

**Audit**



**Report**

OFFICE OF THE INSPECTOR GENERAL

PROCUREMENT OF GUN MOUNTS  
FOR THE M1A2 TANK

Report No. 97-066

January 9, 1997

19991216 099

**Department of Defense**

**DISTRIBUTION STATEMENT A**

Approved for Public Release  
Distribution Unlimited

AOI00-01-0299

**Additional Copies**

To obtain additional copies of this audit report, contact the Secondary Reports Distribution Unit of the Analysis, Planning, and Technical Support Directorate at (703) 604-8937 (DSN 664-8937) or FAX (703) 604-8932.

**Suggestions for Future Audits**

To suggest ideas for or to request future audits, contact the Planning and Coordination Branch of the Analysis, Planning, and Technical Support Directorate at (703) 604-8939 (DSN 664-8939) or FAX (703) 604-8932. Ideas and requests can also be mailed to:

OAIG-AUD (ATTN: APTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801)  
Arlington, Virginia 22202-2884

**Defense Hotline**

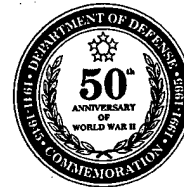
To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to [Hotline@DODIG.OSD.MIL](mailto:Hotline@DODIG.OSD.MIL); or by writing to the Defense Hotline, The Pentagon, Washington, D.C. 20301-1900. The identity of each writer and caller is fully protected.

**Acronym****OMB**

Office of Management and Budget



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



January 9, 1997

**MEMORANDUM FOR GENERAL COUNSEL, DEPARTMENT OF DEFENSE  
AUDITOR GENERAL, DEPARTMENT OF THE ARMY**

**SUBJECT: Audit Report on Procurement of Gun Mounts for the M1A2 Tank  
(Report No. 97-066)**

We are providing this audit report for review and comment by the Army. In addition, we have added the General Counsel, DoD, as an addressee and request the General Counsel's assistance in facilitating resolution of the issues raised in the report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. We request that the Assistant Secretary of the Army (Research, Development and Acquisition) reconsider the Army position and provide comments on Recommendations 1., 2., and 3. by January 24, 1997. We are requesting comments within 15 days of the date of this report because of the time sensitivity of the recommendations.

We appreciate the courtesies extended to the audit staff. Management comments on a draft of this report were considered in preparing the final report. Questions on the audit should be directed to Mr. Garold E. Stephenson, Audit Program Director, at (703) 604-9332 (DSN 664-9332) or Mr. Eugene E. Kissner, Audit Project Manager, at (703) 604-9323 (DSN 664-9323). See Appendix E for the report distribution. The audit team members are listed inside the back cover.

Robert J. Lieberman  
Assistant Inspector General  
for Auditing

## Office of the Inspector General, DoD

Report No. 97-066  
(Project No. 6CH-5034)

January 9, 1997

### Procurement of Gun Mounts for the M1A2 Tank

#### Executive Summary

**Introduction.** The audit was performed in response to a joint inquiry from Senators Paul Simon, Charles E. Grassley, Carol Moseley-Braun, and Tom Harkin, as well as Congressmen Lane Evans and Jim Leach. The inquiry resulted from constituent allegations that the Program Executive Officer for Armored Systems Modernization improperly communicated Government information on Army procurement of gun mounts for the M1A2 tank. The allegations stated that information was communicated to the General Dynamics Land Systems Division (General Dynamics), the prime contractor for the M1A2 tank upgrade program, and operator of the Detroit Army Tank Plant. On June 3, 1996, we advised members of Congress and the Secretary of the Army that the audit did not substantiate the allegations. This report discusses Army plans for the future production of gun mounts as well as other components for the M1A2 tank upgrade program.

As of September 30, 1996, the Army had contracted for 806 of the 1,079 upgraded tanks it plans to procure under the M1A2 tank upgrade program. The cost to upgrade the 806 tanks will be \$1.7 billion. Each upgraded M1A2 tank includes a 120 millimeter gun mount that costs between \$38,000 and \$53,000, depending upon whether the gun mount is produced by Rock Island Arsenal or General Dynamics. The Army contract for the tank upgrade program provides that General Dynamics will provide half of the gun mounts for the M1A2 tanks. The remaining 50 percent of the gun mounts are produced at Rock Island Arsenal, a Government-owned, Government-operated facility, and provided to General Dynamics as Government-furnished material. General Dynamics has produced its gun mounts at the Detroit Army Tank Plant, a Government-owned, contractor-operated facility.

The Army plans to close the Detroit Army Tank Plant in FY 1999, in response to the 1995 Commission on Defense Base Closure and Realignment recommendation that DoD close and dispose of the plant because the Army had excess tank production capacity. In August 1996, the Army authorized General Dynamics to move Government-owned plant equipment used to produce M1A2 tank components from the Detroit Army Tank Plant to a company-owned facility that General Dynamics purchased in February 1996 in Muskegon, Michigan. The Army is evaluating two alternatives for the future production of gun mounts for the M1A2 tank upgrade program. The alternatives are to continue producing half of the gun mounts by Rock Island Arsenal and the other half by General Dynamics at its Muskegon facility, or to transfer the entire production quantity to General Dynamics. A transfer of the entire production quantity to Rock Island Arsenal is not an alternative under consideration.

**Audit Objective.** The primary audit objective was to determine whether the Army complied with applicable statutes and acquisition regulations for the procurement of gun mounts to support M1A2 tank production. We expanded the scope of the audit to determine whether the Army justified its August 1996 decision to authorize General Dynamics to move Government-owned plant equipment needed to produce

components for the M1A2 tank from the Detroit Army Tank Plant to a General Dynamics-owned plant in Muskegon, Michigan. We also evaluated the adequacy of the management control program as it applied to the primary audit objective.

**Audit Results.** The Army has not complied with the Arsenal Act in its evaluation of alternatives for the future manufacture of M1A2 tank gun mounts and other components that were produced by General Dynamics at the Detroit Army Tank Plant. As a result, the Army authorized General Dynamics to move Government-owned plant equipment for the production of M1A2 tank components from the Detroit Army Tank Plant to a General Dynamics-owned plant. Additionally, the Army is performing a cost comparison review for production of M1A2 tank gun mounts that will not maximize potential savings and does not resolve the problem of excess production capacity. Management controls were adequate as they applied to the primary audit objective. See Part I for a discussion of the audit results.

**Summary of Recommendations.** We recommend that the Assistant Secretary of the Army (Research, Development and Acquisition) direct the Army Materiel Command to:

- o issue a stop work order on the contract modification that authorized General Dynamics to move Government-owned equipment to its Muskegon plant and perform an Arsenal Act economic analysis to determine where the M1A2 tank components that were manufactured at the Detroit Army Tank Plant should be manufactured,

- o perform an Arsenal Act economic analysis rather than an Office of Management and Budget Circular A-76 cost comparison review for a competition between Rock Island Arsenal and General Dynamics to produce the 360 gun mounts needed for the M1A2 tanks to be delivered during FYs 1999 through 2001, and

- o modify contract DAAE07-95-C-0292 to reflect the results of the Arsenal Act analyses for the gun mounts and the other M1A2 tank components.

**Management Comments.** The Army nonconcurred with the recommendations to issue a stop work order on moving the equipment, to perform an Arsenal Act economic analyses to determine where the items should be manufactured, and to modify the contract to reflect the results of the analyses. The Army stated it would not implement the recommendations because the Army believes that the Arsenal Act does not apply to the acquisition strategy decisions it is making on how to buy gun mounts and other M1A2 tank components that were manufactured at the Detroit Army Tank Plant. The Army also stated it did not agree with finding statements on the decision to move Government-owned equipment and the application of the Arsenal Act. See Part I for a summary of managements comments on the recommendations; see Appendix D for a summary of management comments on the finding; and see Part III for the complete text of management comments.

**Audit Response.** As a result of the management comments, we revised the finding to delete opinions on the Arsenal Act made by the Army General Counsel in December 1995 and included the revised Army position where appropriate. We also deleted the finding statements that the decision to move the equipment was made to minimize the impact of the closure of the Detroit Army Tank Plant and that the decision occurred without coordination. For the reasons discussed in Part I and Appendix D of the report, we still believe that the recommendations require action. We request that the Army provide final comments on the recommendations by January 24, 1997. We are requesting comments within 15 days of the date of this report because of the time sensitivity of the recommendations.

# Table of Contents

---

<b>Executive Summary</b>	i
<b>Part I - Audit Results</b>	
Audit Background	2
Audit Objectives	3
Production of M1A2 Tank Gun Mounts and Other Components	4
<b>Part II - Additional Information</b>	
Appendix A. Scope and Methodology	
Audit Scope	12
Management Control Program	13
Organizations and Individuals Visited or Contacted	14
Summary of Prior Audits and Other Reviews	14
Appendix B. Advisory Memorandum to the Secretary of the Army on the Program Executive Officer for Armored Systems Modernization	15
Appendix C. Advisory Memorandum to the Assistant Secretary of the Army (Research, Development and Acquisition) on Future Gun Mount Production	16
Appendix D. Army Comments on the Finding and Audit Response	19
Appendix E. Report Distribution	24
<b>Part III - Management Comments</b>	
Army Comments	28

## **Part I - Audit Results**

### Audit Background

The audit was performed in response to a joint inquiry from Senators Paul Simon, Charles E. Grassley, Carol Moseley-Braun, and Tom Harkin, as well as Congressmen Lane Evans and Jim Leach. The inquiry resulted from an allegation that the Program Executive Officer for Armored Systems Modernization improperly communicated sensitive Government procurement information to General Dynamics on Army planned procurements of gun mounts for the M1A2 tank. General Dynamics is the prime contractor for the M1A2 tank upgrade program and the operator of the Detroit Army Tank Plant, a Government-owned, contractor-operated facility. The audit did not substantiate the allegation that the Program Executive Officer improperly communicated Government information to General Dynamics. On June 3, 1996, the Inspector General, DoD, advised the Army that the audit found no evidence that the Program Executive Officer illegally communicated any Government cost data or other proprietary data to General Dynamics (Appendix B). The Army is performing a cost comparison review in accordance with Office of Management and Budget (OMB) Circular A-76 to evaluate its options for future production of gun mounts for the M1A2 tank.

**M1A2 Tank Upgrade Program.** The M1A2 tank upgrade program involves converting the M1A1 tank to the M1A2 tank by replacing the 105 millimeter gun with a 120 millimeter gun and making numerous other improvements to the tank. The Army plans to procure a total of 1,079 tanks under the M1A2 tank upgrade program. As of September 30, 1996, the Army has contracted for 806 upgraded M1A2 tanks at an estimated cost of \$1.7 billion. Deliveries are scheduled through FY 2001. General Dynamics has manufactured one half of the gun mounts for the M1A2 tank at the Detroit Army Tank Plant and assembles the upgraded tank at the Lima Army Tank Plant. The Rock Island Arsenal, a Government-owned, Government-operated facility, has manufactured the remaining half of the gun mounts for the M1A2 tank. The Army provides the gun mounts manufactured by the Rock Island Arsenal to General Dynamics as Government-furnished material for the M1A2 tank. The Army plans to close the Detroit Army Tank Plant in FY 1999.

**Contracting for the M1A2 Tank.** The M1A2 tank upgrade program began in October 1994. As of September 1996, General Dynamics delivered 197 of the 206 upgraded tanks to be delivered under contract DAAE07-93-C-A003. The most recent contract for 600 M1A2 tanks, contract DAAE07-95-C-0292, was awarded to General Dynamics in March 1995. The \$1.3 billion contract runs from October 1996 through September 2001, and requires the delivery of 120 upgraded M1A2 tanks a year. Even though the Army has not decided who will produce gun mounts for the M1A2 tank upgrade program in the future, contract DAAE07-95-C-0292 requires that General Dynamics produce half the gun mounts and that the Army provide the other half as Government furnished material.



## Guidance Relevant to Production at Government-Owned Factories and Arsenals

**Arsenal Act.** The Arsenal Act (United States Code, title 10, section 4532) requires that the Army produce supplies needed in United States owned factories and arsenals when the supplies can be produced economically. The Arsenal Act states that:

The Secretary of the Army shall have supplies needed for the Department of the Army made in factories or arsenals owned by the United States, so far as those factories or arsenals can make those supplies on an economical basis.

**Arsenal Act Implementing Guidance.** The Comptroller General guidance on implementing the Arsenal Act states that "economical basis" means at a cost to the Government which is equal to or less than the cost of such supplies to the Government if they were produced in privately-owned facilities. Further, the cost of production is to be evaluated on the out-of-pocket cost to the Government facility, rather than fully burdened costs. Out-of-pocket costs include the direct costs of manufacturing the supplies and any indirect costs resulting from placing the additional work in the Government facility.

**Office of Management and Budget (OMB) Circular A-76.** OMB Circular A-76, "Performance of Commercial Activities," establishes policy for performance of commercial activities. The circular articulates the policy that competition enhances quality, economy and productivity, and states a preference for commercial sector performance whenever the product or service can be procured more economically from a commercial source. The circular and other policy statements on privatization generally assume that private industry can do the job better and cheaper. The purpose of OMB Circular A-76 is to reduce costs by: (i) balancing the interests of the parties to a make-or-buy cost comparison, (ii) providing a level playing field between public and private offerers to a competition, and (iii) encouraging competition and choice in the management and performance of commercial activities.

## Audit Objectives

The primary audit objective was to determine whether the Army complied with applicable statutes and acquisition regulations for the procurement of gun mounts to support M1A2 tank production. We expanded the scope of the audit to determine whether the Army justified its August 1996 decision to authorize General Dynamics to move Government-owned plant equipment needed to produce components for the M1A2 tank from the Detroit Army Tank Plant to a General Dynamics-owned plant in Muskegon, Michigan. The audit also evaluated the management control program as it applied to the primary audit objective. See Appendix A for a discussion of the audit scope and methodology and the management control program.

---

## **Production of M1A2 Tank Gun Mounts and Other Components**

The Army has not complied with the Arsenal Act in its evaluation of alternatives for the future manufacture of M1A2 tank gun mounts and other components that were produced by General Dynamics at the Detroit Army Tank Plant. This condition occurred because the Army believed that the Arsenal Act did not apply to the production of gun mounts. As a result, the Army authorized General Dynamics to move Government-owned plant equipment for the production of M1A2 tank components from the Detroit Army Tank Plant to a General Dynamics-owned plant and is performing a cost comparison review for production of M1A2 tank gun mounts that will not maximize potential savings to the Army and does not resolve the problem of excess production capacity.

### **Closing the Detroit Army Tank Plant**

The 1995 Commission on Defense Base Closure and Realignment recommended that DoD close and dispose of the Detroit Army Tank Plant because the Army has excess tank manufacturing capacity. Based on cost figures provided to the Commission by the Army, the Commission concluded that consolidating gun mount production at Rock Island Arsenal would reduce gun mount cost from \$53,000 to approximately \$38,000, a cost reduction of about \$15,000 per unit. The Commission's report did not state where the Army should consolidate production of the other M1A2 tank components produced at the Detroit Army Tank Plant. The Army plans to close the Detroit Army Tank Plant in FY 1999, and its present contract with General Dynamics was to be performed until that time partially at the Detroit Army Tank Plant. However, in August 1996, the Army modified the General Dynamics contract to allow General Dynamics to immediately begin moving the Government-owned industrial and operational plant equipment needed to manufacture components for 10 M1A2 tanks a month from the Detroit Army Tank Plant to a General Dynamics-owned plant in Muskegon, Michigan. The estimated \$14 million cost to move the equipment will be absorbed in the contract costs as if the production effort was performed at the Detroit Army Tank Plant.

### **Moving Government-Owned Plant Equipment**

**Alternate Offers Analyzed.** The Army analyzed other alternatives for manufacturing tank components, but it did not consider the out-of-pocket direct costs of manufacturing the components in Army arsenals with significant excess production capacity. In August 1995, the Army Tank-Automotive and

## Production of M1A2 Tank Gun Mounts and Other Components

---

Armaments Command requested General Dynamics and the Army Industrial Operations Command to submit priced offers, within two weeks, for manufacturing M1A2 tank components made at the Detroit Army Tank Plant, except the gun mount and its sub-assemblies\*. The Tank-Automotive and Armaments Command further requested General Dynamics to perform a make or buy analysis on the seven components that required industrial plant equipment relocation.

The Army Industrial Operations Command submitted an offer on 16 of the 19 components. It did not submit an offer on the other three components because two had inadequate technical data packages. The last component did not require machining and it could be provided by a small or medium size business in the private sector at less cost than arsenal production. The Industrial Operations Command based its offer for the 16 components on fully burdened costs to manufacture the components at Rock Island and Watervliet arsenals. The fully-burdened costs represented the cost of the components to the M1A2 tank upgrade program.

The Army Tank-Automotive and Armaments Command did not request the Army Industrial Operations Command to include only out-of-pocket direct costs to the Army in its offer, as required by the Arsenal Act. The Industrial Operations Command offer was not competitive with the quoted prices on the components from General Dynamics. Additionally, the offers that General Dynamics received from six contractors on the seven components for its make or buy analysis were not competitive with the estimated costs for General Dynamics to make the components.

The Army determined, based on the comparison of the cost information received by the Army Tank-Automotive and Armaments Command and the Program Executive Office for Armored Systems Modernization, that it was in the best interest of the M1A2 tank upgrade program to have General Dynamics move the Government-owned plant equipment to a General Dynamics plant purchased in February 1996. In August 1996, the Army Tank-Automotive and Armaments Command modified contract DAAE07-95-C-0292 to authorize General Dynamics to move the Government-owned plant equipment. The move is to be made without additional costs to the contract price. The current contract price was negotiated on the basis that the components would be produced at the Detroit Army Tank Plant.

**Excess Production Capacity.** The Army decision to move the Government-owned plant equipment to General Dynamics was based on a flawed analysis that will not resolve the problem of excess production capacity. The estimates of the out-of-pocket direct costs we obtained from Rock Island and Watervliet arsenals for 16 of the 19 components showed that the out-of-pocket costs ranged from 38 percent to 78 percent of the fully burdened costs. The out-of-pocket cost analysis would have been appropriate under the Arsenal Act because the components were manufactured in a Government-owned factory. Further, an analysis that was based on out-of-pocket cost estimates

---

\*By direction of the Army Materiel Command.

## **Production of M1A2 Tank Gun Mounts and Other Components**

---

may have shown that it was more cost effective for the Army to manufacture the components in its underutilized arsenals. We believe that the Army should issue a stop work order on the equipment move and perform an Arsenal Act economic analysis to determine where the components should be manufactured.

### **M1A2 Tank Gun Mount Production Requirements**

Production of the gun mounts for the M1A2 tank upgrade program, including the 240 gun mounts to be produced in 1996 and 1997 under contract DAAE07-95-C-0292, has been split evenly between Rock Island Arsenal and General Dynamics at the Detroit Army Tank Plant. The gun mounts produced by Rock Island Arsenal are provided as Government-furnished material to General Dynamics for the M1A2 tank. The gun mounts produced by General Dynamics are included in the contract price for the upgraded tank and are not separately priced in the contract.

In November 1995, the Assistant Secretary of the Army (Research, Development and Acquisition) recommended to the Secretary of the Army that production of all gun mounts for the M1A2 tank be privatized. On May 3, 1996, the Secretary of the Army directed the Assistant Secretary of the Army (Research, Development and Acquisition) and the Commander, Army Materiel Command to proceed with a cost comparison review with a view toward possible privatization of tank gun mount production.

### **Gun Mount Cost Comparison Review**

**Determination to Perform an OMB Circular A-76 Cost Comparison Review.** On October 25, 1996, the Army General Counsel provided a memorandum to the Inspector General, DoD, advancing the legal argument that the test for application of the Arsenal Act to supplies needed by the Army is whether the Army is purchasing an item separately or as part of a system. Further, because the Army is deciding how to buy the M1A2 gun mounts, not where to produce them, the Arsenal Act does not apply. Therefore, the Army believes it can legally restrict its study of gun mount production alternatives to 50 percent Rock Island Arsenal/50 percent General Dynamics and 100 percent General Dynamics and base the study on OMB Circular A-76 cost comparison rules. The Army began the OMB Circular A-76 cost comparison review in August 1996. The Army estimated that the review will be completed in July 1997.

**Alternatives Being Studied Under the OMB Circular A-76 Cost Comparison Review.** The Army is studying two alternatives under the OMB Circular A-76 cost comparison review to produce the 240 gun mounts needed during 1999 and 2000 for the M1A2 tanks projected for FYs 2000 and 2001 under contract DAAE07-95-C-0292. The alternatives are to continue producing

## **Production of M1A2 Tank Gun Mounts and Other Components**

---

half of the gun mounts at Rock Island Arsenal and the other half at the General Dynamics-owned facility in Muskegon, Michigan, or to transfer the entire production quantity to the latter. Transferring the entire production quantity to Rock Island Arsenal is not an alternative under consideration. Additionally, the alternatives being studied do not discuss producing the 120 gun mounts needed in 1998 for the M1A2 tanks projected for FY 1999. As of September 30, 1996, the Army has not provided funds to Rock Island Arsenal or to General Dynamics to produce any of the 120 gun mounts. Officials at the Army Tank-Automotive and Armaments Command stated that the Army must authorize the production of the 120 gun mounts by February 1997.

**Applying the Arsenal Act to Production of M1A2 Tank Gun Mounts and Other Components.** The gun mounts and the components in question are now wholly manufactured in arsenals or factories owned by the United States, some in a Government-owned, Government-operated facility and some in a Government-owned, contractor-operated facility. The proposal to allow General Dynamics to manufacture the components in its contractor-owned, contractor-operated facility is tantamount to removing the supplies (or a portion of them) from the arsenal system. Under the circumstances, the decision to take them out or leave them in requires an Arsenal Act economic analysis.

To comply with the Arsenal Act, the Army should solicit an "out-of-pocket" cost proposal from Rock Island Arsenal to produce 360 gun mounts and perform an Arsenal Act economic analysis, rather than an OMB Circular A-76 cost comparison review, for use in the competition with General Dynamics for gun mount production. The Arsenal Act economic analysis would include all remaining gun mount production for contract DAAE07-95-C-0292 and would consider only the out-of-pocket costs to the Government facility, rather than fully burdened costs. In a memorandum dated July 19, 1996, we informed the Army of our opinion that the Arsenal Act applied to gun mount production and our position that the Army should study transferring the production of all M1A2 tank gun mounts to Rock Island Arsenal. In response, the Army stated that the Arsenal Act did not apply because the determination the Army is making is whether the Army should purchase the gun mounts as part of the M1A2 tank system, not where to produce the gun mounts. The full text of the Army response is found at the end of the Management Comments in Part III.

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

The Army commented extensively on the finding. See Appendix D for a summary of the Army comments and the audit response.

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

**We recommend that the Assistant Secretary of the Army (Research, Development and Acquisition) direct the Army Materiel Command to:**

**1. Immediately issue a stop work order on modification P00019 to contract DAAE07-95-C-0292 that authorized General Dynamics to move Government-owned plant equipment from the Detroit Army Tank Plant to the General Dynamics-owned plant and perform an Arsenal Act economic analysis to determine where the components should be manufactured.**

**Army Comments.** The Army nonconcurred, stating that a stop work order on the equipment move is unnecessary and unwarranted. The Army stated that allowing General Dynamics to move the equipment from the Detroit Army Tank Plant to its Muskegon, Michigan, plant is not premature because both options the Army is studying for future gun mount production include at least 50 percent production at the General Dynamics-owned plant. The Army further stated that it does not believe that an Arsenal Act economic analyses is required because the decision the Army is making for the gun mounts is not where, but how to purchase the 50 percent of gun mounts that the Army decided to manufacture at Rock Island Arsenal in 1982.

**2. Solicit from Rock Island Arsenal an "out-of-pocket" cost proposal and perform an Arsenal Act economic analysis, rather than an Office of Management and Budget Circular A-76 cost comparison review, for use in a competition between Rock Island Arsenal and General Dynamics to produce the 360 gun mounts needed for the M1A2 tanks to be delivered during FYs 1999 through 2001 under contract DAAE07-95-C-0292.**

**Army Comments.** The Army nonconcurred, stating that it does not believe that the Arsenal Act applies to the acquisition strategy decision that the Army is making with respect to the production of tank gun mounts. The Army stated that it does not read the Arsenal Act as requiring that the option of producing 100 percent of the gun mounts at Rock Island Arsenal be considered. Also, continuing the OMB Circular A-76 study of the two tank gun mount production options of 50 percent Rock Island Arsenal/50 percent General Dynamics and 100 percent General Dynamics will provide the Army with cost information that is appropriate for making an acquisition strategy decision about how to continue to purchase the 50 percent of tank gun mounts that have been produced by Rock Island Arsenal since 1982. The Army further stated that examining the two options is consistent with the National Performance Review objectives and 10 United States Code section 2462 that requires the Secretary of Defense to procure supplies and services from the private sector when more economical based on total cost.

## **Production of M1A2 Tank Gun Mounts and Other Components**

---

**3. Modify contract DAAE07-95-C-0292 as necessary to reflect the producer of the gun mounts and other components identified as a result of the Arsenal Act economic analyses.**

**Army Comments.** The Army nonconcurred, stating that no Arsenal Act analysis should be performed and no resulting contract modifications made because the Arsenal Act does not apply to the acquisition strategy decisions that are being made for the gun mounts and other components produced at the Detroit Army Tank Plant. The Army further stated that it will alter contract DAAE07-95-C-0292 if modifications are needed to implement acquisition strategy decisions that are made for these items.

**Audit Response.** The Army comments are nonresponsive to Recommendations 1., 2., and 3. The recommendations were made to ensure that future acquisitions of M1A2 tank gun mounts and other M1A2 tank components that were produced at the Detroit Army Tank Plant are in compliance with the Arsenal Act. Implementation of the recommendations is contingent on the Army agreeing to apply the Arsenal Act in its evaluations of alternatives for the future acquisition of the items. For the reasons stated in the finding and the audit response to the Army comments on the finding, we continue to believe that the Arsenal Act does apply to the Army's new acquisition strategy decisions for purchasing the items. We request that the Army reconsider its position and provide additional comments on the recommendations in response to the final report.

This page was left out of original document



## **Part II - Additional Information**

---

## **Appendix A. Scope and Methodology**

### **Audit Scope**

The audit covered allegations that the Program Executive Officer for Armored Systems Modernization communicated Government proprietary information on the procurement of gun mounts for the M1A2 tank to General Dynamics, the prime contractor for the M1A2 tank upgrade program. The allegations were made by constituents of Senators Paul Simon, Charles E. Grassley, Carol Moseley-Braun, and Tom Harkin, as well as Congressmen Lane Evans and Jim Leach. The audit also covered the procedures that the Army used to procure gun mounts to support M1A2 tank production.

We expanded the scope of the audit to determine whether the Army justified its August 1996 decision to authorize General Dynamics to move Government-owned plant equipment needed to produce components for the M1A2 tank from the Detroit Army Tank Plant to a General Dynamics-owned plant in Muskegon, Michigan.

### **Audit Methodology**

To evaluate the allegations that the Program Executive Officer for Armored Systems Modernization disclosed Government proprietary information to General Dynamics, we reviewed applicable electronic mail messages and interviewed cognizant officials at the Office of the Assistant Secretary of the Army (Research, Development and Acquisition), the Program Executive Office for Armored System Modernization, the Army Materiel Command, the Army Tank-Automotive and Armaments Command, the Detroit Army Tank Plant, and Rock Island Arsenal. To determine whether the Army complied with statutes and regulations applicable to the procurement of gun mounts, we reviewed files on the procurement and production of the gun mounts and interviewed officials at the six organizations mentioned above and at the Army Industrial Operations Command. Additionally, we witnessed live-fire testing of M1A2 gun mounts produced by Rock Island Arsenal and General Dynamics. We also evaluated the results of previous live-fire tests of the gun mounts at the Army's Aberdeen Proving Grounds. To determine whether the Army justified moving Government-owned plant equipment from the Detroit Army Tank Plant to a General Dynamics-owned plant, we reviewed contract and production cost data and data on available production capacity in the Army arsenals. We also discussed the equipment move and unused production capacity in Army arsenals

with officials at the Program Executive Office for Armored Systems Modernization and the Army Tank-Automotive and Armaments Command. Additionally, we evaluated fully burdened and out-of-pocket costs to manufacture 16 components at Rock Island Arsenal and Watervliet Arsenal.

**Audit Period and Standards.** This economy and efficiency audit was performed from March through September 1996 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Office of the Inspector General, DoD. Accordingly, we included such tests of management controls as were considered necessary.

**Use of Computer-Processed Data and Statistical Sampling.** We did not rely on any computer-processed data or statistical sampling procedures to perform the audit.

### Management Control Program

DoD Directive 5010.38, "Management Control Program," August 26, 1996, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

**Scope of Review of the Management Control Program.** We reviewed the adequacy of management controls over the procurement of gun mounts for the M1A2 tank. Specifically, we reviewed Program Executive Office for Armored Systems Modernization and Army Tank-Automotive and Armaments Command management controls over contracting for gun mount production to support the M1A2 tank upgrade program. We did not assess the adequacy of management's self-evaluation of those controls. Implementation of the recommendations will improve procedures for the procurement of gun mounts and other components for M1A2 tanks. Although potential monetary benefits will result from implementing the recommendations, we could not quantify the amount because the cost to produce gun mounts in the future cannot be accurately determined.

**Adequacy of Management Controls.** Program Executive Office for Armored Systems Modernization and Army Tank-Automotive and Armaments Command management controls over the procurement of gun mounts for the M1A2 tank were adequate in that we identified no material management control weaknesses. As discussed in the finding, the Army decision to obtain fully burdened costs to produce the M1A2 components at Army arsenals instead of the out-of-pocket costs required by the Arsenal Act resulted from Army interpretation of the Arsenal Act, not from any systemic weakness in the established management controls.

## **Organizations and Individuals Visited or Contacted**

**Contacts during the Audit.** We visited or contacted individuals and organizations within the DoD and the General Dynamics Land Systems Division. Further details are available on request.

## **Summary of Prior Audits and Other Reviews**

There were no audits or other reviews in the last 5 years covering the specific issues discussed in this report.

## Appendix B. Advisory Memorandum to the Secretary of the Army on the Program Executive Officer for Armored Systems Modernization



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



JUN - 3 1996

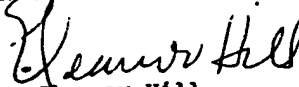
MEMORANDUM FOR SECRETARY OF THE ARMY

SUBJECT: Review of Allegations Regarding Procurement of Tank Gun Mounts by the Department of the Army

In my memorandum of March 7, 1996, I advised you that, in response to a joint congressional letter of February 15, 1996, this office would conduct a review of allegations that Major General James E. Longhouser illegally communicated information regarding the Army's procurement of gun mounts for the M1A2 tank. On March 11, 1996, we began an audit to review the allegations and to determine whether the Army complied with applicable statutes and acquisition regulations for the procurement of the gun mounts.

The audit did not substantiate allegations that Major General Longhouser illegally communicated Government information to the General Dynamics Land Systems Division. As the Program Executive Officer for Armored Systems Modernization, Major General Longhouser is responsible for the M1A2 tank upgrade program, including procurement of the gun mounts. He has, on occasion, discussed business and technical aspects of the upgrade program with the General Dynamics Land Systems Division, the prime contractor for the upgrade program. We found no evidence that he illegally communicated Government cost data or other proprietary information to the General Dynamics Land Systems Division. The auditors are still reviewing other aspects of gun mount procurement.

A letter containing similar information has been provided to Senators Charles E. Grassley, Paul Simon, Carol Moseley-Braun, and Tom Harkin, as well as Congressmen Lane Evans and Jim Leach.

  
Eleanor Hill  
Inspector General

# Appendix C. Advisory Memorandum to the Assistant Secretary of the Army (Research, Development and Acquisition) on Future Gun Mount Production



Auditing

INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
488 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-3004

JUL 19 1996

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (RESEARCH, DEVELOPMENT, AND ACQUISITION)

SUBJECT: Audit of Procurement of Gun Mounts for the M1A2 Tank (Project 6CH-5034)

During the subject audit, we determined that the Secretary of the Army directed the Commander, Army Materiel Command, to proceed with an OMB Circular A-76 cost comparison study to determine whether the Army should privatize all tank gun mount production. The purpose of this memorandum is to bring to your attention several matters that we believe the Army should consider as it evaluates the alternatives for future gun mount production for the M1A2 tank.

First, the Army apparently intends to study two alternatives under OMB Circular A-76 for 360 gun mounts to be produced during FYs 1998 through 2000 by Rock Island Arsenal (RIA) and by General Dynamics Land Systems (GDLS). These alternatives are to continue the production of half of the gun mounts by RIA and the other half by GDLS at its new facility, or to transfer the entire production quantity to GDLS at its new facility. A transfer of the entire production quantity to RIA is not an alternative under consideration. We believe that it should be an alternative that is included in the competition between RIA and GDLS. OMB Circular A-76, which establishes policy for performance of commercial activities, does not preclude studying the alternative of RIA producing all of the gun mounts. Although OMB Circular A-76 states the "government should not compete with its citizens" and policy statements on privatization generally assume that private industry can do the job better and cheaper, RIA may be the best, most economical choice for the production of all gun mounts in this instance. Also, this alternative should be studied to provide a level playing field between RIA and GDLS in a competition for the gun mount production.

We believe that before the Army conducts an extensive OMB Circular A-76 study at RIA, the Army should conclusively determine the position of GDLS with regard to moving and installing the plant equipment needed for production of the mounts at the new GDLS facility. GDLS has identified certain Government-owned plant equipment at the Detroit Army Tank Plant that must be moved to its new facility to establish a gun mount production capability. GDLS has not made a firm commitment that the movement and installation of the plant equipment to its new

Appendix C. Advisory Memorandum to the Assistant Secretary of the Army  
(Research, Development and Acquisition) on Future Gun Mount Production

---

2

facility will be at no cost to the Army if GDLS produces half or all of gun mounts. GDLS also had not provided Army officials in Detroit with a cost estimate for moving and installing the plant equipment at its new plant.

Also, we believe that the Arsenal Act (10 U.S.C. 4532) applies to the gun mount production. The statute provides that the Secretary of the Army "shall have supplies needed for the Department ... made in factories or arsenals owned by the United States, so far as those factories or arsenals can make those supplies on an economical basis." The Comptroller General has interpreted the statute to include both Government-owned, Government-operated (GOGO) and Government-owned, contractor-operated (GOCO) facilities within the meaning of "factories and arsenals owned by the United States." Further opinions have interpreted the "shall have supplies" language as mandatory. The tank gun mounts in question are now wholly manufactured in arsenals or factories owned by the United States, some in a GOGO facility and some in a GOCO facility. The proposal to allow GDLS to manufacture the mounts in its new contractor-owned, contractor-operated (COCO) facility is tantamount to removing this supply (or a portion of it) from the Arsenal system. Under the circumstances, the decision to take them out or leave them in requires an Arsenal Act economic analysis. An Arsenal Act economic analysis would consider only the out of pocket costs to the Government facility, rather than fully burdened costs.

The Army Office of General Counsel provided your office with an opinion that the Arsenal Act does not apply because the item of supply purchased is a tank, not its components. This is a fairly narrow construction of the term "supply" and, as pointed out in the opinion, that interpretation is not supported by case law. The Federal Acquisition Regulation, on the other hand, defines "supplies" broadly, as does 10 U.S.C. 2302(3) and 41 U.S.C. 403. Further, in at least one instance (Action Manufacturing Company, B-220013, 85-2 CPD 537, November 12, 1985), the Army has applied the Arsenal Act analysis to procurement of components.

In a recent bid protest decision (Talon Manufacturing Company, Inc., B-261687, 95-2 CPD 184, October 19, 1995), the Comptroller General was confronted with a request for proposals that anticipated competition from GOCO and COCO firms, and recognized the implications of the Arsenal Act to the work then being performed in GOCO facilities. The request for proposals required the Olin Corporation, operating the Lake City Army Ammunition Plant (a GOCO facility) to submit two offers, one representing "out of pocket" costs for evaluation in the competition, and a fully burdened proposal for internal use.

**Appendix C. Advisory Memorandum to the Assistant Secretary of the Army  
(Research, Development and Acquisition) on Future Gun Mount Production**

---

3

In the current situation, we believe that two cost proposals should be solicited from RIA if the Army proceeds with a competition between RIA and GDLS for the gun mount production. RIA should develop an "out of pocket" proposal for use in an Arsenal Act economic evaluation, and a fully burdened proposal for management information.

I request that this office be advised of actions taken or planned in response to this memorandum by August 19, 1996. We are currently preparing a draft report on the audit, and will incorporate your position on these matters into the audit report. If you have any questions regarding the audit, please contact Mr. Garold E. Stephenson, Audit Program Director, at (703) 604-9332 (DSN 664-9332) or Mr. Eugene E. Kissner, Audit Project Manager, at (703) 604-9323 (DSN 664-9323).

  
Paul J. Granetto  
Director

Contract Management Directorate

CC:  
Secretary of the Army  
Commander, Army Materiel Command  
Auditor General, Department of the Army



---

## Appendix D. Army Comments on the Finding and Audit Response

**Army Comments on the Finding.** The Army nonconcurrent stating that although the gun mounts and the other components in question are currently being produced in an Army arsenal, the Arsenal Act does not apply to the future manufacture of the items because Army decisions are based on the acquisition strategy of how, not where, to continue to procure the items. The Army stated it does not interpret the Arsenal Act to require that it determine every component of a system that can be made in arsenals, thus mandating component breakout for those components.

The Army stated that if its acquisition strategy is to purchase a system (the M1A2 tank system) from industry, it is unnecessary to evaluate arsenal production of the system's components. In such a case, the decision of where to purchase components is made by the system prime contractor. If the Army acquisition strategy decision is to purchase a component on other than a system prime contractor approach, then the Arsenal Act is applied to the resulting decision that must be made by the Government of where to purchase the component. The Arsenal Act is considered only after an acquisition strategy decision has been made to acquire a component separately. With respect to the gun mounts, the Army stated that it is reevaluating its acquisition strategy decision made in 1982 to acquire 50 percent of the gun mounts from Rock Island Arsenal. Further, this acquisition strategy decision only requires examination of the 50 percent Rock Island Arsenal/50 percent General Dynamics and 100 percent General Dynamics options. For the other components, the Army stated that it considered acquiring the components in Army arsenals and supplying them to General Dynamics as Government-furnished material because the components were produced at a facility that the Army knew was closing. The Army further stated that a comparison of the out-of-pocket cost of producing the gun mounts and the other components in Army arsenals was not necessary because it was making acquisition strategy decisions, not performing Arsenal Act evaluations of the items.

**Audit Response.** The Army did not provide any new information that would cause us to change our conclusion that the Arsenal Act applies to the evaluation of alternatives for the future acquisition of gun mounts and the other M1A2 tank components in question. We agree with the Army that the Arsenal Act does not require the Army to evaluate every component of a system purchased from private industry to determine whether the components could be economically manufactured by an arsenal and provided to the system prime contractor as Government-furnished material. We assume that in this scenario the Army complied with the Arsenal Act and determined that the system could not be manufactured on an economical basis in Government-owned factories or arsenals when it decided to buy the system from private industry.

The Army argument that the Arsenal Act does not apply because it is making an acquisition strategy decision on whether to buy the gun mounts and the other components from the prime contractor as part of the M1A2 tank system or buy

## **Appendix D. Army Comments on the Finding and Audit Response**

---

them separately is not valid. The Army and the system prime contractor decided earlier to manufacture the items in Government-owned facilities. As stated in the finding, the gun mounts and the other components are now wholly manufactured in arsenals or factories owned by the United States. The Arsenal Act specifically requires the Army to make supplies in factories or arsenals owned by the United States, so far as those factories or arsenals can make the supplies on an economical basis. Clearly, any decision on whether to continue to manufacture the items in the arsenal system requires application of the Arsenal Act. Similarly, the Army argument that it does not need to compare the out-of-pocket cost of manufacturing the gun mounts and the other components in Army arsenals because it is making acquisition strategy decisions, not Arsenal Act evaluations, is not valid. Compliance with the Arsenal Act entails comparing the out-of-pocket cost of manufacturing the items in the arsenals with the price of the items from private industry. We believe that if the Army is allowed to declare that it is reevaluating its acquisition strategy every time it wants to obtain a component that is manufactured in an arsenal from a private source without performing an Arsenal Act economic analysis, the result will be an unstable, unpredictable work load, and additional idle capacity in the already under used arsenals. In our view, the Arsenal Act requires that the Army avoid idle capacity in its arsenals when the arsenals can make items the Army needs at a cost to the Government that is no greater than the cost of procuring the items from private industry. Certainly, the taxpayers and the DoD have a right to expect the Army to make every effort to efficiently use its organic production capacities that cost the DoD hundreds of millions of taxpayer dollars to provide.

**Army Comments on Applying the Arsenal Act to Production of M1A2 Tank Gun Mounts and Other Components.** The Army stated that on December 27, 1995, the Army General Counsel provided an information paper to the Assistant Secretary of the Army (Research, Development, and Acquisition), which concluded that the Arsenal Act did not apply to the tank gun mount production decision. The Army did not agree with the legal opinion in the information paper that the term "supplies" in the Arsenal Act applies to producing end items (the upgraded M1A2 tank) rather than a component of the tank, such as the gun mounts. The Army stated that the test for Arsenal Act application is not whether an item being purchased is a component or an end item. Rather, the test is whether the item is purchased separately or as part of a system. The Army further stated that this decision is an acquisition strategy decision of how to buy an item and does not involve the Arsenal Act.

**Audit Response.** Based on the Army comments, we revised the finding to delete all references to opinions on the Arsenal Act contained in the December 1995 Army General Counsel information paper. Where appropriate, we incorporated the revised Army position on applying the Arsenal Act.

**Army Comments on Comptroller General Decisions.** The Army stated that the Comptroller General decisions cited in the audit report address different production scenarios than the M1A2 tank gun mount production scenario. Therefore, the decisions do not require application of the Arsenal Act to the gun mount production decision. The Army further stated that the Comptroller General decisions involve situations where a component is already being

## Appendix D. Army Comments on the Finding and Audit Response

---

acquired separately by the government and provided as government furnished material to a contractor for assembly. In contrast, the acquisition strategy decision about how to continue to purchase 50 percent of the gun mounts has not yet been made. The Army believes that the acquisition strategy decision does not involve the Arsenal Act and that it can restrict its study of gun mount production alternatives to 50 percent Rock Island Arsenal/50 percent General Dynamics and 100 percent General Dynamics and base the study on OMB Circular A-76 cost comparison rules.

**Audit Response.** We agree that the scenarios cited in the Comptroller General decisions are different in that the Army had issued solicitations to acquire the items under the Arsenal Act. In the M1A2 tank gun mount scenario, the decision on how to acquire the gun mounts in the future has not yet been made. We do not agree with the Army that because the scenarios are different, the Arsenal Act does not apply to future gun mount production. We believe that the Arsenal Act applies to any required Army item that can be made in the arsenal system. Also, there is no question that the statute applies to items that are already in production in the arsenal system. We cited Comptroller General decisions in the audit report to show that the Army had applied the Arsenal Act to previous procurements and that, when the Arsenal Act is applied, only the out-of-pocket cost of manufacturing the items in the Government-owned facilities are compared to private industry cost proposals. For the reasons stated above, and in the finding, we continue to believe that the Arsenal Act applies to the Army's evaluation of alternatives for the future manufacture of M1A2 tank gun mounts and other components that were produced by General Dynamics at the Detroit Army Tank Plant, as well as the gun mounts that were produced at Rock Island Arsenal.

**Army Comments on Moving Government-Owned Plant Equipment.** The Army disagreed with several audit conclusions concerning moving the Government-owned equipment used to manufacture M1A2 tank components from the Detroit Army Tank Plant to a General Dynamics-owned plant in Muskegon, Michigan. The Army disagreed that:

- o the Army should issue a stop work order on the equipment move and perform the out-of-pocket cost analysis required by the Arsenal Act to determine where the gun mounts and other M1A2 tank components should be manufactured,

- o not moving the equipment to General Dynamics will resolve the problem of excess production capacity,

- o the Army Tank-Automotive and Armaments Command and the Program Executive Officer for Armament Systems Modernization supported the decision to move the equipment because it would minimize the impact of the closure of the Detroit Army Tank Plant on the M1A2 tank contract, and that

## Appendix D. Army Comments on the Finding and Audit Response

---

o the decision to transfer the equipment occurred without coordination and analysis of available in-house production capacity because production capacity in the Army tank plants is controlled by the Army Tank-Automotive and Armaments Command while production capacity in Army arsenals is controlled by the Army Industrial Operations Command.

The Army stated that a stop work order on the equipment move is unnecessary and unwarranted because the Arsenal Act does not apply to the acquisition strategy decisions that the Army is making for the gun mounts and the other components produced at the Detroit Army Tank Plant. The Army stated that it considered all prospective alternatives for manufacturing the gun mounts and other M1A2 tank components when it made its decision to allow General Dynamics to move the Government-owned plant equipment from the Detroit Army Tank Plant to the General Dynamics-owned plant. The Army further stated that it concluded that a comparison of out-of-pocket cost was not necessary because the Army was not performing Arsenal Act evaluations of the components.

The Army stated that the auditors assumed that the excess tank gun mount production capacity was at the Detroit Army Tank Plant. The Army has not determined whether the Detroit Army Tank Plant or the Rock Island Arsenal capacity is excess capacity. The Army further stated that if the 100 percent General Dynamics option is determined most economical, then the capacity at Rock Island Arsenal should be considered excess. If the 50 percent Rock Island Arsenal/50 percent General Dynamics option is determined most economical, then neither production capacity should be labeled excess.

The Army stated that the decision to move the equipment was not made to minimize the impact of the closure of the Detroit Army Tank Plant. The determination that the equipment should be moved to the General Dynamics-owned plant was made as part of the acquisition strategy decision that is being made for gun mount production. Additionally, the Army stated that the Army Material Command coordinated the acquisition strategy decision and was responsible for determining whether to move the equipment to the General Dynamics plant.

**Audit Response.** We do not agree that a stop work order on the equipment move is unwarranted, nor do we agree that the Army does not need to obtain the out-of-pocket cost of manufacturing the gun mounts and the other M1A2 components in the arsenal system. We believe that moving the Government-owned plant equipment from the Detroit Army Tank Plant is unwarranted because the Army has not yet determined whether it is economical to make the items in the arsenal system as required by the Arsenal Act. Further, moving the equipment perpetuates the excess tank manufacturing capacity that the 1995 Commission on Defense Base Closure and Realignment recommended that the Army dispose of. Additionally, if the analysis of out-of-pocket cost shows that it is economical to produce the items in the arsenal system, the equipment will not be used to produce the items at the General Dynamics Muskegon plant. If this does happen, neither the Army nor General Dynamics will be able to recover the cost of the moving the equipment. The Army has greatly increased the probability that the analysis of out-of-pocket

## Appendix D. Army Comments on the Finding and Audit Response

---

cost will show that it is economical to make the parts in the arsenal system when it agreed in contract DAAE07-95-C-0292 to pay General Dynamics the price for producing the items at the Detroit Army Tank Plant rather than the price for producing them at the General Dynamics Muskegon plant. As we stated throughout this report, we believe that the Arsenal Act applies to any decision that effects the future manufacture of items that are currently being manufactured in arsenals or factories owned by the United States. Further, the Arsenal Act requires that the out-of-pocket cost be analyzed when deciding whether to manufacture items in the arsenal system. The required analysis will impact the decision on whether to move the Government-owned plant equipment to the General Dynamics-owned plant.

We also do not agree with the Army position that the determination of where the excess production capacity exists has not been made. Nor do we agree that the determination should be based on the Army's OMB Circular A-76 review of the 50 percent Rock Island Arsenal/50 percent General Dynamics and 100 percent General Dynamics options. The 1995 Commission on Defense Base Closure and Realignment recommended that DoD close and dispose of the Detroit Army Tank Plant because the Army had excess tank production capacity. The Commission further found that consolidating gun mount production at Rock Island Arsenal would result in unit cost reduction to about \$38,000 from the current \$53,000. Regarding the Army's OMB A-76 review of the two production alternatives, for the reasons stated in the finding, we believe that the Army needs to solicit an out-of-pocket cost proposal from Rock Island Arsenal for 100 percent of the gun mount requirements and perform an Arsenal Act economic analysis rather than the OMB Circular A-76 cost comparison review to determine where to obtain the gun mounts.

Based on our evaluation of the Army comments, we revised the finding to delete that the decision to move the equipment was made to minimize the impact of the closure of the Detroit Army Tank Plant and that the decision occurred without coordination.

**Army Comments on Funding Gun Mount Production.** The Army stated that it provided funds to General Dynamics in February 1996 and to Rock Island Arsenal in March 1996 to produce the gun mounts needed in 1998 (third increment of the multi-year contract) for the M1A2 tanks projected for FY 1999.

**Audit Response.** Information from documents we obtained from Rock Island Arsenal and the Army Tank-Automotive and Armaments Command disagrees with the Army position and shows that the funds provided in February and March 1996 were for gun mounts needed in 1997 (second increment of the multi-year contract) for the M1A2 tanks projected for FY 1998.

---

## **Appendix E. Report Distribution**

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

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

### **Department of the Army**

Assistant Secretary of the Army (Research, Development, and Acquisition)  
  Program Executive Officer, Armored Systems Modernization  
Deputy Assistant Secretary of the Army (Procurement)  
General Counsel of the Army  
Auditor General, Department of the Army  
Commander, Army Materiel Command  
  Commander, Army Industrial Operations Command  
  Commander, Army Tank-Automotive and Armaments Command  
  Commander, Rock Island Arsenal

### **Other Defense Organizations**

Director, Defense Contract Audit Agency  
Director, National Security Agency  
  Inspector General, National Security Agency  
Inspector General, Defense Intelligence Agency

## **Non-Defense Federal Organizations and Individuals**

Office of Management and Budget  
Technical Information Center, National Security and International Affairs Division,  
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 Subcommittee on National Security, International Affairs, and Criminal  
Justice, Committee on Government Reform and Oversight  
House Committee on National Security

Senator Spencer Abraham  
Senator Charles E. Grassley  
Senator Tom Harkin  
Senator Carl Levin  
Senator Carol Moseley-Braun  
Senator Paul Simon  
Congressman Lane Evans  
Congressman Peter Hoekstra  
Congressman Joe Knollenberg  
Congressman Jim Leach  
Congressman Sander M. Levin

This page was left out of original document



## **Part III - Management Comments**

# Department of the Army Comments

Final Report  
Reference



DEPARTMENT OF THE ARMY  
OFFICE OF THE ASSISTANT SECRETARY  
RESEARCH DEVELOPMENT AND ACQUISITION

November 19, 1996

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE  
(AUDITING)

SUBJECT: Quick-Reaction Report on Procurement of Gun  
Mounts for the M1A2 Tank  
(Project No. 6CH-5034)

The following responds to findings and recommendations contained in your October 28, 1996 Draft Audit Report / Quick Reaction Report on the Procurement of Gun Mounts for the M1A2 Tank (Draft Report):

(1) **DRAFT REPORT:** "The Army is studying two alternatives under the Office of Management and Budget (OMB) Circular A-76 cost comparison review to produce the 240 gun mounts needed during 1999 and 2000 for the M1A2 tanks projected for FYs 2000 and 2001 under contract DAAE07-95-C-0292. The alternatives are to continue producing half of gun mounts at Rock Island Arsenal and the other half at the General Dynamics-owned facility in Muskegon, Michigan, or to transfer the entire production quantity to the latter." Page 8.

ARMY RESPONSE: Agree.

(2) **DRAFT REPORT:** "Production of the gun mounts for the M1A2 tank upgrade program, including the 240 gun mounts to be produced in 1996 and 1997 under contract DAAE07-95-C-0292, has been split evenly between Rock Island Arsenal and General Dynamics at the Detroit Army Tank Plant. The gun mounts produced by RIA are provided as Government-furnished material to General Dynamics for the M1A2 tank." Page 7.

ARMY RESPONSE: Partially agree.

To understand the rationale behind the Army's approach, the full history of M1A2 tank gun mount production must be considered. The Army began to procure the M1 Abrams tank (an earlier version of the M1A2 tank) in 1980. At that time, no Arsenal Act analysis was necessary because the tank as well as numerous tank components were manufactured in the Detroit Army Tank Plant (DATP). Although the government provided the contractor with several

Printed on  Recycled Paper

2

components of the tank system as government-furnished material (GFM), gun mounts were not one of the furnished components. The government did not begin producing tank gun mounts until 1982 when a significant increase in demand for the tank was projected. Concerned with this projection, the Army determined as a matter of acquisition strategy that two production locations for gun mounts should be established and maintained. The government has produced 50% of tank gun mounts at RIA since that time.

In 1985, the M1 Abrams tank, which has a 105 mm gun, was upgraded to the M1A2 tank, which has a 120 mm gun. The contractor and RIA continued to each produce 50% of gun mounts for the upgraded tank. Although demand for the M1A2 tank has fallen since that time, RIA has continued to produce 50% of tank gun mounts. At first, RIA continued to produce gun mounts to ensure that sufficient capacity would be available in the event that demand for the M1A2 tank again increased. As time passed and demand for the tank did not increase, RIA production of gun mounts continued because the arrangement had become accepted as the status quo.

However, in today's era of downsizing, consolidation and reorganization, maintaining the status quo, especially if it results in costly excess manufacturing capability, is unacceptable. For tank gun mount production, the catalyst for change in the status quo was the scheduled closure by the Base Realignment and Closure (BRAC) Commission of DATP. Upon announcement of this BRAC recommendation, the Army decided to reevaluate its previous acquisition strategy decision to breakout 50% of gun mounts. The cost studies that have been performed since 1995 and the OMB Circular A-76 cost study currently being performed have been and are being done to assist in making this updated acquisition strategy decision for tank gun mounts. As explained in this memorandum, we do not believe that such decisions involve the Arsenal Act.

(3) **DRAFT REPORT:** "Transferring the entire production quantity to RIA is not an alternative under consideration." Page 8.

**ARMY RESPONSE:** Partially agree.

Although the 100% RIA alternative is no longer under consideration, this option has been considered by

## Department of the Army Comments

---

Final Report  
Reference

3

the Army. However, as a matter of acquisition strategy, our current analysis is focused on whether we should continue the current breakout of 50% of gun mount production. This acquisition strategy breakout decision only requires examination of the 50% RIA / 50% GDLS and 100% GDLS options.

(4) **DRAFT REPORT:** "The proposal to allow GDLS to manufacture the components in its contractor-owned, contractor-operated (COCO) facility is tantamount to removing supplies (or a portion of them) from the arsenal system. Under the circumstances, the decision to take them out or leave them in requires an Arsenal Act analysis." Page 8-9. "The Army has not complied with the Arsenal Act in its evaluation of alternatives for the future manufacture of M1A2 tank gun mounts and other components that were produced by GDLS at DATP." Page 5.

**ARMY RESPONSE:** Disagree.

Although the items are currently being produced in an Army Arsenal, the decisions that we are making for these items do not require Arsenal Act analyses, because they are acquisition strategy decisions of *how*, not *where* to continue to procure the items.

The Tank Automotive and Armaments Command (TACOM) examined production alternatives for the gun mount as well as several other tank components manufactured at DATP based on a comparison of fully burdened costs, rather than out-of-pocket costs, for production in a government arsenal. Other than 50% of gun mounts, the components in question have never been purchased separately by the Army and furnished as GFM. The components were parts of the tank which GDLS decided to utilize DATP to produce; none of these items are or ever have been part of the arsenal assigned workload. Because the Army knew that these components were produced at a facility that was closing, it considered whether to break out these components and supply them to GDLS as GFM. This is an acquisition strategy decision, which takes into account factors such as potential legal liability, cost risk and schedule risk to the program, short and long term industrial base impact, as well as the administrative difficulty of managing additional components. It is proper to take into account actual cost to the program in making acquisition strategy decisions.

Page 7

Page 4

4

With respect to gun mounts, the Army is reevaluating the acquisition strategy decision it made in 1982 to break out 50% of gun mount production. Accordingly, the Army will examine two gun mount production alternatives, the 50% RIA / 50% GDLS option (in which the 50% break-out would be continued) and the 100% GDLS option (in which we would no longer break out 50% of the gun mounts). The analysis of these two options will be based on the above listed factors which include, but are not limited to, costs. From this analysis, the Army will determine as a matter of acquisition strategy, whether to continue to break out 50% of tank gun mount production.

The Army has not interpreted the Arsenal Act to require that systems be examined to determine each and every component that can be made in arsenals, thus mandating component breakout for all such components. The Arsenal Act is considered once an acquisition strategy decision has been made to break out an item and acquire it separately. Once this "how to acquire" acquisition strategy decision has been made, the Arsenal Act "where to acquire" decision can be made. The Arsenal Act mandates that this decision be focused narrowly on cost to determine whether to utilize government facilities for production. As alluded to above, we do not view the Arsenal Act as a limiting factor that prevents systems acquisitions from private industry or mandates breakout decisions, both of which may rest on considerations other than cost.

(5) **DRAFT REPORT:** "On December 27, 1995, the Army General Counsel provided an information paper to the ASA(RDA), advancing the legal argument that the term "supplies" in the Arsenal Act applies to producing end items (the upgraded M1A2 tank) rather than a component of the tank, such as the gun mounts." Page 8.

**ARMY RESPONSE:** Partially agree.

The Army Office of the General Counsel (OGC) provided a December 27, 1995 information paper which concluded that the Arsenal Act did not apply to the tank gun mount production decision. However, further explanation of how that conclusion was reached may clarify our position.

Although the Army Arsenal Act has historically only been applied to end items, not components of items, the Army does not believe the test for Arsenal

## Department of the Army Comments

---

Final Report  
Reference

Revised  
Page 6

5

Act application is simply whether an item being purchased is a component or an end item. Rather, we look at whether the Army is purchasing the item separately or as part of a system. This decision is an acquisition strategy decision of how to buy an item and we do not believe it involves the Arsenal Act. For example, if our acquisition strategy decision is to purchase an item as part of a system and the system is purchased from a contractor, we never reach the stage in the decision making process that requires Arsenal Act application. In this scenario, it is up to the contractor to decide where the item is produced.

If we purchase a system from industry, it is unnecessary to evaluate arsenal production of the system's components. We do not read the Arsenal Act as requiring evaluation of these system components to determine if any could be economically manufactured by an arsenal and provided to the private contractor as government-furnished material. Such an interpretation of the Arsenal Act would be impossible to administer and is not how the Act has historically been read. For example, when the Army decides to purchase a truck from private industry, we do not examine the truck's metal parts to see if any could be economically manufactured at an arsenal. In such a case, the decision of where to purchase components is made by the prime contractor. Requiring an Arsenal Act analysis of components of supplies already acquired from private contractors would make systems contracting untenable and interfere with the Army's ability to select the best acquisition strategy.

However, if our acquisition strategy decision is to purchase an item on other than a systems prime contractor approach, then the Arsenal Act is applied to the resulting decision that must be made by the government of where to purchase the item. The Arsenal Act will be applied to this decision, comparing out-of-pocket cost estimates of producing the item in Army Arsenals to fully burdened cost estimates of production options outside of arsenals. It is at this final step in the acquisition decision making process that the Arsenal Act is applied.

(6) DRAFT REPORT: "The [OGC] opinion itself conceded that the [OGC] interpretation is not supported by legal precedent." Page 9.

Deleted  
Page 7

6

ARMY RESPONSE: Disagree.

The purported admission misconstrues the meaning of the concept "not supported by legal precedent." As quoted, the audit makes it appear as if the Army has acknowledged its position is not supported by legal authority. Any such conclusion would be incorrect. While there is no precedent which is precisely on point, there is none which contradicts it, and the language of the statute, the existing precedents, Army policy and practice and common sense all support the Army position.

(7) **DRAFT REPORT:** "In at least one instance the Army has applied the Arsenal Act analysis to procurement of components (Comptroller General Decision B-220013, 85-2 CPD 537, Action Manufacturing Company, November 12, 1985)." Page 9.

Deleted  
Page 7

ARMY RESPONSE: Disagree.

The OGC interpretation of the Arsenal Act has never been reviewed by the Comptroller General. The General Accounting Office (GAO) decisions cited in your July memorandum and Draft Report address a different production scenario than the one we have with M1A2 tank gun mounts. Therefore, the cases do not require application of the Arsenal Act to the gun mount production decision. The decisions which are cited, *Action Manufacturing Company*, B-220013 CPD 537, November 12, 1985, and *Talon Manufacturing Company, Inc*, B-261687, 95-2 CPD 184, October 19, 1995, involve situations where a component is already being managed and acquired separately by the government and provided as government-furnished material to a contractor for assembly. As stated by the GAO in these decisions, the Arsenal Act applies to the acquisition of such components because it is the government in these situations that is making the decision of where to acquire the item. In these cases, the acquisition strategy of how to purchase the items had already been made. At issue in these cases was *where* to purchase the item.

Deleted

In contrast to these GAO cases, the acquisition strategy decision about *how* to continue to purchase 50% of gun mounts has not yet been made. As part of this acquisition strategy decision, we are performing an OMB Circular A-76 study of two production alternatives. We will also consider factors in addition to cost, as

## Department of the Army Comments

---

Final Report  
Reference

7

explained in the Army Response to (4), to decide whether to continue to break out 50% of gun mount production. Although our decision will affect the location of gun mount production, we are not deciding where to produce gun mounts. Instead, we are deciding how to buy them. As explained in the Army Response to (4) and (5), this decision does not involve the Arsenal Act. Therefore, we believe we can legally restrict our study of gun mount production alternatives to 50% RIA/50% GDLS and 100% GDLS and base our study on cost comparison rules found in OMB Circular A-76.

(8) **DRAFT REPORT:** [The OGC opinion stated] "because the end item (the upgraded M1A2 tank) is produced in a U.S. factory, the Arsenal Act is satisfied and the gun mount is not subject to an Arsenal Act analysis." Page 8.

ARMY RESPONSE: Disagree.

The OGC determination that the Arsenal Act did not apply to the gun mount production decision was not based on labelling the gun mount a "component," nor was it determined that an Arsenal Act study was unnecessary because the Act was already satisfied by producing the end item (tank) in an arsenal. Rather, as explained in the Army Response to (4) and (5), the OGC position that the Arsenal Act does not apply to the gun mount production decision rests on the fact that it is a decision of how to buy the item. We do not believe that the Arsenal Act applies to this kind of acquisition strategy decision.

(9) **DRAFT REPORT:** "Further, the Army General Counsel opinion that the Arsenal Act does not apply to the gun mounts because the item of supply purchased (the M1A2 tank) is an end item, not its components, is a narrow construction of the term "supply".... The Federal Acquisition Regulation, on the other hand, defines "supplies" broadly, as does 10 U.S.C. 2303(3) and 41 U.S.C. 403." Page 9.

ARMY RESPONSE: Disagree.

First, statutory and regulatory definitions apply to the use of terms in those particular statutes and regulations. The term "supplies," as used in the Army Arsenal Act, was not necessarily intended to have the same meaning as is found in these other statutes and regulations. Second, the Army recognizes that the term

Deleted  
Page 7

Deleted  
Page 7



8

supplies can encompass components, subassemblies, subcomponents, subsystems or individual parts. However, as explained in the Army Response to (5), the Arsenal Act does not apply until after the acquisition strategy decision of how to purchase an item has been completed.

Once the acquisition strategy "how to purchase" decision has been made, it is only necessary to apply the Arsenal Act to the items which the Army has decided to purchase separately. The Arsenal Act applies only to this decision of where the government will purchase items that it has decided to purchase separately. The Arsenal Act applies to this decision regardless of whether the item fits under the label of component, subassembly, subcomponent, subsystem or individual part. Defining the word supplies in the Arsenal Act to encompass all items, regardless of whether we decide to procure them separately, would make the Arsenal Act a final determinant in acquisition strategy decisions on "how," not just "where," we will buy items for the Army. As shown above, such an interpretation of the Act is contradicted by universally accepted existing practice and, if adopted, would impose a burden that would calcify the acquisition process.

(10) **DRAFT REPORT:** "The gun mounts and the components in question are now wholly manufactured in arsenals or factories owned by the United States, some in a government-owned, government-operated (GOGO) facility and some in a government-owned, contractor-operated (GOCO) facility." Page 8.

ARMY RESPONSE: Disagree.

Only gun mounts are produced in both a GOGO (RIA) and a GOCO (DATP). The other components are produced by the contractor in a GOCO and are being transferred to a contractor-owned, contractor operated (COCO) facility.

(11) **DRAFT REPORT:** "The Army Industrial Operations Command (IOC) submitted an offer on 16 of the 19 components. It did not submit an offer on the other three components because two had inadequate technical data packages. The last component did not require machining and it could be provided by a small or medium size business in the private sector at less cost than arsenal production." Page 6.

Page 7

Page 5

## Department of the Army Comments

---

Final Report  
Reference

9

ARMY RESPONSE: Agree.

(12) DRAFT REPORT: "The IOC based its offer for the 16 components on fully burdened costs to manufacture the components at Rock Island and Watervliet arsenals. The fully burdened costs represented the cost of the components to the M1A2 tank upgrade program." Page 6.

Page 5

ARMY RESPONSE: Agree.

(13) DRAFT REPORT: "The estimates of the out-of-pocket direct costs requested from Rock Island and Watervliet arsenals for 16 of the 19 components showed that the out-of-pocket costs ranged from 38 percent to 78 percent of the fully burdened costs. The out-of-pocket analysis would have been appropriate under the Arsenal Act because the components were manufactured in a Government-owned factory." Page 7.

Page 5

ARMY RESPONSE: Disagree.

The estimates were as stated in the Draft Report. However, because the decisions that the Army was making on these 16 components were acquisition strategy decisions, the Arsenal Act is not applicable and a simple out-of-pocket analysis is inappropriate. As explained in the Army Response to (4), acquisition strategy decisions require a more complex analysis that includes factors in addition to cost.

(14) DRAFT REPORT: "The Army analyzed other alternatives for manufacturing tank components, but it did not consider the out-of-pocket direct costs of manufacturing the components in Army arsenals with significant excess production capacity." Page 6.

Page 4

ARMY RESPONSE: Disagree.

The Army considered all prospective alternatives for manufacturing gun mounts, but concluded that a comparison of out-of-pocket costs would not be necessary because we were not performing Arsenal Act evaluations of these items. As explained in the Army Response to (4), we were making acquisition strategy decisions which appropriately consider factors in addition to cost to include the issue of excess production capacity.

Department of the Army Comments

Final Report  
Reference

10

(15) DRAFT REPORT: "An analysis that was based on out-of-pocket costs estimates that were not developed under a 2-week time constraint may have shown that it was more cost effective for the Army to manufacture the components in its underutilized arsenals." Page 7.

ARMY RESPONSE: Disagree.

Studies are routinely done in a matter of weeks because arsenals maintain the data necessary to conduct such studies on an annual basis. We do not believe that allowing additional time for the completion of the studies would have significantly altered the data or the conclusions drawn therefrom.

(16) DRAFT REPORT: "TACOM did not request the IOC to include only out-of-pocket direct costs to the Army in its offer, as required by the Arsenal Act." Page 6.

ARMY RESPONSE: Disagree.

TACOM did not request that only out-of-pocket costs be included. As explained in the Army Response to (4) and (5), this analysis did not require an out-of-pocket comparison because the Arsenal Act does not apply to acquisition strategy decisions of how to purchase an item.

(17) DRAFT REPORT: "The Army determined, based on the comparison of the cost information received by TACOM and the Program Executive Office (PEO) for Armored Systems Modernization, that it was in the best interest of the M1A2 tank upgrade program to have GDLS move the Government-owned plant equipment to a GDLS plant purchased in February 1996." Page 6.

ARMY RESPONSE: Agree.

(18) DRAFT REPORT: "In August 1996, the Army modified the GDLS contract to allow GDLS to immediately begin moving the Government-owned industrial and operational plant equipment needed to manufacture components for 10 M1A2 tanks a month from the DATP to a GDLS-owned plant in Muskegon, Michigan." Page 5. "In August 1996, TACOM modified contract DAAE07-95-C-0292 to authorize GDLS to move the Government-owned plant equipment. The move is to be made without additional costs to the contact price." Page 6-7. "The estimated \$14 million cost to move the equipment will be absorbed in the contract costs as if the production effort was

Revised  
Page 5

Page 5

Page 5

Page 4

Page 5

## Department of the Army Comments

---

Final Report  
Reference

11

Page 4

performed at the Detroit Army Tank Plant." Page 5.

ARMY RESPONSE: Agree.

GDLs has agreed in a written modification to its contract that the cost to move the equipment will not be included in any GDLs contract cost.

Deleted  
Page 6

(19) DRAFT REPORT: "We believe that the decision to move the equipment [to the GDLs-owned facility] was supported by TACOM and the Army PEO for Armored Systems Modernization because it would minimize the impact of the closure of DATP on the current M1A2 tank contract." Page 6.

ARMY RESPONSE: Disagree.

Although it may be in the government's interest to minimize the impact that BRAC closures have on government contracts for essential defense systems, the decision to move equipment from DATP to the GDLs facility was not made in order to attain such objective. The Base Realignment and Closure Act of 1990 allows transfer of equipment to a private facility. Although the government prefers contractors to purchase their own production equipment, we do provide tooling and test equipment to contractors when it is in our best interest to do so. This allows the contractor to avoid the risk of government program and budget changes. Furnishing equipment can also avoid depreciation write-offs for the Army. In this case, we already own the production equipment. It can therefore be provided to the contractor at no cost to the government. The determination that the equipment should be moved to the GDLs facility was made as part of the acquisition strategy decision that is being made for tank gun mount production.

Deleted  
Page 6

(20) DRAFT REPORT: "We also believe that the decision [to transfer the equipment to the GDLs-owned facility] occurred without coordination and analysis of available in-house production capacity because production capacity in the Army tank plants is controlled by the Army Tank-Automotive and Armaments Command while production capacity in Army arsenals and depots is controlled by the Army Industrial Operations Command." Page 7.

12

ARMY RESPONSE: Disagree.

No lack of coordination occurred. The Army Material Command, which commands the IOC and TACOM, appropriately worked with the IOC and TACOM to make this acquisition strategy decision. Moreover, AMC was ultimately responsible for determining whether the gun mount production capacity located at DATP should be moved to the GDLS facility.

(21) DRAFT REPORT: "The Army decision to move the Government-owned plant equipment to GDLS was based on a flawed analysis that will not resolve the problem of excess capacity." Page 7.

Page 5

ARMY RESPONSE: Disagree.

This assertion assumes that the excess tank gun mount production capacity is the capacity located at DATP. Whether the DATP or the RIA capacity is excess remains to be determined. If the 100% GDLS option is determined to be most cost effective, then the capacity at RIA should be considered excess. Moreover, if the 50% RIA/ 50% GDLS option is determined to be most economical, then neither production capacity should be labeled excess.

(22) DRAFT REPORT: "We believe that the Army should issue a stop work order on the equipment move and perform an Arsenal Act economic analysis to determine where the components should be manufactured." Page 7.

Page 6

ARMY RESPONSE: Disagree.

The Arsenal Act does not apply to the acquisition strategy decisions that are being made for the gun mounts and the other components produced at DATP. Therefore, no Arsenal Act analysis should be performed and no resulting contract modifications should be made. A stop work order is unnecessary and unwarranted. See Army Response to paragraphs 2 through 7 and 9 and Draft Report Recommendation # 1.

(23) DRAFT REPORT: "In November 1995, the ASA(RDA) recommended to the Secretary of the Army that production of all gun mounts for the M1A2 tank be privatized. On May 3, 1996, the Secretary of the Army directed the ASA(RDA) and the Commander, AMC to proceed with a cost comparison review with a view toward

## Department of the Army Comments

---

Final Report  
Reference

Page 6

13

possible privatization of tank gun mount production." Page 7-8.

ARMY RESPONSE: Agree.

In fact, the May 3, 1996, Secretary of the Army memorandum directed that an Office of Management and Budget (OMB) Circular A-76 cost comparison be performed. Comparison of gun mount production under OMB Circular A-76 will result in proposals which are judged by the same standard and based on the most efficient and cost effective workforce of each competitor. The results of this cost comparison will be used to help the Army make a sound acquisition strategy decision for future gun mount production. This is consistent with current Department of Defense policy that supports and encourages privatization. Fairly evaluating the purchase of gun mounts to determine the most efficient source is also fully consistent with Vice President Gore's National Performance Review objectives, the long established national policy of reliance on commercial sources for government products and services, and 10 U.S.C. § 2462 which requires the Secretary of Defense to procure supplies and services from the private sector when economical on a total cost basis to do so.

(24) DRAFT REPORT: "The Army began the OMB Circular A-76 cost comparison review in August 1996. The review is scheduled to be completed in March 1997." Page 8.

ARMY RESPONSE: Disagree.

The Army has not issued a March 1997 completion date. Completion date is estimated to be July 1997.

(25) DRAFT REPORT: "As of September 30, 1996, the Army has not provided funds to Rock Island Arsenal or to GDLS to produce any of the 120 gun mounts. Officials at the Army Tank-Automotive and Armaments Command stated that the Army must authorize the production of the 120 gun mounts by February 1997." Page 8.

ARMY RESPONSE: Disagree.

Funds were provided to GDLS on February 27, 1996, and to RIA on March 21, 1996.

Revised  
Page 6

Revised  
Page 6

Page 7

## Department of the Army Comments

Final Report  
Reference

14

**(26) DRAFT REPORT:** "As part of its efforts to outsource and privatize, the Army may well want to ask for relief or request changes to the Arsenal Act. However, at present, the Army must comply with the existing statute." Page 9.

**ARMY RESPONSE:** Disagree.

The Army is complying with the Arsenal Act. We do not need relief from the Arsenal Act provided that we continue to use the Act as it historically has been applied. As it is written and as the Army has used it over the years, the Arsenal Act does not interfere with privatization initiatives, because it is not applied until the acquisition strategy decision of whether to buy an item separately or as part of a system has been made. As explained in the Army Response to (4), acquisition strategy decisions involve much more than the simple economic analysis mandated by the Arsenal Act.

If however, the Army is required to begin to use the unprecedented aggressive application that is suggested in the Draft Report, immediate legislative relief will be needed because such application would be impossible to administer. It would also interfere with the Army's ability to select the best acquisition strategy and render systems contracting untenable.

**(27) DRAFT REPORT:** "The Army should solicit an "out-of-pocket" cost proposal from Rock Island Arsenal to produce 360 gun mounts and perform an Arsenal Act economic analysis, rather than an OMB Circular A-76 cost comparison review, for use in the competition with GDLs for gun mount production. The Arsenal Act economic analysis would include all remaining gun mount production for contract DAAE07-95-C-0292 and would consider only the out-of-pocket costs to the Government facility, rather than fully burdened costs." Page 9.

**ARMY RESPONSE:** Disagree.

Explained in Army Response to paragraphs 2 through 7 and 9.

**(28) DRAFT REPORT:** "In a memorandum dated July 19, 1996, we informed the Army of our opinion that the Arsenal Act applied to gun mount production and our position that the Army should study transferring the production of all M1A2 tank gun mounts to RIA. The

Deleted  
Page 7

Page 7

## Department of the Army Comments

---

Final Report  
Reference

Revised  
Page 7

Page 8

15

Army has not responded to us regarding any actions taken or planned to comply with the Arsenal Act" Page 9.

ARMY RESPONSE: Partially agree.

Although the Army response did not meet the suspense provided by the Department of Defense Inspector General (DODIG), the Army did provide a response to the July 19, 1996, memorandum. Unfortunately, the DODIG did not have an opportunity to consider the Army position before issuing the October 28, 1996, Draft Report. A copy of the Army response, an Army General Counsel opinion dated October 25, 1996, is attached.

**DRAFT REPORT RECOMMENDATION # 1:** "Immediately issue a stop work order on modification P00019 to contract DAAE07-95-C-0292 that authorized GDLS to move Government-owned plant equipment from the DATP to the GDLS-owned plant and perform an Arsenal Act economic analysis to determine where the components should be manufactured." Page 9.

ARMY RESPONSE: Disagree.

The Army does not believe that an Arsenal Act analysis is required for the tank gun mount production decision. The decision that the Army is making for tank gun mounts is not where, but *how*, to purchase the 50% of gun mounts that we decided to break out to RIA in 1982 due to projected increases in tank demand. We do not believe that the Arsenal Act applies to acquisition strategy decisions of how to purchase an item. This position is explained in detail in the Army Response to paragraphs 2 through 7 and 9.

Further, we do not believe that our decision to transfer the gun mount equipment from DATP to a GDLS facility is premature. As discussed in the Army Response to (4), we are focusing our analysis on how to continue to purchase the 50% of gun mounts that were broken out to RIA in 1982. Accordingly, we are analyzing the options of 50% RIA / 50% GDLS production (in which the 50% break out would be continued) and the 100% GDLS production (in which we would no longer break out 50% of the gun mounts). Because both options under study include at least 50% of gun mount production at the GDLS facility, we do not believe it is premature to allow GDLS to move the equipment from DATP to its new



16

facility. Therefore, a stop work order on the equipment move is unnecessary and unwarranted.

**DRAFT REPORT RECOMMENDATION # 2:** "Solicit from RIA an "out-of-pocket" cost proposal and perform an Arsenal Act economic analysis, rather than an OBM Circular A-76 cost comparison review, for use in a competition between RIA and GDLS to produce the 360 gun mounts needed for the M1A2 tanks to be delivered during FYs 1999 through 2001 under contract DAAE07-95-C-0292." Page 9-10.

**ARMY RESPONSE:** Disagree.

As explained in the Army Response to paragraphs 2 through 7 and 9, the Army does not believe that the Arsenal Act applies to the kind of acquisition strategy decision that the Army is currently making with respect to the production of tank gun mounts. Moreover, as explained in the Army Response to (5), we do not read the Arsenal Act as requiring that the 100% RIA option be considered. Continuing our OMB Circular A-76 study of the two tank gun mount production options of 50% RIA, 50% GDLS and 100% GDLS will provide the Army with cost information that is appropriate for making an acquisition strategy decision about how to continue to purchase the 50% of tank gun mounts that were broken out to RIA in 1982.

Examining these two options is also consistent with Vice President Gore's National Performance Review objectives, the long established national policy of reliance on commercial sources for government products and services, and 10 U.S.C. § 2462 which requires the Secretary of Defense to procure supplies and services from the private sector when economical on a total cost basis to do so. Therefore, we believe we should continue to perform the OMB Circular A-76 cost analysis of the two production options.

**DRAFT REPORT RECOMMENDATION # 3:** "Modify contract DAAE07-95-C-0292 as necessary to reflect the producer of the gun mounts and other components identified as a result of the Arsenal Act analyses." Page 10.

Page 8

Page 9

Department of the Army Comments

---

17

ARMY RESPONSE: Disagree.

We do not believe that the Arsenal Act applies to the acquisition strategy decisions that are being made for the gun mounts and other components produced at DATP. Therefore, no Arsenal Act analysis should be performed and no resulting contract modifications should be made. We will, of course, alter contract DAAE07-95-C-0292 if modifications are needed to implement acquisition strategy decisions that are made for these items.



Gilbert F. Decker  
Assistant Secretary of the Army  
(Research, Development & Acquisition)

Attachment



GENERAL COUNSEL OF THE DEPARTMENT OF THE ARMY  
WASHINGTON D.C. 20310-0104



October 25, 1996

MEMORANDUM FOR THE INSPECTOR GENERAL, DEPARTMENT OF  
DEFENSE

SUBJECT: Audit of Procurement of Gun Mounts for the  
M1A2 Tank (Project 6CH-5034)

The Secretary of the Army has requested that I respond on his behalf to your July 19, 1996, memorandum addressing the Army's plan to study production alternatives for M1A2 tank gun mounts. The two alternatives we intend to study are: 1) continue the current production arrangement with Rock Island Arsenal (RIA) producing 50% of the gun mounts and General Dynamics Land Systems (GDLS) producing 50% at a GDLS facility, and 2) have GDLS produce 100% of gun mounts at a GDLS facility. Your memorandum questions our decision to study these options without considering a third option of producing 100% of gun mounts at RIA. You also question our position that the Arsenal Act, 10 U.S.C. § 4532, does not apply to the study of these alternatives and you express concern that we may not be realistically considering the cost of moving gun mount equipment from the Detroit Army Tank Plant (DATP) to a GDLS facility in our evaluation of these options.

Your memorandum suggests that we should not dismiss the alternative of manufacturing 100% of the tank gun mounts at RIA. We have considered the 100% RIA alternative. However, adding this third option to the evaluation of gun mount production alternatives would not result in a "level playing field" as your memorandum suggests. In fact, addition of this third production alternative would destroy our ability to establish a level playing field, because, as required by the Arsenal Act, the 100% RIA cost estimate would be based on out-of-pocket costs, whereas the cost estimates for the other two options would be based on all direct and indirect costs. The different cost standard required for the 100% RIA alternative prevents us from fairly comparing the 100% RIA alternative on a consistent basis. As a result, if we add in the 100% RIA alternative, we would be prevented from making a meaningful determination of which proposal is the most economical. Such an outcome is inconsistent with current DOD policy that supports and encourages privatization.

Your memorandum also questions our position, stated in a December 27, 1995, Army Office of the

General Counsel (OGC) information paper, that the Arsenal Act does not apply to the gun mount production decision. You further question the OGC statement that the Arsenal Act has generally only been applied to end items, not components of items. Further explanation of how we reached these conclusions may clarify our position. We believe the test for Arsenal Act application is not whether an item being purchased is a component or a system. Rather, we look at whether the Army is purchasing the component separately or as part of a system. We do not believe that this initial decision of how to buy an item involves the Arsenal Act.

Moreover, if we purchase a system from industry, it is unnecessary to evaluate arsenal production of the system's components. We do not read the Arsenal Act as requiring evaluation of these system components to determine if any could be economically manufactured by an arsenal and provided to the private contractor as government-furnished material. Such an interpretation of the Arsenal Act would be impossible to administer and is not how the Act has historically been read. For example, when the Army decides to purchase a truck from private industry, we do not examine the truck's metal parts to see if any could be economically manufactured at an arsenal. In such a case, the decision of where to purchase components is made by the prime contractor. Requiring an Arsenal Act analysis of components of supplies already acquired from private contractors would make systems contracting untenable and interfere with the Army's ability to select the best acquisition strategy.

The OGC interpretation of the Arsenal Act is supported by common practice. The interpretation has never been reviewed by the Comptroller General. The General Accounting Office (GAO) decisions cited in your July letter address a different production scenario than the one we have with M1A2 tank gun mounts. Therefore, the cases do not require application of the Arsenal Act to the gun mount production decision. The decisions you cite, *Action Manufacturing Company*, B-220013 CPD 537, November 12, 1985, and *Talon Manufacturing Company, Inc*, B-261687, 95-2 CPD 184, October 19, 1995, involve situations where a component is already being acquired separately by the government and provided as government-furnished material to a contractor. As stated by the GAO in these decisions, the Arsenal Act applies to the acquisition of such components because it is the government in these situations that is making the decision of where to

3

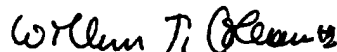
acquire the item.

In contrast to these GAO cases, the determination we are making for tank gun mounts is whether we should purchase gun mounts as part of the tank system. Although our decision will affect the location of gun mount production, we are not deciding *where* to produce gun mounts. Instead, we are deciding *how* to buy them. As explained previously, we do not believe this decision involves the Arsenal Act. Therefore, we believe we can legally restrict our study of gun mount production alternatives to 50% RIA/50% GDLS and 100% GDLS and base our study on cost comparison rules found in OMB Circular A-76.

Comparison under A-76 will result in proposals which are judged by the same standard and based on the most efficient and cost effective workforce of each competitor. Accordingly, the resultant decision and acquisition strategy for future gun mount production will be based on a fair cost comparison and sound business judgement. This is consistent with current DOD policy that supports and encourages privatization. Fairly evaluating the purchase of gun mounts to determine the most efficient source is also fully consistent with Vice President Gore's National Performance Review objectives, the long established national policy of reliance on commercial sources for government products and services, and 10 U.S.C. § 2462 which requires the Secretary of Defense to procure supplies and services from the private sector when economical on a total cost basis to do so.

Additionally you expressed concern that the Army may not be realistically considering the cost of moving the tank gun mount equipment currently located at DATP to a GDLS facility. GDLS has agreed in a written modification to its contract that the cost of moving this equipment to a GDLS facility will not be included in any GDLS contract cost.

Please let us know if you have any questions or if we can provide additional assistance in preparation of your audit report.



William T. Coleman III

## **Audit Team Members**

**This report was prepared by the Contract Management Directorate, Office of the Assistant Inspector General for Auditing, DoD.**

**Paul J. Granetto  
Garold E. Stephenson  
Eugene E. Kissner  
Major Mitchell Hailstone, USAF  
Peter I. Lee  
John E. Polley  
Janice S. Alston**

## INTERNET DOCUMENT INFORMATION FORM

**A . Report Title: Procurement of Gun Mounts for the M1A2 Tank**

**B. DATE Report Downloaded From the Internet: 12/15/99**

**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 12/15/99

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.