTV Program as of September 30, 1995. The Defense Contract Management Command has initiated positive actions to reduce risk to the Government. We believe additional actions are still warranted. We request additional comments regarding the recommendations related to quantifying and reducing excessive unliquidated progress payments by November 25, 1996.

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## **Part I - Audit Results**

### Audit Background

The Army medium tactical vehicle inventory, which consisted of approximately 95,460 2-1/2-ton and 5-ton vehicles, was costly to maintain and operate. The Family of Medium Tactical Vehicles (FMTV) consists of a family of vehicles based on a common vehicle chassis that is designed to perform line haul, local haul, and unit resupply. The Army plans to field 2-1/2-ton tactical vehicles in cargo and van variants and 5-ton vehicles in cargo, material-handling, dump truck, wrecker, expandable van, tanker, and tractor configurations. The FMTV is to operate worldwide as multi-purpose transportation and unit mobility vehicles on primary and secondary roads, trails, and cross-country terrain. The Army planned to acquire 85,401 medium tactical vehicles by FY 2021. The Army estimated that the total cost of the FMTV Program would be \$16.3 billion (then-year dollars).

The FMTV Program is an Acquisition Category IC Program in the production and deployment phase of the acquisition cycle. DoD Instruction 5000.2, "Defense Acquisition Management Policies and Procedures," describes an Acquisition Category IC as major Defense acquisition programs that have unique statutorily imposed acquisition strategy, execution, and reporting requirements. The cognizant DoD Component head or, if delegated, the DoD Component Acquisition Executive has milestone decision authority for Acquisition Category IC programs. The Army Acquisition Executive has milestone decision authority for the FMTV Program. Subsequent to the completion of the audit field work, DoD Instruction 5000.2 was replaced by DoD Regulation 5000.2R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs."

The Army acquisition strategy for the FMTV Program features non-developmental items: existing commercial components are modified as required and integrated into vehicle configurations to meet military needs. The acquisition strategy also provided for a two-phased procurement program.

**Prototype Phase.** The prototype phase encompassed competition between three contractors who each produced 15 vehicles and 5 trailers. The strategy required a competitive hardware demonstration of the prototypes before a competitive "ride before you buy" production source selection. In effect, the prototype phase combined Milestone I, Concept Demonstration and Validation, and Milestone II, Engineering and Manufacturing Development. The Army awarded three contracts, valued at \$46.0 million, during the prototype phase of the Program.

On June 30, 1991, the Army Acquisition Executive approved the FMTV Program for low-rate initial production (LRIP).

**Production Phase.** The production phase of the acquisition strategy started in October 1991 with the award of a 5-year firm-fixed priced contract, valued at \$1.2 billion, to Stewart and Stevenson Services, Incorporated (the Contractor), for the production of 10,843 vehicles. The production phase provided for



concurrent initial production testing and initial operational testing and evaluation. The production contract limited LRIP to 200 vehicles per month and provided for progression to full-rate production.

On August 14, 1995, the Army Acquisition Executive approved the FMTV Program for full-rate production.

The FMTV Program Office, located at the Army Tank-automotive and Armaments Command, Warren, Michigan, manages the FMTV Program under the direction of the Program Executive Officer for Tactical Wheeled Vehicles.

## Audit Objectives

The overall objective of the audit was to evaluate the Army efforts to produce and field medium tactical vehicles. To satisfy the objective, we conducted the audit in three parts. The first part addressed the consequences and risks associated with the Army conditionally accepting vehicles from the Contractor. The second part addressed matters involving contract performance management, acquisition planning and risk management, affordability, and engineering and manufacturing. The third part, which is addressed in this report, covered contracting, requirements evolution, logistics and other infrastructure, and product improvements. We also evaluated the adequacy of management controls related to the program management elements. See Appendix A for the coverage of the Management Control Program and the audit scope and methodology. See Appendix B for a summary of prior coverage related to the audit objectives, including the results of the first two parts of this audit. See Appendix C for other matters of interest concerning the Contractor material management and accounting system (MMAS), missing and nonconforming parts, integrated logistics support, and component breakout that did not result in a recommendation. See Appendix D for audit conclusions on acquisition objectives, qualitative requirements, and preplanned product improvements.

We did not evaluate test and evaluation during the audit. As discussed in Appendix B, the General Accounting Office (GAO) issued an audit report in January 1996 on technical and operational testing of vehicles in the FMTV Program.

The Army did not suggest additional or modified audit objectives.

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## **Contract Financing**

The Administrative Contracting Officer (ACO) approved \$43.6 million of excessive financing to the Contractor through progress payments for the FMTV Program as of September 30, 1995. This occurred because the Contractor did not properly prepare its requests for progress payments and ACO did not take actions that were necessary. The excessive financing could cost the Government more than \$2.3 million each year in interest costs. Further, the excessive financing unnecessarily shifted cost risk from the Contractor to the Government.

### **Criteria for Providing Contract Financing**

The Federal Acquisition Regulation (FAR) 32.104(a), "Providing Contract Financing," states that:

Prudent contract financing can be a useful working tool in Government acquisition by expediting the performance of essential contracts. Government financing shall be provided only to the extent actually needed for prompt and efficient performance, considering the availability of private financing. Contract financing shall be administered so as to aid, not impede, the acquisition. At the same time, the contracting officer shall avoid any undue risk of monetary loss to the Government through the financing. The contractor's use of the contract financing provided and the contractor's financial status shall be monitored.

### **Provisions for Contract Financing for the FMTV Program**

On October 11, 1991, the Army awarded contract DAAE07-92-C-R001 to Stewart and Stevenson Services, Incorporated (the Contractor), for the production of 10,843 vehicles of the FMTV Program. The contract provided that contract financing would be accomplished through progress payments to the Contractor.

According to the contract payment provisions, the Government should pay the Contractor 85 percent of its cumulative total costs incurred under the contract and 100 percent of its progress payments to subcontractors. To receive those payments, the Contractor must request, not more frequently than monthly, payments on Standard Form 1443, "Contractor's Request for Progress Payment."

## Oversight Required of Contract Financing

The ACO had responsibility for approving payments to the Contractor in accordance with the terms of the contract. The FAR 32.503-2, "Supervision of Progress Payments," specifies the responsibilities of the ACO in administering progress payments.

(a) The extent of progress payments supervision, by prepayment review or periodic review, should vary inversely with the contractor's experience, performance record, reliability, quality of management, and financial strength, and with the adequacy of the contractor's accounting system and controls. Supervision shall be of a kind and degree sufficient to provide timely knowledge of the need for, and timely opportunity for, any actions necessary to protect Government interests.

The FAR 32.503-5(a) under "Administration of Progress Payments" also requires the ACO to review or audit the Contractor requests for progress payments. The FAR 32.503-5(b) specifies that the reviews and audits will, as a minimum, determine whether or not:

- (1) The unliquidated progress payments are fairly supported by the value of the work accomplished on the undelivered portion of the contract;
- (2) The applicable limitation on progress payments in the Progress Payments clause has been exceeded;
- (3) (i) The unpaid balance of the contract price will be adequate to cover the anticipated cost of completion, or  
(ii) The contractor has adequate resources to complete the contracts; and
- (4) There is reason to doubt the adequacy and reliability of the contractor's accounting system and controls and certification.

Further, when unliquidated progress payments exceed the fair value of work-in-process on the contract, the progress payment clause (FAR 52.232-16) in the contract for FMTVs specified that the Contractor shall repay the Government any excessive unliquidated progress payment on demand.

## Evaluation of Contract Financing Provided to the Contractor

As of \*\*\*\*\*, the ACO had approved \*\*\*\*\* of progress payments to the Contractor that included \$43.6 million of excessive financing to the Contractor.

## Reasons for Excessive Progress Payments

The Contractor received the excessive progress payments for several reasons.

- o The Contractor did not properly prepare its requests for progress payments.

- o The ACO did not demand that the Contractor repay the amount of unliquidated progress payments that exceeded the fair value of work-in-process on the contract.

- o The ACO did not reduce the Contractor request for progress payments for excessive inventory that the Contractor had bought.

- o The ACO did not reduce or suspend progress payments when the Contractor failed to meet contractual requirements that were critical to administering progress payments.

**Requests for Progress Payments.** The FAR 53.301-1443 requires the Contractor to include an estimate of the costs to complete the contract on its requests for progress payments. Also, it requires the Contractor to update the estimate at least once every 6 months.

The Contractor did not realistically estimate the costs to complete the contract on its requests for progress payments. Instead of providing a realistic estimate of the costs to complete the contract on its requests for progress payments, the Contractor merely reported the difference between the obligated contract amount (less profit) and the amount of cost incurred as of the end of the period for which it would request progress payments. On the request for progress payments for the period ending September 30, 1995, the Contractor estimated that it would cost \*\*\*\*\* to complete \*\*\*\*\* vehicles that remained to be produced from the 4,808 vehicles for the first 3 program years of the multi-year contract. Such an estimate provided for the Contractor to complete the \*\*\*\*\* vehicles at an average cost of \*\*\*\*\*. Considering the contract cost of the vehicles, as well as the Contractor inability to attain the level of production necessary to meet contractual delivery schedules that we reported in Inspector General, DoD, Report No. 96-020, "Contractor's Performance on the Family of Medium Tactical Vehicles Program," November 1, 1995 (See Appendix B), the Contractor is unlikely to produce the \*\*\*\*\* at a cost of \*\*\*\*\*. The contract cost of the vehicles averaged \*\*\*\*\*. Further, on the \*\*\*\*\* produced through September 30, 1995, the Contractor incurred cost averaged \*\*\*\*\*. Additionally, all 2,758 vehicles required additional work because they had either missing or nonconforming parts or both.

The absence of a realistic estimate from the Contractor on the costs to complete the contract complicated the ACO evaluation of the Contractor requests for progress payments. Without a detailed estimate of the costs to complete the contract, the ACO had to develop an independent estimate to use in his evaluation of progress payments.

**Excessive Unliquidated Progress Payments.** The progress payment clause (FAR 52.232-16) in the contract for FMTVs limited the amount of unliquidated progress payments on the contract to the fair value of work-in-process. Also, the clause specified that the Contractor shall repay the Government any excessive unliquidated progress payment on demand.

Based on the Contractor request for progress payments for work through September 30, 1995, and the value of work-in-process, the Contractor had \$50.1 million of excessive unliquidated progress payments. The Contractor request for progress payment showed \*\*\*\*\* of unliquidated progress payments as of September 30, 1995. We estimated the fair value of the Contractor work-in-process was \*\*\*\*\* as of September 30, 1995. Table 1. shows how we estimated the work-in-process.

**Table 1. Estimate of the Fair Value of Work-in-Process  
(as of September 30, 1995)**

Proprietary Table Removed

## Contract Financing

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The ACO did not demand that the Contractor repay the \$50.1 million of excessive unliquidated progress payments. The ACO maintained that the only action that he had to take when unliquidated progress payments exceeded the fair value of work-in-process was to apply a loss ratio. More specifically, the FAR 32.503.6 (f) provides for the contracting officer to use a loss ratio to eliminate any excess unliquidated progress payments. In Appendix E, we discuss the FAR requirement for the loss ratio and explain how the ACO calculated and applied the loss ratio to the Contractor requests for progress payments.

By applying the loss ratio, the ACO withheld only \$6.5 million of the \$50.1 million of excessive unliquidated progress payments. Therefore, the Contractor still was paid \$43.6 million in excessive unliquidated progress payments. The \$43.6 million includes \$20.6 million of progress payments for excessive inventory that we will discuss later in this finding.

The ACO had multiple actions he could have taken when unliquidated progress payments exceeded the fair value of work-in-process, not just the loss ratio. The loss ratio is only one of various methods that the FAR provides for the ACO to use to eliminate excessive unliquidated progress payments. The FAR 32.503-12 provided multiple methods for the ACO to use, including increasing the liquidation rate, reducing the progress payment rate, suspending progress payments, or a combination of those methods. Also, the progress payment clause (FAR 52.232-16) in the contract provided for the ACO to demand repayment for excessive unliquidated progress payments.

**Excessive Inventory.** The ACO did not act on a January 1995 draft Defense Contract Audit Agency (DCAA) report that recommended that he reduce the Contractor requests for progress payments for excessive inventory. Drafts of the DCAA report were issued in January and again in June 1995. According to the June 1995 DCAA draft report, the Contractor had \$98.4 million of inventory on hand, as of May 31, 1995. The DCAA determined that the Contractor needed only \$18.7 million of inventory to support the FMTV contract. As such, the Contractor had requested progress payments for \$79.7 million (\$98.4 million - \$18.7 million) of excessive material inventory. By applying the progress payment rate of 85 percent of costs, the DCAA determined that the ACO approved about \$67.7 million of excessive progress payments (\$79.7 million times 85 percent) to the Contractor. The DCAA recommended that the ACO deduct the \$67.7 million from future requests for progress payments.

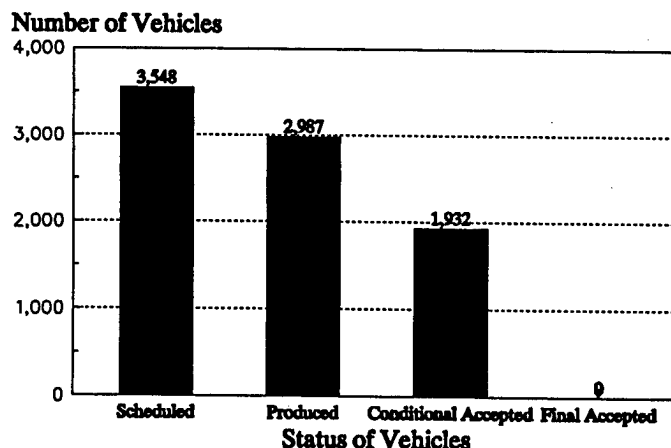
The ACO maintained that he did not need to adjust the Contractor requests for progress payments before the DCAA issued its final report. We disagree. Waiting for the final report resulted in the Contractor retaining as much as \$67.7 million of free financing for 6 months, as of November 30, 1995. The significance of the DCAA draft finding should have warranted the ACO at least inquiring and taking interim action.

In January 1996, the DCAA estimated that the Contractor had about \$24.2 million of excessive inventory as of October 31, 1995. The excessive inventory overstated the amount of progress payments that the Contractor was entitled to by \$20.6 million.

The Contractor had already requested progress payments on the \$24.2 million of excessive inventory. As such, the ACO could have recovered the \$20.6 million of progress payments resulting from excessive inventory as part of his recovery of the \$43.6 million of excessive unliquidated progress payments.

**Contractual Requirements.** The FAR 32.503-6 states that the Government can reduce or suspend progress payments if the Contractor does not comply with all material requirements of the contract. Other than applying the loss ratio to the Contractor requests for progress payments, the ACO took no action to reduce progress payments although the Contractor had not demonstrated a reliable material management and accounting system (Appendix C) and had not developed a realistic estimate of the costs to complete the contract. Also, the Contractor had not met the delivery schedules in the contract. As discussed in Inspector General, DoD, Report No. 96-020, "Contractor's Performance on the Family of Medium Tactical Vehicles Program," November 1, 1995, the Army had not received a single vehicle suitable for fielding out of 4,146 vehicles that were scheduled for delivery, as of May 31, 1995.

Due to the Contractor delinquency, the Procuring Contracting Officer issued modification P00042, dated July 25, 1995, revising the delivery schedule. Figure 1 shows the number of vehicles scheduled for delivery (based on the July 1995 revised delivery schedule) and the number of vehicles accepted as of December 31, 1995.



**Figure 1. Number of Vehicles Produced and Accepted Lagged Behind Schedule**

## Contract Financing

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The Contractor had not achieved efficient production. Figure 2 shows that as of September 30, 1995, the Contractor had spent \*\*\*\*\* to produce \*\*\*\*\*, which were to have cost about \*\*\*\*\*.

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**Figure 2. Actual Cost to Produce 2,758 Vehicles Far Exceeded Contract Cost**

## Effect of Excessive Contract Financing

In total, the ACO approved about \$43.6 million of excessive financing to the Contractor. Further, the amount of excessive financing exceeded \$43.6 million at various times, such as in May 1995 when the excessive inventory was at \$79.7 million rather than the \$24.2 million that we used to calculate excessive financing. The excessive financing was premature payments to the Contractor; however, it does not mean that the DoD will pay the Contractor more than the total contract price. The excessive financing resulted from the ACO approving progress payments that exceeded the fair value of work performed. Thus, the effect to the Government was the imputed interest cost of financing premature payments to the Contractor. The \$43.6 million of excessive financing costs the Government \$2.3 million (\$43.6 million times an average interest rate for Treasury Bills of 5.15 percent) each year in interest costs.

By approving excessive financing to the Contractor, the ACO did not protect the Government interest. His actions placed added cost risk on the Government rather than the Contractor. This risk would manifest itself if either the Army terminated the contract or the Contractor was unable to complete the contract. Terminating the contract would require the Contractor to repay the Government the \$43.6 million of excessive unliquidated progress payments. For example,



due to funding limitations, program officials had considered limiting the buy of the FMTV to \*\*\*\*\*, which is only 4 of the 5 program years on the multi-year contract.

## **Analysis of Contractor Financial Capability**

The ACO had also not monitored the Contractor financial capability to determine the extent of financial loss that the Contractor could absorb. The FAR 32.503-2(b) and (c) require that the ACO monitor the Contractor financial status.

(b) The administering office must keep itself informed of the contractor's overall operations and financial condition, since difficulties encountered and losses suffered in operations outside the particular progress payment contract may affect adversely the performance of that contract and the liquidation of the progress payments.

(c) For contracts with contractors (1) whose financial condition is doubtful or not strong in relation to progress payments outstanding or to be outstanding, (2) with management of doubtful capacity, (3) whose accounting controls are found by experience to be weak, or (4) experiencing substantial difficulties in performance, full information on progress under the contract involved (including the status of subcontracts) and on the contractor's other operations and overall financial condition should be obtained and analyzed frequently, with a view to protecting the Government's interests better and taking such action as may be proper to make contract performance more certain.

The ACO last analyzed the Contractor financial capability on October 31, 1990, as part of the preaward survey before the Army award of the production contract. The analysis concluded that the financial capability of the Contractor was adequate to perform on the contract.

We believe that the Contractor financial capability would be significantly impacted if it had to absorb the financial loss that it is incurring. The contract and program administrators should be aware of such an impact.

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

The Principal Deputy Director, Defense Logistics Agency, provided comments on various parts of the finding. Those comments and our responses to the comments are provided below. The full text of the Principal Deputy Director comments is in Part III.

The Principal Deputy Director partially concurred with the audit conclusion on contract financing. He recognized that excessive financing to the Contractor

## **Contract Financing**

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through progress payments may have occurred and stated that any excessive financing had been eliminated since the auditors' analysis as of September 30, 1995. He concluded that the auditors significantly overstated the amount of excessive financing. In support of his conclusion, the Principal Deputy Director stated that the auditors incorrectly calculated the value of work-in-process, the number and value of vehicles awaiting delivery, and the amount of nonrecurring costs included in the fair value calculation.

### **Value of Work-in-Process**

**Management Comments.** The Principal Deputy Director stated that the ACO valued work-in-process or undelivered work at \$259.0 million, which was \$93.5 million more than the \$165.5 million calculated by the auditors. Therefore, the Principal Deputy Director concluded that the \$215.6 million of unliquidated progress payments did not exceed the \$259.0 million of undelivered work as of September 30, 1995. As such, the ACO had not made excessive payment to the Contractor. Table 2. shows how the ACO made his calculation.

**Table 2. ACO Calculation of Fair Value of Undelivered Work**

**Proprietary Table Removed**

The Principal Deputy Director stated that the auditors' estimate of work-in-process was incorrect because the auditors did not calculate the fair value of undelivered work in accordance with guidance in the FAR. The

Principal Deputy Director stated that FAR 32.503-6(f)(1) describes the fair value of undelivered work as the lesser of the contract price of the undelivered work minus the estimated costs required for completing contract performance or incurred costs applicable to the undelivered items. The Principal Deputy Director further stated that the ACO used data from lines 12b, 20b, 20d, and 21b on the Standard Form 1443, "Contractor's Request for Progress Payments," for the period ending September 30, 1995, to calculate the two amounts required by the FAR to determine the fair value of undelivered work.

**Audit Response.** We disagree with the Principal Deputy Director conclusion that the fair value of work-in-process was \*\*\*\*\* as of September 30, 1995. The methodology that the ACO used to calculate the fair value of undelivered vehicles was flawed. The ACO methodology relied on inaccurate data from the contractor request for progress payments. As shown on Table 2., lines 20b and 20d of the Standard Form 1443, "Contractor's Request for Progress Payment," for the period ending September 30, 1995, showed a total of \*\*\*\*\* as the costs eligible for progress payments applicable to undelivered items. Line 20b is calculated by taking the difference between the total costs eligible for progress payments (line 11) and the costs applicable to items that have been delivered, invoiced, and accepted (line 20a). Table 3. shows how the ACO calculated line 20b, as of September 30, 1995.

**Table 3. ACO Calculation of Line 20b  
for the Period Ending September 30, 1995.**

Proprietary Table Removed

As of September 30, 1995, the Contractor had produced 2,758 vehicles of which the ACO had conditionally accepted 1,918 vehicles. If the ACO calculation of the value of the undelivered work is correct, the cost of the \*\*\*\*\* vehicles averaged about \*\*\*\*\* while \*\*\*\*\* awaiting delivery, vehicles in process, and an acceptable level of inventory costs \*\*\*\*\* . Thus, we cannot agree that the Contractor provided accurate data for the incurred costs for the 1,918 vehicles it had delivered.

We remain convinced that the \$259.0 million that the ACO used to estimate the value of undelivered vehicles was overstated about \$93.5 million. In Table 1,

## **Contract Financing**

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page 7, we calculated the fair value of undelivered work, including 840 vehicles awaiting delivery, 43 vehicles in process, an acceptable level of inventory, and nonrecurring costs to be \$165.5 million.

### **Vehicles Awaiting Delivery**

**Management Comments.** The Principal Deputy Director stated that the Contractor had 840 vehicles awaiting delivery as of September 30, 1995, not 995 vehicles as stated in the draft report. He also stated that the average contract cost of each vehicle was \$138,600, not \$103,400 as stated in the draft report.

**Audit Response.** We agree on the number of vehicles awaiting delivery on September 30, 1995. However, the \$138,600 that the Principal Deputy Director cited as the average contract cost of each vehicle was actually the average contract price. The average contract cost of each vehicle was \$129,500, not \$103,400 as stated in the draft report. We have changed the report to reflect that the Contractor had produced 840 vehicles with an average contract cost of \$129,500 per vehicle that it had not delivered to the Army, as of September 30, 1995.

### **Nonrecurring Costs**

**Management Comments.** The Principal Deputy Director explained that the Contractor calculated its nonrecurring costs at \$114.8 million, rather than the \$95.0 million calculated by the auditors. He also stated that the Contractor may include the entire amount of the nonrecurring costs in its requests for progress payments, provided that the costs are eligible for progress payments.

**Audit Response.** In his response to Recommendation 2., the Principal Deputy Director stated that the ACO requested that DCAA examine the Contractor nonrecurring costs to ensure that nonrecurring costs in the Contractor requests for progress payments are consistent with the FAR. We agree with this action.

### **Additional Management Comments.**

The Principal Deputy Director also took exception to several matters in the draft report, including:

- o the accuracy of the cost of first 2,758 vehicles produced under the contract for the FMTV Program;
- o the use of loss ratio to eliminate excessive unliquidated progress payments;
- o the extent of excessive inventory and the responsiveness of the ACO actions on excessive inventory; and
- o the adequacy of management controls.

The Principal Deputy Director comments and audit responses on these matters are provided in Appendix F.

## **Recommendations, Management Comments, and Audit Responses**

We recommend that the Administrative Contracting Officer, Defense Contract Management Command, for the multi-year contract for the Family of Medium Tactical Vehicles:

1. Suspend or reduce progress payments on contract DAAE07-92-C-R001 until actions are completed on Recommendations 2. and 3. below.

**Management Comments.** The Principal Deputy Director nonconcurred, stating that it is no longer clear that the Contractor has been paid excessive progress payments. The Principal Deputy Director stated that the Contractor and the ACO have taken several actions since September 1995.

- o The Contractor substantially reduced its inventory.
- o The ACO reduced progress payments by \$5.6 million for excessive inventory.
- o The ACO increased from \$8.0 million to \$13.0 million the amount withheld from progress payments as a result of the loss ratio.
- o Government officials initiated evaluations of nonrecurring costs and the Contractor inventory that should enable the ACO to determine whether he should further reduce the amount of progress payments to the Contractor.

The Principal Deputy Director stated that if the evaluations of nonrecurring costs and the Contractor inventory conclude that a reduction in progress payments is appropriate, the ACO would take appropriate action to suspend or reduce progress payments.

**Audit Response.** The actions taken by the Contractor and the ACO partially meet the intent of the recommendation, which was to recover excessive unliquidated progress payments. However, we remain convinced that our method of calculating the excessive progress payments accurately reflects the financing status of the contract for the FMTV Program and that the ACO needs to take further action to recover the additional excessive unliquidated progress payments. Using our methodology to calculate the Contractor request for progress payment for work through June 30, 1996, and the value of work-in-process, the Contractor had \$92.4 million of excessive unliquidated progress payments. The Contractor request for progress payment showed \$269.2 million of unliquidated progress payments as of June 30, 1996. We estimated the fair value of the Contractor work-in-process was \*\*\*\*\* as of June 30,

## Contract Financing

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1996. By applying the loss ratio, the ACO withheld only \$22.0 million of the \$92.4 million of excessive unliquidated progress payments, leaving \$70.4 million in excessive unliquidated progress payments. Table 3. shows how we estimated the work-in-process. The methodology is the same as shown in Table 1.

**Table 3. Estimate of the Fair Value of Work-in-Process  
(as of June 30, 1996)**

**Proprietary Table Removed**

We ask the Principal Deputy Director to further analyze the Contractor request for progress payments, reconsider his position on whether the Contractor has been overpaid, and provide additional comments.

**2. Request that the Defense Contract Audit Agency quantify the amounts of excessive inventory and excessive unliquidated progress payments.**

**Management Comments.** The Principal Deputy Director partially concurred, stating that the ACO will request the DCAA to evaluate and quantify any excessive inventory. Further, the Principal Deputy Director stated that the ACO has requested that DCAA examine the Contractor nonrecurring costs to ensure that nonrecurring costs in the Contractor requests for progress payments are consistent with the FAR.

**Audit Response.** The Principal Deputy Director comments on the portion of Recommendation 2. that involved excessive inventory were responsive. The Principal Deputy Director did not respond as to whether the ACO planned to ask the DCAA to quantify the amount of excessive unliquidated progress payments. Therefore, we ask the Principal Deputy Director to provide comment on that portion of the recommendation.

**3. Demand that the Contractor repay the amounts paid for excessive inventory and the remaining amount of excessive unliquidated progress payments.**

**Management Comments.** The Principal Deputy Director partially concurred, stating that the Contractor must repay amounts associated with excessive inventory once the ACO determines the amount of the excessive inventory. The Principal Deputy Director added that the ACO had already withheld \$5.6 million from progress payments for excessive inventory. As for the portion of the recommendation involving excessive unliquidated progress payments, the Principal Deputy Director nonconcurred. He stated that the Contractor has not been paid excessive progress payments

**Audit Response.** The comments that involved excessive inventory were responsive. We believe that the Contractor had excessive unliquidated progress payments. In his response to Recommendation 4., the Principal Deputy Director stated that the ACO would demand that the Contractor repay any excessive progress payments. Therefore, no further comments are required on Recommendation 3.

**4. Quantify excessive inventory and excessive unliquidated progress payment on future requests for progress payments and demand that the Contractor repay any excessive amounts.**

**Management Comments.** The Principal Deputy Director concurred, stating that the ACO would demand that the Contractor repay any excessive progress payments.

**5. Require the Contractor to include a realistic estimate of the costs to complete the contract on its requests for progress payments and update the cost estimate at least once every 6 months.**

## **Contract Financing**

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**Management Comments.** The Principal Deputy Director concurred, stating that the ACO will continue to work closely with the Contractor to improve the quality of the Contractor estimate of costs to complete the contract. In addition, the contract administration office at the Contractor facility is developing a baseline estimate of costs to complete the contract and will use that estimate to evaluate the Contractor estimates to complete and requests for progress payments.

**6. Assess the financial capabilities of the Contractor as required in Federal Acquisition Regulation 32.503-2(b) and (c).**

**Management Comments.** The Principal Deputy Director concurred, stating that current policies require annual progress payment reviews, including reviews of the Contractor financial condition. The ACO has updated and improved his system for maintaining and documenting his surveillance of the Contractor financial condition.

**7. Provide the results of the assessment of the financial capabilities of the Contractor to the Contracting Officer and program administrators.**

**Management Comments.** The Principal Deputy Director partially concurred, stating that whenever the financial capability assessment process reveals any information that would cause the ACO to reduce financing to the Contractor, the ACO would immediately inform the Contracting Officer and the Project Manager for the FMTV Program. However, the Principal Deputy Director stated that, to date, that has not been necessary.

## **Army Comments**

The Deputy Assistant Secretary of the Army (Procurement) also provided comments. He stated that the Army was supportive of the Defense Contract Management Command and the ACO positions on the finding and recommendations. The full text of the Deputy Assistant Secretary comments is in Part III.



## **Part II - Additional Information**

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## Appendix A. Scope and Methodology

### Scope

This report is the third of three reports on this audit addressing the acquisition of the Family of Medium Tactical Vehicles (FMTV). This third report addresses contracting, requirements evolution, logistics and other infrastructure, and product improvements.

We reviewed records and supporting documentation, dated from June 1987 through February 1996. In doing so, we evaluated progress payment requests, budget and cost estimates, test schedules and results, performance and quantitative requirements of the FMTV and its mission, system concepts, studies of alternatives, contractual actions, and management control assessments relating to the FMTV Program. We also evaluated the adequacy of management controls related to the program management elements.

### Methodology

**Use of Computer-Processed Data.** We did not rely on computer-generated data to develop our audit conclusions.

**Audit Period, Standards, and Locations.** We performed this economy and efficiency and program audit from October 1994 through February 1996. The audit was made in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. We included such tests of management controls as were deemed necessary. Appendix H lists the organizations that we visited or contacted during the audit.

### Statistical Sampling Methodology

The following statistical sampling methodology was used to evaluate the Contractor plan to complete and retrofit vehicles with missing and nonconforming parts.

**Audit Universe.** As of May 31, 1995, the Contractor had produced \*\*\*\*\*. Also, the Contractor required 2,087 parts to produce a vehicle in the FMTV Program.

**Sampling Plan.** We randomly selected two samples. The first sample of 160 vehicles was to determine the status and cost of the missing and nonconforming parts that the Contractor needed to complete and retrofit vehicles that the Contractor had produced. We intended to identify the missing and nonconforming parts for each vehicle in our sample at the time of its production. We also intended to adjust the requirements for missing and nonconforming parts by adjusting them for engineering changes that occurred after the vehicle was produced.

The second sample of 180 parts using data from the Contractor material management and accounting system (MMAS) was to determine the inventory status of parts required for the production of future vehicles and the Contractor planned retrofit efforts.

Using the results of both samples, we planned to make various statistical projections.

**Sample Results.** We could not complete our objective for the vehicle sample. As discussed in Appendix C, we were unable to determine the extent of missing and nonconforming parts on the sample items because the data that the Contractor recorded on the two types of documents and an automated system for vehicles were inaccurate. Even if the data on missing and nonconforming parts had been accurate, we would not have been able to determine the parts that the Contractor required to complete and retrofit the vehicles because the Contractor did not provide data showing the effects of engineering changes.

We also could not complete our objective for the parts sample. The Contractor did not provide any data that we requested on our parts sample. The data that we requested were basic data that should have been readily available in the Contractor MMAS. For example, we requested the quantities of the parts required to produce each vehicle, quantities of the parts in the inventory, and quantities of the parts that had been ordered.

## Management Control Program

DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operated as intended and to evaluate the adequacy of the controls.

**Scope of Review of Management Control Program.** We limited our review because of relevant coverage in Inspector General, DoD, Report No. 96-028, "Implementation of the DoD Internal Management Control Program for Major Defense Acquisition Programs," November 28, 1995. The report discussed the effectiveness of the management control program that the Defense Acquisition Executive and the Component Acquisition Executives use for major Defense acquisition programs. The report concluded that the acquisition community had not effectively integrated DoD Management Control Program requirements into

## Appendix A. Scope and Methodology

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its management assessment and reporting processes. As a result of the report recommendations, the Under Secretary of Defense for Acquisition and Technology integrated DoD Directive into 5010.38 requirements into the March 15, 1996, revision to DoD Directive 5000.1, "Defense Acquisition," and DoD Regulation 5000.2R. Acquisition managers are now to use program cost, schedule, and performance parameters as control objectives to implement the DoD Directive 5010.38 requirements. The managers are to identify material weaknesses through deviations from approved acquisition program baselines and exit criteria in the Defense Acquisition Executive Summary report.

In this audit of the FMTV Program, we limited our review to management controls over the program management process. In assessing the management controls, we reviewed the vulnerability assessments of the Program Executive Officer for Tactical Wheeled Vehicles; the Program Manager for the FMTV Program; the Commander, Army Tank-automotive and Armaments Command; and the Commander, Defense Plant Representative Office, at the Contractor plant, to determine the levels of risk that their responsible officials assigned to their organizations' functional responsibilities. We also reviewed the last annual certifications by the officials to determine whether they reported material weaknesses related to the acquisition management of the FMTV Program.

**Adequacy of Management Controls.** The ACO had not implemented existing controls to ensure that he did not provide the contractor with excessive progress payments. We considered this a material control weakness as defined by DoD Directive 5010.38. The weakness existed because the ACO was not reviewing the Contractor progress payment requests according to established procedures. Also, the ACO was not requiring the Contractor to provide realistic estimates of the costs to complete the contract on its requests for progress payments. Recommendations in the Finding will correct the weakness. If implemented, the ACO will be able to reduce excessive financing and cost risk in the FMTV Program. We will provide a copy of our final report to the senior official responsible for management controls in the Defense Logistics Agency.

**Adequacy of the Army Self-Evaluation.** The vulnerability assessments showed that the officials assigned low risk to each functional area that they assessed. The last annual certifications on management controls showed that the officials did not report deficiencies related to the acquisition management of the FMTV Program. In view of the excessive financing to the Contractor, the risk was understated.

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## Appendix B. Summary of Prior Audits and Other Reviews

During the last 5 years, the GAO issued four reports that specifically addressed the FMTV Program. Also, the Inspector General, DoD, issued a report on the Contractor performance on the FMTV Program, a quick-reaction report on conditional acceptance of medium tactical vehicles, and a report on low-rate initial production in major Defense acquisition programs.

### General Accounting Office

GAO Report No. GAO/NSIAD-96-4 (OSD Case 1033), "Army Acquisition: Medium Trucks Passed Testing," January 8, 1996, stated that the FMTV trucks had successfully completed technical and operational testing. The report further noted that while the FMTV trucks performed well, many technical test vehicles were not produced on the production line and that the Contractor pretested the test vehicles and corrected deficiencies before delivering the test vehicles to the Army for testing. The GAO did not make recommendations.

GAO Report No. GAO/NSIAD-95-77R (OSD Case 9839), "FMTV Low Rate Initial Production [LRIP]," December 21, 1994, stated that the Army was planning to modify its FMTV contract to increase the number of vehicles authorized for LRIP from 3,085 to 3,858 vehicles, an increase of 773 vehicles. The Army stated that the increase would prevent a break in production. The GAO concluded that the contract should not be modified because testing of the FMTV had not demonstrated that it was operationally suitable and that the current contract authorized enough vehicles under LRIP to maintain production until scheduled testing can be completed.

The GAO recommended that the Assistant Secretary of the Army (Research, Development and Acquisition) direct the FMTV Program Manager to cancel plans to modify the contract and delay the planned increase of 773 vehicles until the system successfully completes operational testing.

The Army partially concurred with the GAO recommendation. The Army agreed that significant successful test experience should be accumulated before increasing the number of vehicles under LRIP. However, the Army believed that limiting that experience to completion of operational testing was not necessary and possibly not contractually feasible.

GAO Report No. GAO/NSIAD-94-240 (OSD Case 9571), "Army Acquisition: Commercial Components Used Extensively in Tactical Trucks," September 26, 1994, concluded that key operational requirements prevented the Army from using strictly commercial items to meet its tactical vehicle needs. However, the GAO found that contractors used commercial trucks as baselines for their systems and generally used commercial manufacturing practices and components to produce tactical trucks. The GAO also concluded that the Army policies

## Appendix B. Summary of Prior Audits and Other Reviews

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placed higher demands on contractors by requiring rigorous testing, more detailed technical manuals, and the use of standard Army parts. The GAO did not make recommendations.

GAO Report No. GAO/NSIAD-93-232 (OSD Case 9461), "Army Acquisition: Medium Truck Program Is Not Practical and Needs Reassessment," August 5, 1993, concluded that the Army 30-year strategy could impair the Army ability to meet key management and program goals and expectations, such as significantly reducing the average age of the fleet and lowering the fleet operation and support costs. The GAO also identified several alternatives to the current program that could provide a more cost-effective medium tactical vehicle acquisition.

The GAO recommended that the Secretary of the Army reassess the cost-effectiveness of the 30-year acquisition strategy for the Army FMTV Program, especially in light of the negative impact of program length on program and fleet management goals and expectations. The GAO added that the assessment, at a minimum, should consider the:

- o DoD final unannounced force structure reductions,
- o impact of the Army new operational doctrine on requirements,
- o air deployability of the 2-1/2-ton vehicle in the FMTV Program, and
- o need for more trailers in the FMTV Program.

The GAO also recommended that the Army not proceed to full-rate production on the FMTV Program until the reassessment was complete and alternatives were considered.

The Army generally disagreed with the GAO conclusions and recommendations; the Under Secretary of Defense for Acquisition and Technology nonconcurred with delaying the FMTV Program from proceeding to full-rate production. The Under Secretary believed that completing the assessment to support the solicitation for the follow-on production contract was more prudent. Also, the Under Secretary stated that the Army would update the cost and operational effectiveness assessment for the FMTV Program. The Under Secretary further stated that the update would be used to support the Army System Acquisition Review Council Milestone IIIB review to decide whether the FMTV Program should proceed to full-rate production. Further, following the Milestone IIIB review, the Army Training and Doctrine Command would perform a program assessment of the cost-effectiveness of a 30-year procurement program. That assessment would be completed by FY 1996, before the award of the second multi-year production contract.

## Inspector General, DoD

Inspector General, DoD, Report No. 96-020, "Contractor's Performance on the Family of Medium Tactical Vehicles Program," November 1, 1995, stated that the Contractor for the FMTV Program had not attained the level of production necessary to meet contractual delivery schedules. As a result, the Army had spent \*\*\*\*\* on the production contract as of May 31, 1995, but had not received a single vehicle suitable for fielding out of \*\*\*\*\* scheduled for delivery. Also, the Contractor delinquency resulted in the Army incurring about \$21 million in added costs to maintain vehicles 14 to 25 years old and having to continue to use old vehicles, which could result in adverse readiness consequences. The report also stated that the FMTV Program was not fully funded. However, the Deputy Secretary of Defense directed that the Director, Program Analysis and Evaluation, determine the adequacy of funding for the FMTV Program as part of the FYs 1997-2001 Program Review.

The report recommended that the Army revise the delivery schedule, hold the Contractor accountable to meet the revised delivery schedule and include a liquidated damages clause in future contracts for the FMTV Program, and determine the need for a second source for medium tactical vehicles.

The Director, U.S. Army Contracting Support Agency, provided comments for the Army on this report. The Army concurred with the recommendations to revise the delivery schedule and to hold the Contractor accountable for meeting the revised delivery schedule. The Army also concurred with the intent of the recommendation to include a liquidated damages clause in future contracts for the FMTV. The Army stated that the Contracting Officer would make a business decision on including a liquidated damages clause and the feasibility of having a second source of medium tactical vehicles based on the available information and extenuating factors at the time of the contract award.

Inspector General, DoD, Report No. 96-005, "Quick-Reaction Audit Report on Conditional Acceptance of Medium Tactical Vehicles," October 12, 1995, stated that the FMTV Program Office had conditionally accepted 552 incomplete vehicles from the Contractor and planned to conditionally accept additional vehicles. The report concluded that the conditional acceptance of the vehicles was not in the best interest of the Government. As a result, the ACO prematurely paid the Contractor an additional \$7.1 million for which the Army received no benefit. Further, the continued conditional acceptance of incomplete vehicles could result in the Army paying the Contractor an additional \$17.0 million for incomplete vehicles. Also, conditional acceptance increased the Army cost risk on the FMTV Program and reduced the incentive for the Contractor to finish incomplete vehicles. The report recommended that the Army stop conditionally accepting vehicles under the FMTV Program. The Deputy Assistant Secretary of the Army (Procurement) concurred with the recommendation.

## **Appendix B. Summary of Prior Audits and Other Reviews**

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Inspector General, DoD, Report No. 94-014, "Low-Rate Initial Production in Major Defense Acquisition Programs," November 9, 1993, stated that all seven Defense acquisition programs that the auditors reviewed entered LRIP without completing at least some prerequisites in design, testing, and preparation for production. The report also stated that LRIP acquisition strategies did not effectively limit production quantities before Milestone III, Production Approval.

The report recommended that the Under Secretary of Defense for Acquisition (now Under Secretary of Defense for Acquisition and Technology) revise acquisition regulations and military standards to provide additional internal controls for assessing the readiness of programs to enter LRIP, including a required milestone review before entry into LRIP, and to limit the number of LRIP units produced to the minimum quantity necessary to support initial operational test and evaluation and production base considerations.

The Director, Acquisition Program Integration, Office of the Under Secretary of Defense for Acquisition, was generally supportive of the findings and recommendations. The Inspector General, DoD, agreed that the DoD Regulation 5000.2R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs," together with guidance provided in the Acquisition Deskbook, meets the intent of the recommendations.



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## Appendix C. Other Matters of Interest

**Material Management and Accounting System.** The Contractor material management and accounting system (MMAS) was not effective and the ACO had not required the Contractor to correct deficiencies in its MMAS.

The MMAS is a system or systems for planning, controlling, and accounting for the acquisition, use, issuance, and disposition of material. A MMAS allows a contractor to effectively budget, procure, and manage parts and material required for production. The capabilities of the MMAS prevent production line stoppages, schedule slippages due to shortages of material, and alternatively avoid costs of excess material.

The DCAA issued an audit report on January 25, 1996, on the Contractor MMAS. The report concluded that the Contractor MMAS was inadequate. The DCAA found that the Contractor MMAS system was not in compliance with seven of the eight applicable standards required by the Defense Supplement to the FAR 242.72. See the following table for a summary of the DCAA audit results.

### Summary of DCAA Audit of the Contractor MMAS

<u>MMAS Standard</u>	<u>Audit Result</u>
Audit Trails	Noncompliant
Internal Audit	Noncompliant
Inventory Accuracy	Noncompliant
Material Transfers	Noncompliant
System Description	Noncompliant
System Reporting	Noncompliant
Valid Time-Phased Requirements	Noncompliant
Material Costing	Compliant
Allocation of Common Inventory	Not Applicable
Commingled Inventory	Not Applicable

The DCAA also concluded that the accuracy of the Contractor master production schedule was 49.2 percent instead of 95 percent, as required in the MMAS standard. Further, the DCAA concluded that the inaccuracy of the master production schedule resulted in the Contractor acquiring \$24.2 million of excessive material and billing the Government and receiving progress payments of \$20.6 million for the excessive material.

The DCAA also reported that the Contractor should have successfully demonstrated its MMAS within a year of when (October 11, 1991) the Army awarded the production contract. Also, the Contractor delay in demonstrating its MMAS caused financial harm to the Government.

## Appendix C. Other Matters of Interest

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The DCAA made several recommendations that, if implemented, would correct the deficiencies in the Contractor MMAS. As such, we made no recommendations on the Contractor MMAS. However, we do believe that both the Army and the Contractor management should actively participate in implementing the DCAA recommendations on the MMAS as soon as possible. Although the DCAA issued its initial draft report detailing the problems with the Contractor MMAS in January 1995, the ACO had not acted to require the Contractor to correct the deficiencies. The ACO maintained that he did not need to act until after the DCAA issued its final report. As discussed in Inspector General, DoD, Report No. 96-020, "Contractor's Performance on the Family of Medium Tactical Vehicles Program," November 1, 1995, part shortages were a primary reason that the Contractor for the FMTV Program had not attained the level of production necessary to meet contractual delivery schedules. The lack of parts forced the Contractor to stop the production line several times and the Contractor must retrofit the vehicles that it produced before fielding the vehicles. If the Contractor effectively used the MMAS, the problems with shortages of parts would be significantly diminished.

**Missing and Nonconforming Parts.** The ACO and the Contractor were unable to determine the extent of missing or nonconforming parts on 1,806 vehicles.

The configuration status accounting requirement of the contract requires the Contractor to maintain information that shows the number and type of missing and nonconforming parts for each vehicle built. The Contractor records the missing and nonconforming parts for vehicles on two documents and an automated system: the Vehicle Inspection Record (VIR), the Material Inspection and Receiving Report (DD Form 250), and the Material Accounting and Production Information Control System (MAPICS). The VIR is the first document on which the Contractor should record, among other things, missing and nonconforming parts. The VIR should remain with the vehicle until the vehicle is sold. The DD Form 250 is the document that the Government uses to conditionally and finally accept vehicles. The DD Form 250 should contain all discrepancies reported when the Government accepts the vehicles and should list all missing and nonconforming parts for each vehicle. The MAPICS is part of the Contractor MMAS and should be used to determine the requirements for missing and nonconforming parts.

We randomly selected 160 vehicles of the FMTV Program that the Contractor had produced to determine the extent of missing and nonconforming parts. The sample contained both vehicles that the ACO had conditionally accepted from the Contractor, as well as vehicles that the Contractor had not presented for conditional acceptance.

We were unable to determine the extent of missing and nonconforming parts on the sample items because of discrepancies between the VIR, DD Form 250, and MAPICS. We identified discrepancies in two ways. One way was to record a discrepancy when the Contractor had listed a part number as missing or nonconforming on one document or system but not on another document. The

other way was to record a discrepancy when the quantities for a specific part number differed on two of the documents. The discrepancy rates between the VIR, DD Form 250, and MAPICS ranged from 86 percent to 89 percent:

- o 86 percent discrepancy rate between the VIR and the DD Form 250.
- o 87 percent discrepancy rate between the VIR and the MAPICS.
- o 89 percent discrepancy rate between the MAPICS and the DD Form 250.

Since the Contractor did not know the missing and nonconforming parts on the 1,806 vehicles, the Contractor planned to estimate the quantities of parts needed to retrofit the incomplete vehicles. If the Contractor procured more parts than it needed for the retrofit program, the Contractor planned to use the excessive parts in future production. While such action by the Contractor would provide it with the parts that it needs to complete and retrofit the vehicles, the ACO would be financing the Contractor excessive parts.

The DCAA recommendations should correct the deficiencies in the Contractor MMAS. As such, we did not make recommendations on requirements for missing and nonconforming parts.

**Integrated Logistics Support.** The Contractor experienced extensive delays during the production of vehicles in the FMTV Program. The delays adversely impacted the logistics support of the vehicle in the FMTV Program. For instance, the Contractor shipped to Army depots about \$10 million in spare parts that may require replacement or extensive rework because of continuing design changes until the Army has a product baseline for variants of the FMTV Program. Also, the continuous design changes have delayed validation, verification, and delivery of the technical manuals needed to operate and maintain the vehicles in the FMTV Program. We did not make recommendations on these matters because the Army recently established a product baseline that should enable the Contractor to identify parts and data needed for integrated logistics support and because the Contractor was contractually obligated to buy back the nonconforming parts and correct the technical manuals.

**Component Breakout.** The Army had not established a component breakout program to identify material that the Government could furnish to the Contractor for the production of vehicles in the FMTV Program. The FMTV Program Management Office planned to pursue component breakout during the second multi-year production contract. As such, we did not make a recommendation on component breakout.

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## Appendix D. Acquisition Objectives, Qualitative Requirements, and Product Improvements

We did not identify problems during our review of the program management elements of acquisition objectives, qualitative requirements, or preplanned product improvements.

**Acquisition Objectives.** We concluded that it was too early in the FMTV Program to make a meaningful analysis of the acquisition objectives for the Program. The Army steadily reduced its force structure and, as such, the acquisition objectives for 2-1/2 and 5-ton vehicles have declined. The Army planned to replace its present 2-1/2 and 5-ton vehicles with the FMTV on a one-for-one basis. As of February 1995, the Army had 95,460 vehicles in the inventory and a total acquisition objective of 85,401 2-1/2 and 5-ton vehicles. However, the Army had only put 10,843 vehicles on contract. The acquisition objective was calculated based on a strength of 10 divisions. The Wheeled Vehicle Requirements Management Office, U.S. Army Training and Doctrine Command, reviews tables of equipment on a 3-year cycle.

**Qualitative Requirements.** We determined that the Army clearly established a need for modernizing its medium tactical vehicle fleet. The average age was 25.4 years for the 2-1/2-ton vehicles in the inventory and 13.8 years for the 5-ton vehicles. Both vehicles required increasing supportability costs. A new state-of-the-art fleet offers the Army a lighter, more deployable fleet with maximum commonality of parts and superior automotive technology, including automatic transmission, central tire inflation, 20-year maintenance reliability, and the ability to operate on severe off-road terrain in extreme weather conditions.

The GAO reviewed the FMTV Test and Evaluation Program and concluded that the FMTV trucks had successfully completed technical and operational testing. The Contractor has started its program to retrofit and complete the previously produced vehicles to the product baseline.

**Preplanned Product Improvement.** We determined that the FMTV Program Management Office had no preplanned product improvements for vehicles in the FMTV Program. Officials of the FMTV Program Management Office indicated that changes relating to potential regulatory requirements, such as emission standards, are probable.

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## Appendix E. Administrative Contracting Officer Calculation and Application of the Loss Ratio

The FAR 32.503-6(g)(1) requires the contracting officer to compute a loss ratio and to adjust future progress payments or exclude progress payments on financial losses on a contract. To calculate the loss ratio, the contracting officer should perform three steps:

- o Calculate the revised contract price by adding the contract price plus the price of change orders and unpriced orders for which funds have been obligated.

- o Calculate the total costs to complete the contract by adding the total costs incurred to date plus the estimated additional costs to complete the contract.

- o Calculate the loss ratio by dividing the revised contract price by the total costs to complete the contract.

For example, assume that the contract price was \$950,000; change orders and unpriced orders totalled \$50,000; total costs incurred to date were \$900,000; and the estimated additional costs to complete the contract were \$300,000. Using the assumed data, the contracting officer would calculate a loss ratio of 83.3 percent as shown in the table below and apply the loss ratio to future progress payment requests that the Contractor submitted.

### Example of How to Calculate a Loss Ratio

Contract price	\$ 950,000
Change orders and unpriced orders	<u>50,000</u>
Revised contract price	<b>\$1,000,000</b>
Total costs incurred to date	\$ 900,000
Estimated additional costs to complete	<u>300,000</u>
Total costs to complete	<b>\$1,200,000</b>

The revised contract price (\$1 million) divided by the total costs to complete (\$1.2 million) equals the loss ratio (83.3 percent).

Before the ACO could calculate a loss ratio for the FMTV contract, he first had to develop an estimate of the cost necessary to complete the multi-year contract because the Contractor had not developed such an estimate. The ACO estimated that the Contractor would incur about \$1.205 billion of costs through the end of the 5-year, \$1.185 billion contract for the production of 10,843 vehicles.

Based on that estimate of cost to complete the multi-year contract, the ACO calculated a loss ratio of 98.34 percent (revised contract price [\$1.185 billion]

## **Appendix E. Administrative Contracting Officer Calculation and Application of the Loss Ratio**

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divided by total costs to complete [\$1.205 billion] equals the loss ratio of 98.34 percent). Further, by using that loss ratio, the ACO then determined that he would reduce the Contractor costs eligible for progress payments by 1.66 percent, beginning with the Contractor January 19, 1995, request for progress payments. Therefore, the ACO reduced the amount of progress payments that the Contractor requested by \$6.4 million. By September 30, 1995, the amount that the ACO withheld using the loss ratio had increased from \$6.4 million to \$6.5 million.

The ACO based his estimate at completion on the total estimated value of the 5-year contract. The Army had funded \$424.1 million of the \$1.185 billion contract at the time of the ACO estimate. The \$424.1 million funded the 5-year contract through Program Year 3a, which provided for \*\*\*\*\* of the 10,843 vehicles on the contract. If the Army terminated the contract or the Contractor was unable to complete the contract, the Contractor financial loss on the \$424.1 million would be substantially greater than the \$20 million loss estimated on the 5-year contract.

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## Appendix F. Management Comments on Finding and Audit Responses

The Principal Deputy Director, Defense Logistics Agency, took exception with various facts presented in the draft report. His specific comments and our audit responses follow. The full text of the Principal Deputy Director comments is in Part III.

**Management Comment.** The Principal Deputy Director nonconcurred with the auditor estimate of an average cost of \*\*\*\*\* for the first 2,758 vehicles that the Contractor produced. The Principal Deputy Director stated that substantial amounts of nonrecurring costs were included in the cost of these vehicles, which should have been factored into the cost of vehicles produced later in the program.

**Audit Response.** Our review of detailed information supporting the Contractor progress payment requests did not identify any substantial amounts of nonrecurring costs included in the costs of these vehicles. We believe that the Contractor is in a more serious loss position than the Principal Deputy Director statements. Further, the loss cannot be attributed to nonrecurring costs.

Although the ACO was applying a loss ratio that would withhold about \$40 million from the total cost of the contract, we do not see how the Contractor can achieve the efficiency to complete the contract with only a \$40 million loss. The average contract cost is \*\*\*\*\* for the 10,843 on this firm-fixed-price contract or a total cost of \$1.121 billion. As of June 30, 1996, the Contractor had spent \*\*\*\*\* (53.7 percent of the total contract cost) to produce \*\*\*\*\* (28.5 percent of the total vehicles in the contract), an average cost of \*\*\*\*\* vehicle produced. Further, the Army has taken final acceptance on only three of the \*\*\*\*\* that the Contractor had produced as of June 30, 1996. Figure 3. compares the average cost per vehicle that the Contractor had incurred as of September 30, 1995; June 30, 1996; and the average contract cost per vehicle at completion of the contract.

Proprietary Figure Removed

**Figure 3. Actual Cost to Produce Vehicles Far Exceeded Contract Cost as of June 30, 1996**

**Management Comment.** The Principal Deputy Director stated that applying a loss ratio was the correct and only action that the ACO had to take when unliquidated progress payments exceeded the fair value of work-in-process. The Principal Deputy Director stated that the ACO applied the loss ratio because he concluded that adjusting unliquidated progress payments down to the fair value of undelivered work was sufficient.

**Audit Response.** The application of the loss ratio will not adjust unliquidated progress payments down to the fair value of undelivered work. Recovery of loss is spread over the entire contract period, or 5 years in the case of the FMTV Program, while recovery of excessive unliquidated progress payments is based on the current progress payment position.

**Management Comment.** The Principal Deputy Director nonconcurred that the amount of excessive inventory was ever \$79.7 million or that the ACO should have reduced progress payments based solely on the draft DCAA audit report. The Principal Deputy Director stated that the ACO should have obtained immediate technical assessments of the inventory levels to verify the level of excessive inventory that DCAA reported and made adjustments to progress payments.

**Audit Response.** We did not say nor did we mean to imply that the ACO should have reduced progress payments based solely on the draft DCAA audit report. We have clarified the report to avoid misinterpretation.



## Appendix F. Management Comments on Finding and Audit Responses

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**Management Comment.** The Principal Deputy Director stated that existing management controls were adequate to protect the Government interest for contract financing on the FMTV program.

**Audit Response.** The draft report did not state that management controls were inadequate. We stated that the ACO had not implemented controls to ensure that he did not provide the Contractor with excessive progress payments. Specifically, the ACO was not reviewing the Contractor progress payment requests according to established procedures. Also, the ACO was not requiring the Contractor to provide realistic estimates of the costs to complete the contract on its requests for progress payments. Such weaknesses should be reported as management control weaknesses until the ACO has corrected the weaknesses.

## Appendix G. Summary of Potential Benefits Resulting From Audit

Recommendation Reference	Description of Benefit	Amount and/or Type of Benefit
1.	Management Control. Prevents further payment of progress payments until excessive progress payments have been recovered.	Nonmonetary.
2.	Economy and Efficiency. Quantifies the extent of excessive progress payments.	Nonmonetary.
3.	Economy and Efficiency. Recovers excessive progress payments and reduces cost risk to the DoD.	Nonmonetary.
4.	Management Control. Reduces the risk of paying excessive progress payments in the future.	Nonmonetary.
5.	Compliance With Regulations. Provides for proper documentation to be available for reviews of progress payment requests.	Nonmonetary.
6.	Program Results and Management Control. Enables the Administrative Contracting Officer to minimize cost risk to the Government.	Nonmonetary.
7.	Program Results and Management Control. Enables the Procuring Contracting Officer and the Program Manager to minimize cost risk to the Government.	Nonmonetary.

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## **Appendix H. Organizations Visited or Contacted**

### **Office of the Secretary of Defense**

Office of the Under Secretary of Defense for Acquisition and Technology, Washington, DC  
Director, Operational Test and Evaluation, Washington, DC

### **Department of the Army**

Office of the Assistant Secretary of the Army (Research, Development and Acquisition), Washington, DC  
Office of the Assistant Secretary of the Army (Program Analysis and Evaluation), Washington, DC  
Office of the Deputy Chief of Staff for Operations and Plans, Washington, DC  
Army Operational Test and Evaluation Command, Alexandria, VA  
Tank-automotive and Armaments Command, Warren, MI  
Tactical Wheeled Vehicles Requirements Management Office, Fort Eustis, VA  
Office of the Program Executive Officer for Tactical Wheeled Vehicles, Warren, MI  
Office of the Project Manager for the Family of Medium Tactical Vehicles, Warren, MI  
Army Materiel Systems Analysis Agency, Aberdeen Proving Ground, MD  
Army Cost and Economic Analysis Center, Falls Church, VA

### **Defense Agencies**

Defense Contract Management Command, Fort Belvoir, VA  
Defense Plant Representative Office, Stewart and Stevenson Services, Incorporated, Sealy, TX  
Defense Contract Audit Agency, Houston Branch, Houston, TX

### **Non-Government Organizations**

Stewart and Stevenson Services, Incorporated, Sealy, TX

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## **Appendix I. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition and Technology  
  Director, Defense Procurement  
  Director, Defense Logistics Studies Information Exchange  
Under Secretary of Defense (Comptroller)  
  Deputy Chief Financial Officer  
  Deputy Comptroller (Program/Budget)  
Director, Operational Test and Evaluation  
Assistant to the Secretary of Defense (Public Affairs)

### **Department of the Army**

Assistant Secretary of the Army (Research, Development and Acquisition)  
Assistant Secretary of the Army (Financial Management and Comptroller)  
Commanding General, Army Materiel Command  
  Commanding General, Army Tank-automotive and Armaments Command  
Auditor General, Department of the Army  
Program Executive Officer for Tactical Wheeled Vehicles  
Program Manager for the Family of Medium Tactical Vehicles Program

### **Department of the Navy**

Assistant Secretary of the Navy (Financial Management and Comptroller)  
Auditor General, Department of the Navy

### **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Auditor General, Department of the Air Force

## **Other Defense Organizations**

Director, Defense Contract Audit Agency  
Branch Manager, Houston Branch, Defense Contract Audit Agency  
Director, Defense Logistics Agency  
Commander, Defense Contract Management Command  
Chief, Defense Plant Representative Office, Stewart and Stevenson Services,  
Incorporated  
Director, National Security Agency  
Inspector General, National Security Agency  
Inspector General, Defense Intelligence Agency

## **Non-Defense Federal Organizations**

Office of Management and Budget  
Technical Information Center, National Security and International Affairs Division,  
U.S. General Accounting Office

Chairman and ranking minority member of each of the following congressional  
committees and subcommittees:

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on National Security, Committee on Appropriations  
House Committee on Government Reform and Oversight  
House Committee on National Security, International Affairs, and Criminal Justice,  
Committee on Government Reform and Oversight  
House Committee on National Security

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## **Part III - Management Comments**

# Defense Logistics Agency Comments



IN REPLY  
REFER TO

DDAI

DEFENSE LOGISTICS AGENCY  
HEADQUARTERS  
8725 JOHN J. KINGMAN ROAD, SUITE 2533  
FT. BELVOIR, VIRGINIA 22060-6221



JUN 21 1996

MEMORANDUM FOR THE ASSISTANT INSPECTOR GENERAL FOR AUDITING  
DEPARTMENT OF DEFENSE

SUBJECT: Draft Report on Contract Financing of the Family of  
Medium of Tactical Vehicles Program  
(Project No. SAL-0003.03)

This is in response to your request of 28 March 1996.

*Alvin Coleman*  
FOR JACQUELINE G. BRYANT  
Chief, Internal Review Office

Attachments  
8

cc: AQBE  
AQOE

Federal Recycling Program  Printed on Recycled Paper



**AUDIT TITLE:** Contract Financing of the Family of Medium Tactical Vehicles Program, 5AL-0003.03

**FINDING:** The Administrative Contracting Officer (ACO) approved \$50.4 million of excessive financing to the Contractor through progress payments for the FMTV Program as of September 30, 1995. The excessive financing resulted from incomplete information from the contractor and inaction by the ACO. The excessive financing costs the government more than \$2.6 million each year in interest costs. Further, the excessive financing unnecessarily shifted cost risk from the Contractor to the Government (page 4).

**DLA COMMENTS:**

Contract Financing. We partially concur. We recognize that excessive financing to the Contractor through progress payments may have occurred, but we believe that the Department of Defense Inspector General (DoD IG) estimate of \$50.4 M in excess progress payments of as September 1995 is significantly overstated. Furthermore, we believe that there are currently no excessive progress payments. The details of our partial concurrence are explained in the following paragraphs.

Requests for Progress Payments.

Partially concur. Stewart and Stevenson (S&S) did not properly prepare its progress payment requests in that S&S calculated an unrealistic Estimate to Completion (ETC). S&S made baseline estimates less frequently than every six months as required by the Federal Acquisition Regulation, (FAR) part 53.301-1443. However, the ACO calculated a Government ETC, based upon input from Defense Contract Audit Agency (DCAA) and DCMC technical specialists. This Government ETC was used in calculating the loss ratio to determine the appropriate progress payment amount.

A proper ETC on this program is influenced by estimated production and other factors. The S&S ETC was less than the Government ETC because it projected overly optimistic productivity increases. The S&S Contractor Estimating System (CES) was approved effective May 1, 1996. Improvements to the CES are expected to positively impact the quality of the contractor's future ETCs.

DCMC recognizes that there is a high degree of judgment inherent in the process of developing an ETC. DCMC policy, as stated by AQC Policy Letter No. 93-18, Evaluation and Use of Data During Progress Payment Administration, (attached) requires that Contract Administration Office personnel should compare contractor ETCs with other available data, evaluate the reliability of conflicting ETCs, and document the contract file with the rationale used by the ACO for selecting the ETC used for progress payment purposes. The ACO has basically applied this guidance.

We nonconcur with the DoD IG estimate of the cost of the first 2,758 vehicles produced under the program. The Family of Medium Tactical Vehicle (FMTV) contract is a multiyear contract for 10,843 vehicles. The average

Final Report  
Reference

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The DoD IG stated that the ACO was incorrect in maintaining that the only action that he had to take when unliquidated progress payments exceeded the fair value of work-in-process was to apply a loss ratio. The ACO applied the loss ratio after full consideration of the circumstances, particularly the fair value calculation, because he concluded that the loss ratio was sufficient to adjust progress payments for the fair value of undelivered work.

The ACO is in the process of obtaining a baseline ETC. The technical portion of this ETC will be complete by June 30, 1996, and the baseline ETC will be complete by July 31, 1996. This ETC will be the basis for subsequent ETCs and loss ratios.

Excessive Inventory.

Partially concur. The DoD IG asserted that the ACO was remiss in not acting more aggressively on a January 1995 draft DCAA report which recommended that he reduce the Contractors's requests for inventory by \$67.7 M for excessive inventory. We concur that the ACO should have reacted more promptly to the DCAA draft reports issued in January 1995 and June 1995. However, we do not concur that the amount of excessive inventory was ever \$79.7M, or that the ACO should have reduced progress payments based solely on the draft DCAA audit report. Actions that were taken by the ACO included providing reports to S&S and soliciting responses, holding discussions on resolution of the deficiencies, and, in August 1995, establishing an Integrated Product Team (IPT) to address Material Management Accounting System (MMAS) issues, including excessive inventory. Both DCAA and S&S are represented on the IPT, which continues to meet on a weekly basis.

Actions that could have been taken include obtaining immediate technical assessments of inventory levels to verify the DCAA assessments of excessive inventory, discussions with the contractor, followed by appropriate adjustments to progress payments. However, receipt of a draft report is not, in and of itself, sufficient basis for reduction or suspension of progress payments. FAR Part 32.503-6, Suspension or Reduction of Progress Payments, establishes the conditions of suspensions and reductions, among which are stipulations that such actions should never be taken precipitately or arbitrarily, and should only be taken after notifying the contractor of the intended action and providing an opportunity for discussion.

It should be noted that the DCAA assessments of excessive inventory declined from \$79.7M in the January 1995 draft report to \$24M in the January 1996 final report. This was due largely to consumption by the contractor, but \$6M of the reduction was due to a reevaluation of the appropriate inventory level by DCAA.

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distinction between a properly written multiyear contract and an annual contract with options is that, under a multiyear contract, the Government is obligated to purchase the entire multiyear quantity unless the Government pays the cancellation ceiling to buy its way out of that contract.

The advantages of multiyear contracting including lower costs, continuity of production and avoiding annual startup costs, resulting in lower prices to the Government. The Government recognizes that, in order to avoid these costs the contractor must incur certain nonrecurring costs up-front, such as special tooling, pilot runs and labor learning. These costs are factored into the prices for the entire requirement, and are the basis for the cancellation ceiling. The cancellation ceiling represents the amounts that the Government must pay if it cancels any program years after the first year. Cancellation charges need not be funded before cancellation, and are payable in addition to amounts available for contract performance.

The ACO was correct in calculating the loss ratio by dividing the entire contract amount by the EAC for the entire FMTV contract requirement. This methodology allows for nonrecurring costs, and is consistent with the concepts underlying the multiyear contracting as discussed above.

### Adequacy of Management Controls.

Internal Management Controls were addressed in Appendix. A, Scope and Methodology.

Existing management controls are adequate to protect the Government's interest with regard to contract financing on the FMTV program. The Government developed ETC used by the ACO to calculate loss ratios is sufficiently accurate to ensure that progress payments do not exceed fair value. The ACO continues to work with the contractor to obtain realistic ETCs. DCMC policy as contained in DLAD 5000.4, Contract Management, Part XI, Chapter 5, Progress Payments, offers sufficient guidance with regard to management of progress payments, including oversight of contractor systems. Additionally, DCMC desk guide Spotlights on Risk contains detailed guidance on development of ETCs and progress payment surveillance. This guide will be updated to expand the coverage addressing progress payment inventory with regard to detecting and addressing indications of excessive inventory.

The measures taken by the ACO to identify and adjust for excessive inventory, including establishment of the Integrated Product Team, with DCAA and Contractor participation, obtaining a detailed inventory from Technical Specialists, as an interim measure, and applying a \$5.5M reduction from progress payments, offer sufficient protection against overpayment due to excessive inventory.



**INTERNAL MANAGEMENT CONTROL WEAKNESSES:**

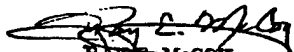
(x) Nonconcur

**ACTION OFFICER:** Timothy J. Frank, AQOE, (703) 767-3431

**PSE APPROVAL:** Gary S. Thurber, Deputy, DCMC

**DLA APPROVAL**

*gt, DDAT, 19 Jan 96*

  
RAY E. MCCOY  
Major General, USA  
Principal Deputy Director

## Defense Logistics Agency Comments



DEFENSE LOGISTICS AGENCY  
THE DEFENSE CONTRACT MANAGEMENT COMMAND  
CAMERON STATION  
ALEXANDRIA, VIRGINIA 22304-6190



IN REPLY  
REFER TO AQC

8 OCT 1993

SUBJECT: AQC Letter No. 93-18, Evaluation and Use of Data  
During Progress Payment Administration

TO: Commanders of Defense Contract Management Districts  
Commander of Defense Contract Management Command  
International

This letter is directive in nature and remains permanent guidance unless superseded or rescinded. This letter supersedes DCMC-D Letter No. 92-5, Use of Key Data During the Progress Payment Review and Approval Process, which is hereby rescinded.

1. A General Accounting Office review, conducted in 1991, found that Defense Contract Management Command (DCMC) procedures did not require the Administrative Contracting Officer (ACO) to consider monthly surveillance reports during the review and approval of progress payment requests. Subsequent audits by the Department of Defense Inspector General (DoD IG) contained findings concerning the administration of progress payments, particularly the use of Estimates at Completion (EAC). One audit found that DCMC procedures did not clearly require a comparison between the EAC submitted with the contractor's progress payment request and the EAC developed by the Contract Administration Office (CAO) using cost and schedule control system (C/SC) data. Another audit found that the ACO did not use recent contractor C/SC data to ensure the reasonableness of the contractor's request for progress payments. A third audit found that the contract price was not consistent among the CAO, the procuring office and the contractor. The following guidance addresses these issues.

2. The results of CAO surveillance provide valuable insight into contractor performance through analysis of information gathered from the contractor management control systems (cost/schedule, production scheduling, quality, etc.), as well as onsite physical surveillance of contractor operations. To ensure that this information is considered during the progress payment review process, Program and Technical Support personnel shall provide the ACO with copies of their monthly surveillance reports. These reports must clearly address any negative performance trends which may result in schedule slippage or increased EAC. The ACO shall review the surveillance reports to determine the need to (1) perform an out-of-cycle progress payment review, (2) reassess

AQC PAGE 2  
SUBJECT: AQC Letter No. 93-18, Evaluation and Use of Data  
During Progress Payment Administration

the contractor risk category, and/or (3) remove the contract from the automated payment system and perform monthly progress payment reviews. The frequency of progress payment reviews is affected by several factors, particularly the ACO's assessment of contractor risk, which is documented in the ACO's progress payment review plan (See paragraph 6 below).

3. On major acquisition programs, contractors may be required to have a management control system that can produce accurate Cost and Schedule data. DoD experience shows that the Cumulative Cost Performance Index (CPIcum), when based on credible Cost and Schedule data, is a reliable indicator of the potential for cost overruns. The ACO should consider the CPIcum whenever the Cost and Schedule data is deemed reliable enough to support it.

4. To ensure the development and use of the most appropriate EAC in progress payment reviews, CAO personnel should:

a. Compare the EAC on the contractor's progress payment request with an EAC calculated using the CPIcum formula, or with other available data, such as EACs developed by the Defense Contract Audit Agency (DCAA) or the procuring activity.

b. Carefully evaluate the reliability of conflicting EACs, particularly ones which are lower than those calculated using the CPIcum, or which are significantly different from EACs using other available data. Significant variances may require technical review and should be communicated with DCAA and program management or buying offices, as appropriate.

c. Document the contract file with the rationale used by the ACO for selecting the EAC used for progress payment purposes.

5. Although the EAC used for progress payments should reflect the EAC calculated using cost and schedule data (if contractually required and if the underlying management systems are adequate), or other available data, legitimate differences in EACs can exist. ACOs should use their judgment to assure that EACs used for progress payments represent the best estimate of the final contract cost.

6. In addition to the measures described above, ACOs will perform the following to ensure accuracy and consistency in progress payment administration:

a. Develop and implement a plan for future progress payment reviews based on contractor risk assessment, using the DLA Form 325, Progress Payment Administrative Record, document the plan, including the risk assessment, in the contract file.

## Defense Logistics Agency Comments

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AQC

PAGE 3

SUBJECT: AQC Letter No. 93-18, Evaluation and Use of Data  
During Progress Payment Administration

- b. Routinely review the contract price on contract modifications issued by the Procuring Contracting Officer (PCO) with the contract price in the CAO records. Contact the PCO to resolve unexplainable differences.
  - c. Be alert to indications that the contract price recorded by the contractor may be different from the contract price in the CAO records. Resolve those discrepancies as they arise.
7. Please ensure this information is provided to your field personnel. Questions regarding this policy may be directed to Mr. David Robertson, AQCOF, (703) 274-7726 or DSN 284-7726, or Mr. Timothy J. Frank, AQCOE, (703) 274-7751 or DSN 284-7751.



ROBERT P. SCOTT  
Executive Director  
(Contract Management)

**AUDIT TITLE:** Contract Financing of the Family of Medium Tactical Vehicles Program, SAL-0003.03

**RECOMMENDATION 1:** Recommend that the Administrative Contracting Officer, Defense Contract Management, for the multiyear contract for the Family of Medium Tactical Vehicles suspend progress payments on contract DAAR07-92-C-R001 until actions are completed on Recommendations 2 and 3 below.

**COMMENTS:** Nonconcur. Our position is addressed in detail in the section Excessive Unliquidated Progress Payments. At this point in time, contractor inventory has been substantially reduced and a \$5.5M reduction has been applied for excess inventory, based on a detailed analysis. Furthermore, the loss ratio reduction has been increased from 98.4% to 97.3%, resulting in a progress payment loss ratio reduction of \$13 from the most recent progress payment request. Therefore, it is not clear that the contractor has been paid excessive progress payments. Evaluations of nonrecurring costs and contractor inventory, which are currently in process, will address this issue. If either study concludes that a reduction in progress payments is appropriate, the ACO will take appropriate action to suspend or reduce progress payments, in accordance with existing guidance.

**INTERNAL MANAGEMENT CONTROL WEAKNESS:**

(x) Nonconcur. We nonconcur that the contractor has been paid excessive unliquidated progress payments. As explained in our comments to the Finding, existing management controls are adequate to ensure that the Government's interest is protected. DLAD 5000.4, Part XI, Chapter 5, and the progress payment desk guide, Spotlights on Risk, offer adequate policy and procedural guidance to ensure that progress payment are appropriately administered, and that progress payment are adjusted for fair value of undelivered work.

**DISPOSITION:**

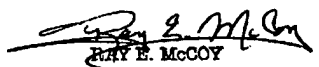
(x) Action is Ongoing. Estimated completion Date: September 30, 1996

**ACTION OFFICER:** Timothy J. Frank, AQOB, (703) 767-3431

**PSE APPROVAL:** Gary S. Thurber, Deputy, DCMC

**DLA APPROVAL**

*980, DCMC, 17 June 96*

  
RAY E. MCCOY  
Major General, USA  
Principal Deputy Director

## Defense Logistics Agency Comments

**AUDIT TITLE:** Contract Financing of the Family of Medium Tactical Vehicles Program, 5AL-0003.03

**RECOMMENDATION 2:** Recommend that the Administrative Contracting Officer, Defense Contract Management, for the multiyear contract for the Family of Medium Tactical Vehicles request that the Defense Contract Audit Agency quantify the amounts of excessive inventory and excessive unliquidated progress payments.

**COMMENTS:** Partially concur. The Integrated Product Team (IPT) is responsible for making a formal recommendation to the ACO regarding excessive inventory. DCAA is represented on the IPT. See our comments under Excessive Inventory regarding interim ACO action.

DCAA will be requested to evaluate and to quantify any excessive unliquidated progress payments related to excessive inventory. The IPT will report on excessive inventory as part of the MMAS redemonstration.

The ACO has requested DCAA to examine the contractor's nonrecurring costs to ensure that such costs included in progress payments requests are consistent with the FAR.

**INTERNAL MANAGEMENT CONTROL WEAKNESS:**

(x) Nonconcur Existing management controls are adequate to ensure that progress payments are protected against excessive inventory and excessive unliquidated progress payments. DLAD 5000.4, Part IX, Chapter 3, Material Management and Accounting System, contains sufficient guidance for CAO personnel regarding MMAS issues. The ACO is working with the IPT and with DCAA to resolve MMAS deficiencies. The contractor has made corrections to the MMAS and is scheduled to demonstrate it in September 1996. In the meantime, the ACO is relying on inventory levels based on detailed analysis by Technical Specialists and the ACO to determine appropriate inventory levels, and is applying progress payment reductions as appropriate.

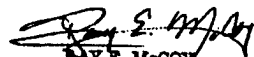
**DISPOSITION:**

(x) Action is Ongoing. Estimated completion Date: November 30, 1996.

**ACTION OFFICER:** Timothy J. Frank, AQOE, (703) 767-3431

**PSE APPROVAL:** Gary S. Thurber, Deputy, DCMC

**DLA APPROVAL**

  
RAY E. MCCOY  
Major General, USA  
Principal Deputy Director

**AUDIT TITLE:** Contract Financing of the Family of Medium Tactical Vehicles Program, 5AL-0003.03

**RECOMMENDATION 3:** Recommend that the Administrative Contracting Officer, Defense Contract Management, for the multi-year contract for the Family of Medium Tactical Vehicles demand that the Contractor repay the amounts paid for excessive inventory and the remaining amount of excessive unliquidated progress payments.

**COMMENTS:** We partially concur. We concur that the contractor must repay amounts associated with excessive inventory once the ACO determines those amounts. The ACO has already taken a \$5.5M withhold against progress payments for excessive inventory. The issue of excessive unliquidated progress payments is addressed in comments under Excessive Unliquidated Progress Payments, and Excessive Inventory. We nonconcur with the recommendation as it relates to excessive unliquidated progress payments, because at this point in time we do not concur that the contractor has been paid excessive progress payments.

**INTERNAL MANAGEMENT CONTROL WEAKNESS:**

(x) Nonconcur. Effective controls are in place to ensure that the Contractor will repay any excessive unliquidated progress payments.

**DISPOSITION:**


(x) Action is Considered Complete.

**ACTION OFFICER:** Timothy J. Frank, AQOE, (703) 767-3431

**FSE APPROVAL:** Gary S. Thurber, Deputy, DCMC

**DLA APPROVAL**

*GB, DCMC, 19 June 94*

  
RAY E. MCGUFF  
Major General, USA  
Principal Deputy Director

## Defense Logistics Agency Comments

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**AUDIT TITLE:** Contract Financing of the Family of Medium Tactical Vehicles Program, SAL-0003.03

**RECOMMENDATION 4:** Recommend that the Administrative Contracting Officer, Defense Contract Management, for the multi-year contract for the Family of Medium Tactical Vehicles quantify excessive inventory and excessive unliquidated progress payments on future requests for progress payments and demand that the Contractor repay any excessive amounts.

**COMMENTS:** Concur. The issue of excessive inventory is discussed in the comments to Excessive Inventory, above. Repayment will be demanded from the contractor for any excessive progress payments. Current DoD DCMC policies are adequate to assure that this recommendation is accomplished.

**INTERNAL MANAGEMENT CONTROL WEAKNESS:**

(x) Nonconcur.


**DISPOSITION:**

(x) Action is Considered Complete.

**ACTION OFFICER:** Timothy J. Frank, AQOE, (703) 767-3431

**PSE APPROVAL:** Gary S. Thurber, Deputy, DCMC  
*GST, DDAJ, 19 JUN 96*

**DLA APPROVAL**

  
RAY E. MCCOY  
Major General, USA  
Principal Deputy Director



**AUDIT TITLE:** Contract Financing of the Family of Medium Tactical Vehicles Program, SAL-0003.03

**RECOMMENDATION 5:** Recommend that the Administrative Contracting Officer, Defense Contract Management, for the multiyear contract for the Family of Medium Tactical Vehicles require the Contractor to include a realistic estimate of the costs to complete the contract on its request for progress payments and update the cost estimate at least once every 6 months.

**COMMENTS:** Concur. This issue is addressed in our comments to Requests for Progress payments. We recognize that the dynamic nature of the program has made it difficult for the contractor to accomplish these updates in the best possible manner. The ACO will continue to work closely with the contractor to improve the quality of ETCs. In addition DCMC S&S is developing a baseline Government ETC, which will be used in evaluating the contractor's ETC and for evaluating progress payments.

**INTERNAL MANAGEMENT CONTROL WEAKNESS:**

(X) Nonconcur. Guidance contained Spotlights on Risk addresses preparation of ETCs in detail. This guidance has been applied by the ACO in preparation of a government ETC for the purpose of developing a realistic ETC, and an appropriate loss ratio.

**DISPOSITION:**

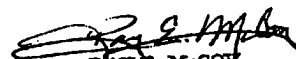
(x) Action is Ongoing. Estimated completion Date: July 31, 1996

**ACTION OFFICER:** Timothy J. Frank, AQOE, (703) 767-3431

**PSE APPROVAL:** Gary S. Thurber, Deputy, DCMC

**DLA APPROVAL**

*JS, DDAJ, 19 June 96*

  
RAY E. MCCOY  
Major General, USA  
Principal Deputy Director

## Defense Logistics Agency Comments

**AUDIT TITLE:** Contract Financing of the Family of Medium Tactical Vehicles Program, SAL-0003.03

**RECOMMENDATION 6:** Recommend that the Administrative Contracting Officer, Defense Contract Management, for the multi-year contract for the Family of Medium Tactical Vehicles assess the financial capabilities of the Contractor as required in Federal Acquisition Regulation 32.503-2(b) and (c).

**COMMENTS:** Concur. This issue is addressed in our comments to Other Conditions Requiring Management's Attention, above. Our current policies require annual progress payment reviews, including reviews of the contractor's financial condition. These policies are adequate to assure compliance with this recommendation. The ACO has updated and improved the CAO's system for maintaining and documenting the contractor's financial surveillance, through establishing a financial surveillance plan and a financial surveillance file.

**INTERNAL MANAGEMENT CONTROL WEAKNESS:**

(x) Nonconcur. DLAD 500.4, Contract Management, and Spotlights on Risk is adequate to ensure that financial capabilities of the contractor are adequate for progress payment administration.

**DISPOSITION:**

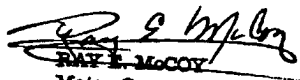
(x) Action is Considered Complete.

**ACTION OFFICER:** Timothy J. Frank, AQOE, (703) 767-3431

**PSE APPROVAL:** Gary S. Thurber, Deputy, DCMC

*JS, DDAJ, 19 June 96*

**DLA APPROVAL**

  
RAY E. MCCOY  
Major General, USA  
Principal Deputy Director

**AUDIT TITLE:** Contract Financing of the Family of Medium Tactical Vehicles Program, 5AL-0003.03

**RECOMMENDATION 7:** Recommend that the Administrative Contracting Officer, Defense Contract Management, for the multi-year contract for the Family of Medium Tactical Vehicles provide the results of the assessment of the financial capabilities of the Contractor to the Contracting Officer and program administrators.

**COMMENTS:** Partially concur. When our financial capability assessment process reveals any information that causes the ACO to reduce contractor financing, that information will be immediately relayed to the PCO and PM. To date, that has not occurred.

**INTERNAL MANAGEMENT CONTROL WEAKNESS:**

(x) Nonconcur

**DISPOSITION:**

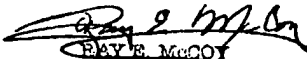
(x) Action is Considered Complete.

**ACTION OFFICER:** Timothy J. Frank, AQOE, (703) 767-3431

**PSE APPROVAL:** Gary S. Thurber, Deputy, DCMC

*JS, ODAT, 19 June 96*

**DLA APPROVAL**

  
GARY S. MCCOY  
Major General, USA  
Principal Deputy Director

# Army Comments



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



REPLY TO  
ATTENTION OF

22 MAY 1996

SARD-PC

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE  
(AUDITING) 400 NAVY DRIVE,  
ARLINGTON, VIRGINIA 22202

SUBJECT: Audit Report on Contract Financing of the  
Family of Medium Tactical Vehicles Program  
(Project No. 5AL-0003.03)

Reference your memorandum of March 28, 1996, subject as above. The subject report has been reviewed as requested. It is recommended that the special warning with regard to company confidential or proprietary information be affixed to the final report. The Defense Contract Management Command (DCMC) and Administrative Contracting Officer (ACO) are responding directly to your office, and therefore, we can not provide any comments on their response at this time. The Army is, however, supportive of the DCMC/ACO position with regard to the findings and recommendations, based upon preliminary comments and discussions with DCMC personnel, the ACO, and representatives of the Defense Contract Audit Agency.

POC for this action is Mr. William A. Kley, who can be reached at (703)697-8298.

Kenneth J. Oscar  
Deputy Assistant Secretary of the Army  
(Procurement)

CF:  
SAAG-PMF-E  
AMCIR-A

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## INTERNET DOCUMENT INFORMATION FORM

**A . Report Title:** Contract Financing of the Family of Medium Tactical Vehicles Program

**B. DATE Report Downloaded From the Internet:** 11/22/99

**C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):** OAIG-AUD (ATTN: AFTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801)  
Arlington, VA 22202-2884

**D. Currently Applicable Classification Level:** Unclassified

**E. Distribution Statement A:** Approved for Public Release

**F. The foregoing information was compiled and provided by:**  
DTIC-OCA, Initials: \_\_VM\_\_ Preparation Date 11/22/99

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.