

# Inspector General

United States  
Department of Defense



Defense Logistics Agency Contracts  
for M2 Machine Gun Spare Parts  
in Support of Operations  
in Southwest Asia

# Report Documentation Page

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## Acronyms and Abbreviations

ARDEC	Armament Research, Development and Engineering Center
DCMA	Defense Contract Management Agency
DLA	Defense Logistics Agency
DLAD	Defense Logistics Agency Acquisition Directive
DSCC	Defense Supply Center Columbus
FAR	Federal Acquisition Regulation
PQDR	Product Quality Deficiency Report



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
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January 11, 2010

MEMORANDUM FOR DIRECTOR, DEFENSE LOGISTICS AGENCY  
DIRECTOR, DEFENSE CONTRACT MANAGEMENT AGENCY

SUBJECT: Defense Logistics Agency Contracts for M2 Machine Gun Spare Parts in Support of Operations in Southwest Asia (Report No. D-2010-035)

We are providing this report for review and comment. We considered management comments on a draft of the report in preparing the final report.

DOD Directive 7650.3 requires that all recommendations be resolved promptly. The Defense Logistics Agency comments on Recommendations B.1.b, B.2, D.2 and D.3 were partially responsive because they lacked specific corrective actions to address our recommendations. Therefore, we request that the Defense Logistics Agency comment on Recommendations B.1.b, B.2, D.2 and D.3 by February 11, 2010.

If possible, please send a .pdf file containing your comments to [audcolu@dodig.mil](mailto:audcolu@dodig.mil). Copies of the management comments must contain the actual signature of the authorizing official. We are unable to accept the /Signed/ symbol in place of the actual signature. If you arrange to send classified comments electronically, you must send them over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the staff. Please direct questions to me at (703) 601-5868 (DSN 329-5868).

*Patricia A. Marsh*

Patricia A. Marsh, CPA  
Assistant Inspector General  
Defense Business Operations



# Results in Brief: Defense Logistics Agency Contracts for M2 Machine Gun Spare Parts in Support of Operations in Southwest Asia

## What We Did

We determined whether the Defense Logistics Agency (DLA) used appropriate and effective contracting procedures to provide customers with critical application M2 machine gun parts.

## What We Found

DLA did not have effective internal controls in place to ensure appropriate and effective contracting procedures related to contract quality assurance, product quality deficiency report processing, spare part kit assembly, and oversight of contractor deliveries. Specifically,

- Contractors provided at least 7,100 nonconforming parts on 24 contracts.
- DLA did not adequately process 95 of 127 product quality deficiency reports.
- DLA did not deliver 60 spare part kits on time to support a U.S. Army program to overhaul 2,600 M2 machine guns and provided nonconforming parts in kits.
- DLA did not pursue adequate compensation from contractors who were significantly late in providing critical parts on 49 contracts.

As a result,

- Warfighters had to wait for critical M2 gun parts as DLA had backorders on 7,183 requisitions for 60,701 parts during a 12-month period. Priority group 1 comprised 4,097 of these requisitions for 40,333 parts.
- A U.S. Army program to overhaul M2 machine guns was negatively impacted.
- DLA missed opportunities to identify contractors with performance problems and obtain adequate compensation.
- Because of the quality problems, the Government spent at least \$655,000 in funds that could have been put to better use.

- DLA missed an opportunity to obtain approximately \$405,000 in contractor compensation for late deliveries.

DLA has initiated several corrective actions to improve the quality of M2 machine gun parts. Implementing our recommendations should improve DLA's internal controls over contracting.

## What We Recommend

We recommend that DLA establish controls and implement measures to improve its contract quality assurance procedures, product quality deficiency report processing, spare part kit assembly, and contractor delivery oversight. We recommend that the Defense Contract Management Agency (DCMA), which assists DLA in contract administration, ensure adequate and thorough reviews of contractor test reports.

## Management Comments and Our Response

The Director, DLA, agreed with all findings and recommendations and stated that each supply chain has established a contract quality position to audit contractor performance. The Director also agreed to review the quality assurance provisions for all critical small arms parts, document testing results, and improve controls over product quality deficiency report processing and spare part kit assembly. The Director's comments were partially responsive. We request additional comments from the Director, DLA.

The Director, DCMA, agreed with the finding and recommendation and stated that DCMA has established supervisor performance evaluations to ensure compliance with its updated quality assurance policy on reviews of contractor first article test reports. The Director's comments were responsive. See the recommendations table on the back of the page.

## Recommendations Table

Management	Recommendations Requiring Comment	No Additional Comments Required
Defense Logistics Agency	B.1.b, B.2, D.2, D.3.	A.1.a, A.1.b, B.1.a, B.3, B.4, C.1, C.2, D.1, D.4.
Defense Contract Management Agency	None	A.2

**Please provide comments by February 11, 2010.**

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# Introduction

## Objectives

Our objective was to determine whether DOD organizations used appropriate and effective contracting procedures to provide customers with the spare parts for vehicle-mounted small arms needed to support operations in Southwest Asia. This report focuses on DLA contracts for M2 .50-caliber machine gun spare parts (M2 gun parts). See Appendix A for a discussion of the scope and methodology.

We performed this audit pursuant to Public Law 110-181, “The National Defense Authorization Act for Fiscal Year 2008,” Section 842, “Investigation of Waste, Fraud, and Abuse in Wartime Contracts and Contracting Processes in Iraq and Afghanistan,” January 28, 2008. Section 842 requires “thorough audits . . . to identify potential waste, fraud, and abuse in the performance of (1) Department of Defense contracts, subcontracts, and task and delivery orders for the logistical support of coalition forces in Iraq and Afghanistan; and (2) Federal agency contracts, subcontracts, and task and delivery orders for the performance of security and reconstruction functions in Iraq and Afghanistan.” This audit focused on DLA contracts for M2 gun parts and the M2 plays a vital role in the operations in Southwest Asia.

## Background

DLA is the largest DOD combat support agency, providing worldwide logistics support in both peacetime and wartime to the Military Services as well as several civilian agencies and foreign countries. DLA purchases spare parts for small arms weapon systems through its Defense Supply Center Columbus (DSCC) Land Supply Chain, or Land Division. The Land Division manages the total supply support and directs the distribution of consumable repair parts for DOD land-based weapon systems. DCMA assists DSCC by providing contract administration services.

### ***M2 Machine Gun***

The M2 is an automatic, belt-fed, recoil-operated, air-cooled, crew-operated machine gun, capable of single-shot and automatic fire. Soldiers use the M2 machine gun on a vehicular mount during both offensive and defensive operations. If necessary, it can be mounted on a tripod for use on the ground. Warfighter infantry, military police, and transportation and maintenance support units are the primary users of the M2 machine gun.

The M2 plays a vital role in the operations in Southwest Asia. As of March 2009, soldiers were using approximately 32,000 M2 machine guns, with 10,000 in use in Southwest Asia. A new M2 machine gun costs approximately \$13,000.

**Figure 1. M2 .50 Caliber Machine Gun**



### ***M2 Gun Parts Reviewed***

DSCC managed 109 M2 gun parts, and we reviewed 22 of them: 21 spare parts and 1 spare part kit<sup>1</sup> that DSCC assembled for the U.S. Army. All selected parts were critical application items. A critical application item is one that is essential to the preservation of life in emergencies or essential to end-item or system performance, the failure of which would adversely affect the accomplishment of a military operation. DSCC provided data that showed a significant increase in demand for our sampled M2 gun parts since FY 2000. In FY 2008, demand for our sampled items was 300 percent greater than before the start of major contingency operations in Southwest Asia in FY 2001.

### ***U.S. Army Commands***

The U.S. Army Materiel Command provides materiel readiness and operates the research, development, and engineering centers; depots; and arsenals. Several of its subordinate commands play important roles in the management of small arms weapon systems.

The U.S. Army TACOM Life Cycle Management Command, Rock Island Small Arms Group manages the M2 machine gun program and several other small arms weapon systems. The heavy machine gun team is responsible for processing requisitions for end-items and repair parts, preparing and updating the technical manual, developing modifications for work orders, and responding to user requests for assistance. The team interfaces with the design engineers to improve weapon performance.

The U.S. Army Research, Development and Engineering Command's Armament Research, Development and Engineering Center (ARDEC) researches, develops, and sustains current and future armament and munitions systems and serves as the M2 machine gun engineering support activity.

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<sup>1</sup> The kit consists of 98 M2 gun parts that DLA assembles into a kit. The parts we reviewed are listed in Appendix A.

The Anniston Army Depot Small Arms Shop overhauls unserviceable M2 machine guns. In FY 2008, Anniston performed the overhauls using DLA spare part kits.

## **Review of Internal Controls**

We determined that internal control weaknesses in the DLA contract quality assurance, product quality deficiency report processing, spare part kit assembly, and contractor oversight for M2 gun parts existed as defined by DOD Instruction 5010.40, "Managers' Internal Control (MIC) Program Procedures," January 4, 2006. We describe the control problems, management actions, and recommendations for improvement in our four report findings. Implementing all recommendations in this report will improve DLA internal controls over contract quality assurance, product quality deficiency report processing, spare part kit assembly, and contractor oversight for M2 gun parts. Specifically, these actions should help get high-quality, critical application M2 gun parts to the warfighter in a timely manner and improve DLA customer service. We will provide a copy of the report to the DLA senior official responsible for internal controls.

## Finding A. Contract Quality Procedures

DSCC did not always use appropriate and effective contract quality assurance procedures, and contractors provided at least 7,100 nonconforming M2 gun parts on 24 contracts. This occurred in part because responsible DSCC and DCMA personnel did not always follow Federal and DLA guidance and ensure adequate and efficient Government inspection of critical application parts. As a result, an increased risk was placed on the warfighter. Specifically,

- DLA had backorders on 7,183 customer requisitions for 60,701 parts during a 12-month period, and 4,097 of these orders for 40,333 parts represented the highest priority backorder status: priority group 1, and
- DLA's customers generated 127 product quality deficiency reports (PQDRs).<sup>2</sup>

In addition, the Government spent at least \$280,000 because of the quality problems.<sup>3</sup>

### Criteria for Contract Quality Assurance

Federal Acquisition Regulation (FAR) Part 46, "Quality Assurance," prescribes policies and procedures to ensure that supplies the Government acquires by contract conform to the contract's quality and quantity requirements. The regulation includes inspection, acceptance, warranty, and other measures associated with quality requirements necessary to protect the Government's interest.

The FAR identifies the extent of contract quality assurance requirements based upon the technical description, complexity, and criticality of the application. According to the FAR, complex items have quality characteristics that must be established progressively through precise measurements, tests, and controls applied during purchasing, manufacturing, performance, and assembly to ensure conformance. The FAR specifies that organizations perform contract quality assurance as necessary to determine whether supplies conform to contract requirements and that each contract designate the place where Government reserves the right to perform contract quality assurance.

DLA Acquisition Directive (DLAD) Part 46, "Government Contract Quality Assurance," specifies that contracting personnel are to incorporate quality assurance requirements into solicitations and contracts to encourage responsible contractor quality efforts and reduce the need for Government oversight. Part 46.402 specifies that DLA is not to delegate contract administration to DCMA for contracts, purchase orders, or delivery orders valued at less than \$250,000 nor to require quality assurance at the contractor's facility

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<sup>2</sup> DOD organizations use PQDRs to report product defects resulting from deficiencies in design, workmanship, specifications, material, or other nonconforming conditions, such as improper packaging.

<sup>3</sup> The \$280,000 and the \$375,000 in Finding C total \$655,000, the amount the Government spent because of the contract quality issues.

unless the items have specific technical requirements or critical characteristics, or there are specific acquisition concerns.

The DLA Technical-Quality Policy and Procedures Deskbook, Business Systems Modernization Version, July 31, 2007 (DLA Technical Quality Deskbook), provides the policy and defines responsibilities for Defense Supply Center technical and quality support functions. The policy states that product specialists are to support the acquisition function by ensuring that DLA contracts contain adequate contractual quality assurance clauses and provisions to minimize Government acceptance of nonconforming items. These provisions include such information as detailed first article testing, inspection, and other testing requirements. Quality assurance provisions contractually obligate both the contractor and the Government to perform specific actions, depending on the item's technical description, complexity, and criticality.

DLA maintains a material master file record that contains unique contract clauses and provisions for each item. Product specialists are required to review the complete master file, including both technical and quality-related data, and are responsible for updating each material master record to ensure that clauses and provisions are inserted into contract solicitations and awards. Product specialists also perform specific reviews, such as pre-award surveys, before contract award to determine whether a contractor can provide conforming parts.

## **Contracts Reviewed and Item Conformance**

We sampled 22 unique DSCC-managed, critical application items for the M2 machine gun. We reviewed 103 contracts for these items and determined the appropriateness of the contract quality assurance provisions. For many of these contracts, DSCC shared contract administration functions with DCMA. At least 7,100 items did not conform with quality standards for 24 of the 103 contracts, including parts that:

- contractors manufactured incorrectly,
- did not meet specific quality standards, and
- contained inadequate phosphate surface coating to prevent corrosion.

## **Pre-award Contract Quality Assurance Procedures**

Contractors produced at least 7,100 nonconforming M2 gun parts, in part because DSCC personnel did not always perform adequate pre-award contract quality assurance procedures and include appropriate contract quality provisions. Specifically, DSCC coded contracts for inspection and acceptance at destination instead of origin and omitted or waived contract first article testing requirements. Performance of these contract quality assurance provisions would have assisted DSCC in determining whether contractors could provide conforming spare parts.

## ***Quality Assurance Inspection Points***

### **Quality Assurance at Final Destination**

For 16 of the 103 contracts, DSCC assigned quality inspection and acceptance of goods at final destination instead of origin. For six of these contracts, the responsible contractor provided parts that did not conform to contract specifications.

The DLA Technical Quality Deskbook specifies that inspectors perform Government contract quality assurance at either source (origin) or destination. Quality assurance actions at source normally consist of Government personnel reviewing the contractor's processes and quality system, which may be coupled with a technical inspection of the supplies. Government quality assurance actions at destination normally consist of kind, count, and condition verification, unless DLA provides a quality letter of instruction requesting specific technical inspection. Contract quality assurance is mandatory for some specific categories of items based upon the critical nature of their application.

Ordinarily, the place of acceptance is assigned at the same location as the place of performance for quality assurance actions. The DLA Technical Quality Deskbook lists the inspection and acceptance codes. Product specialists are responsible for ensuring that the material master record for each item contains the correct place of inspection code. Both the DLAD and the DLA Technical Quality Deskbook specify coding critical application items for inspection and acceptance at origin if the items have specific technical requirements or critical characteristics or if there are specific acquisition concerns. However, this did not always occur for our sampled M2 parts.

For example, DSCC contracted for sight covers and designated inspection and acceptance at destination for these critical application items. The contractor delivered the parts to a Defense Distribution Depot for storage. After delivery, DLA selected a sample of the parts and tested their quality. The DSCC Product Test Center tested the parts and found that they did not meet contract specifications. In addition, the Anniston Army Depot identified 400 nonconforming parts delivered on the same contract.

### **Quality Assurance at Origin**

Coding items for inspection and acceptance at origin does not always ensure that adequate quality assurance takes place before shipment from the contractor's facility. For example, DCMA administered a DSCC contract for trigger bars, which required inspection at origin, but the contractor used alternative release procedures<sup>4</sup> and shipped 1,419 parts directly to DLA customers. DCMA did not inspect the parts because it was following an exception-based product assurance policy at the time, and DSCC had not included a contract clause for higher level quality assurance.

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<sup>4</sup> Alternative release procedures allow certain contractors, based on their performance history, to ship parts without Government inspection.

A U.S. Army unit located in Iraq received the trigger bars and initiated a PQDR. The unit reported that the contractor incorrectly manufactured the rear bend of the trigger bar to the right instead of the left. A DCMA official informed us that the contractor misread the drawing and incorrectly manufactured all 1,419 items. The contractor accepted full responsibility and agreed to replace the defective parts at no cost to the Government. The DCMA official informed us that the contractor replaced 780 of the parts in August 2008, which was 11 months after the contract initially required the parts to be delivered in September 2007.

### ***First Article Testing Requirements***

DSCC did not include a first article test requirement in 79 of the 103 contracts we reviewed. For 21 of the 79 contracts, contractors ultimately provided parts that did not conform to contract specifications. If DSCC had included appropriate quality assurance provisions in these contracts, such as a first article testing requirement, it could have identified contractor deficiencies at an earlier date.

A quality assurance provision DLA uses to determine whether contractors are capable of providing acceptable quality parts is the first article test. This test is a separate contract deliverable conducted after award but much sooner than the required delivery date for the contractor's full production of parts. The purpose of the test is to ensure that the contractor can furnish a product that meets contract technical and quality assurance requirements, therefore minimizing risk for both the contractor and the Government. The test must include a sufficient quantity to clearly demonstrate that the materials, manufacturing processes, and workmanship standards used for quality control are adequate to produce an item that meets all required contract specifications.

The first article test can take place at the contractor's facility, at a Government facility, or at an independent test facility, depending on the contract terms. The product specialist is responsible for determining when a first article testing requirement is appropriate and for identifying who is responsible for reviewing the reported test results. The product specialist must consider previous product quality problems, including contractor-specific quality problems, performance specifications, and the complexity or sensitivity of the production and manufacturing processes required in determining whether the part requires a first article test. There are two distinct phases of a first article test: pre-award and post-award. The pre-award phase consists of defining the test requirement and inserting it into the solicitation. The post-award phase focuses on administration, test performance, and evaluation of test results.

DSCC did not always include first article testing requirements on subsequent purchases from contractors that provided deficient parts on prior contracts. For example, DSCC contracted for firing pins without including sufficient quality provisions despite the contractor's previous quality problems that customers identified on PQDRs. DSCC continued to purchase parts from the same contractor without requiring it to submit items for first article testing. The DSCC Product Testing Center subsequently conducted multiple tests on the parts and found that they did not meet contract specifications.

## **Post-award Contract Quality Assurance Procedures**

DSCC and DCMA personnel did not always perform adequate post-award contract quality assurance procedures and DSCC did not always use the most efficient product testing methods. Specifically, responsible personnel did not adequately review contractor first article test results for 3 of the 24 contracts. In addition, DSCC performed product verification testing on all M2 parts, which is not always the most efficient quality control method of testing.

### ***Quality Reviews of First Article Test Results***

The DLA Technical Quality Deskbook specifies that product specialists are responsible for reviewing first article test reports. Product specialists can also delegate the review of first article test reports to DCMA, but they are ultimately responsible for making approval or disapproval recommendations to the contracting officer. For 3 of the 24 contracts with quality problems, DSCC relied on inadequate DCMA reviews of first article test reports, and contractors provided nonconforming parts.

For example, DSCC relied on insufficient DCMA reviews and acceptances of contractor first article test reports for cover assemblies. For one contract, our review of the contractor's first article test report revealed that the test results omitted a critical interfacing characteristic. DCMA officials confirmed to us that the characteristic should have been included in the test report and verified. The contractor delivered 586 items that resulted in customer-generated PQDRs. The contractor acknowledged fault and agreed to implement corrective actions. However, DSCC and DCMA officials we contacted were unable to provide evidence that they had verified the contractor's proposed corrective actions.

DSCC awarded another contract for 625 parts to the same contractor, and DCMA inspected the parts at the contractor's facility and inappropriately approved them for shipment. DCMA inspection records in the contract file lacked adequate documentation on exactly what DCMA inspected and accepted. Customers generated PQDRs on parts received against the second contract, citing the same problem that occurred on the first contract. In total, customers generated 36 separate PQDRs identifying 233 defective parts against both contracts.

### ***Product Verification Testing***

DSCC did not always use the most efficient quality assurance methods to test parts. As a short-term solution to nonconforming parts, DSCC used product verification testing to identify contractors that could not provide M2 gun parts in accordance with contract specifications. However, product verification testing is not always the most efficient quality control method in terms of timeliness and can be costly. Between June 2008 and February 2009, the DSCC Product Test Center performed 20 product verification tests on items associated with the M2 contracts we sampled. Contractors failed 14 of the 20 tests, and the tests cost DLA more than \$37,500.

Product verification testing requires contractors to submit production-run items to a DLA Product Test Center for examination before payment. DSCC generally takes longer to evaluate contractor capabilities using product verification testing as compared with first article testing. To illustrate, DSCC contracted for latch bolts in June 2008 without a first article test requirement, and it required the contractor to start deliveries in September 2008. The contractor subsequently failed three separate product verification tests through December 2008, which was approximately 180 days after contract award. In contrast, two prior contracts for latch bolts required first article testing 90 and 120 days after contract award.

## **Impact of Quality Problems**

The quality-related problems caused delays in customers' obtaining critical M2 gun parts in a timely manner, resulted in customer-generated PQDRs, and required Government resources to address. Our 22 sampled M2 parts appeared on backorder listings for an average of nearly 8 months during a 12-month period. During this time, DLA had 7,183 customer requisitions for 60,701 M2 gun parts on backorder. Among those were 2,100 orders that originated in Southwest Asia for 16,734 parts. Overall, 4,097 orders for 40,333 parts were priority group 1, the highest priority backorder status. For example, backorders for metal tube assemblies grew to more than 1,860 items during 2008. This represents more than 12 months of demand for a critical application item. In addition, DLA's customers generated 127 PQDRs for our 22 sampled M2 parts.

The Government spent at least \$280,000 to address the quality issues, including \$190,000 that DLA spent and \$90,000 that the U.S. Army ARDEC spent. Specifically, DLA incurred costs of at least \$190,000 because of the quality-related problems. These costs included product testing costs and costs DLA incurred for defective parts, where DSCC did not hold the responsible contractor accountable for rework or replacement of the items or other compensation. In addition, the situation forced DSCC to make emergency buys at prices up to 300 percent greater than they previously paid for the items. Also, as described in Finding C, the quality problems negatively impacted an FY 2008 Anniston Army Depot M2 machine gun overhaul program.

U.S. Army engineering officials we interviewed cited concerns regarding the excessive costs associated with processing PQDRs for DLA-managed items. U.S. Army ARDEC provided details on more than \$90,000 in nonreimbursed costs they incurred as a result of quality issues with DLA-managed M2 parts. Engineering officials also provided the results of a U.S. Army Materiel Systems Analysis Activity PQDR cost study. The study estimated the total Army costs resulting from nonconforming DLA parts at the Anniston Army Depot small arms product line. The study estimates that the Army annually incurs costs of more than \$700,000 as a result of PQDRs associated with DLA-managed small arms parts. U.S. Army officials also expressed concerns that the number of PQDRs may not reflect the complete magnitude of the quality problem because many soldiers do not have the time to prepare PQDRs during wartime.

## **Management Actions**

DSCC and DCMA took several actions to address the problem of nonconforming M2 parts before and during our audit. DSCC revised the material master records for the parts to require first article testing and inspection and acceptance at origin. In addition, DSCC required its product specialists to review first article test reports and prohibited them from delegating the review to an administrative contracting officer. For five of our sampled items, DSCC restricted the pool of contractors that could bid on contracts to sources that Government engineers had preapproved.

DSCC signed a memorandum of agreement with ARDEC to improve the accuracy of the technical data packages it includes in contracts for M2 gun parts. (Appendix B provides details on this effort.) DSCC also updated the quality assurance letter of instruction and stated that all procurements for M2 gun parts must now have the updated letter attached. (Appendix C contains details on the updated quality letter.) In addition, DSCC, DCMA, and U.S. Army officials meet periodically at small arms summits to discuss problems and methods to improve the quality of small arms parts.

In response to a discussion draft of this report, DSCC provided a list of additional process improvements it had recently implemented to improve the quality of its spare parts. These process improvements are listed in Appendix B. We did not validate the effectiveness of these management actions.

In February 2009, DCMA updated its product assurance instructions related to alternative release procedures from an “exception-based product assurance” to a “limited product assurance” policy. Exception-based product assurance did not explicitly require product assurance personnel to do an assessment of the contractors before placing them on an alternative release plan. Limited product assurance policy requires DCMA to establish a basis of confidence before placing contractors on an alternative release plan.

DCMA also updated its policy to include additional details on its oversight of contractor first article testing. The policy requires DCMA quality assurance representatives to verify the contractor’s inspection of critical and major product characteristics in first article test reports by observation or independent inspection. The revised policy also includes detailed documentation requirements for these quality assurance reviews.

## **Conclusion**

DSCC and DCMA did not always use appropriate and effective contracting quality assurance procedures to ensure that contractors provided M2 machine gun parts that conformed to contract specifications. This increased the risk for the warfighter, who had to wait for critical M2 gun parts. DSCC has taken several corrective actions and needs to consistently use the appropriate pre-award and post-award quality assurance procedures to ensure that contractors can provide critical application spare parts that conform to contract specifications. We did not validate the effectiveness of the corrective actions. DLA needs to establish controls, such as an action plan with metrics, to ensure that DSCC fully implements and sustains all corrective actions.

The M2 gun parts we reviewed represent only a small portion of DLA-managed items. A risk exists that additional DLA-managed critical application items for other small arms weapon systems are not subjected to adequate quality controls, and as such, we are making the following recommendations.

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

### **A.1. We recommend that the Director, Defense Logistics Agency:**

**a. Establish an action plan with metrics to ensure that Defense Supply Center personnel fully implement and sustain the corrective actions initiated before and during the audit and use appropriate contract quality assurance procedures for all future purchases of M2 machine gun spare parts.**

**b. Review all critical application small arms parts with specific technical requirements, critical characteristics, or specific acquisition concerns to ensure that appropriate contract quality assurance provisions exist in the material master record prior to any purchase actions. These quality assurance provisions should include inspection and acceptance at origin, first article tests or other quality inspection requirements, and applicable quality letters of instruction.**

### ***Defense Logistics Agency Comments***

The Director, Acquisition Management, responded for the Director, DLA, and agreed with recommendations A.1.a and A.1.b. She stated that each supply chain has established an associate position for contract quality control to audit pre- and post-award performance and that the contract quality associate and management team would monitor specific corrective actions resulting from the audits. The Director stated that a plan is in place to review technical requirements for critical application small arms parts. The Director agreed to review all critical application small arms parts to ensure that specific technical requirements, critical characteristics, or specific acquisition concerns are reviewed before any purchase actions.

### ***Our Response***

We consider the Director's comments to be responsive.

**A.2. We recommend that the Director, Defense Contract Management Agency, establish controls and implement measures to ensure that quality assurance representatives perform adequate and thorough reviews of contractor first article test reports, fully document the testing and acceptance of the results, and retain the results in the contract file.**

### ***Defense Contract Management Agency Comments***

The Executive Director, Operations Management and Customer Relations, DCMA, responded for the Director, DCMA, and agreed with the recommendation. She stated that

DCMA has established an additional control requiring first-line supervisor performance evaluations. The evaluations require supervisors to review, annually, the performance of all of their subordinates according to quality assurance instructions, including the newly revised instruction for performance with the first article inspection and test. The scheduled date for deployment of the first-line supervisor performance evaluation policy was November 30, 2009.

***Our Response***

We consider the Executive Director's comments to be responsive.

## Finding B. Processing Product Quality Deficiency Reports

DSCC did not process 95<sup>5</sup> of 127 PQDRs for M2 gun parts in a timely manner or adequately resolve the root cause of the deficiencies. These conditions occurred because:

- DSCC personnel responsible for processing PQDRs did not always comply with applicable DOD and DLA policy; and
- DLA did not establish adequate controls to monitor compliance, and its policy did not provide measurable performance goals and metrics for PQDR processing.

As a result, DLA did not provide effective customer support and missed opportunities to identify contractors with performance problems and obtain adequate compensation for deficient parts.

### Quality Deficiency Reporting Process

DOD organizations use PQDRs to report product defects resulting from deficiencies in design, workmanship, specifications, material, or other nonconforming conditions, such as improper packaging. The PQDR process begins when personnel identify and report defective material. The process primarily focuses on the following four roles:

- **Originator:** The individual who discovers defective material and initiates the PQDR.
- **Screening Point:** The organization that reviews the originator's PQDR.
- **Action Point:** The organization that receives the PQDR from the screening point, investigates and resolves it, and provides feedback to the screening point.
- **Support Point:** The organization that assists the action point in the investigation.

A DSCC product specialist was usually the action point for the PQDRs we reviewed. DCMA was the support point for the PQDRs we examined.

Originators generate a PQDR as either a category I or category II, depending on the nature of the deficiency. A category I PQDR is a report of a product quality deficiency that may cause death, injury, or severe occupational illness; does cause major loss or damage to a weapon system; critically restricts the combat-readiness capabilities of the using organization; or results in a production line stoppage. A category II PQDR is a report of a product quality deficiency that does not meet the criteria set forth in category I. DOD organizations document PQDR processing and resolution in the U.S.

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<sup>5</sup> This includes 81 PQDRs that DSCC did not process in a timely manner and 62 that it did not adequately resolve; 48 of the 62 were also not processed in a timely manner, resulting in a total of 95 [81+62-48] unique PQDRs.

Navy-hosted Product Data Reporting and Evaluation Program information system. In some cases, organizations provide the nonconforming part for Government or contractor testing. The part is referred to as an exhibit.

## Criteria for PQDR Processing

DLA Regulation 4155.24, “Product Quality Deficiency Report Program,” July 20, 1993, is the DOD Joint Regulation that governs PQDR processing. The regulation specifies that Government organizations pursue cost-free repair or replacement or reimbursement for the defective material when the deficiency is the contractor’s responsibility. The regulation also specifies that organizations should take preventive action to avoid additional, related quality deficiencies. Further, the regulation outlines the PQDR processing steps, including the amount of time spent at each step. DLA’s Technical Quality Deskbook, July 31, 2007, provides additional DLA PQDR processing policy and procedures. Table 1 shows the DOD PQDR processing criteria.

**Table 1. DOD Criteria on PQDR Processing Timeliness**

PQDR Processing Phase and Description	Processing Days	
	Category I	Category II
Days action point final or interim replies are required after PQDR receipt if a support point is not involved.*	20	30
Days action points are required to forward the PQDR to the support point after PQDR receipt.	1	10
Days action points are required to return the PQDR for closure after receipt of the support point’s final reply.	5	10

\* If the process requires an “exhibit,” timeliness is measured from the day of its receipt.

DLA Regulation 4155.24 specifies that interim replies address the status of the investigation, estimated date and time of the final reply, and any need for delay. The DLA Technical Quality Deskbook also specifies that interim replies should be provided at least every 30 days until a final reply is sent. The DLA One Book Process Chapter, “Product Quality Deficiency Report,” October 31, 2008, provides additional DLA guidance on PQDR processing. The policy specifies the DLA metrics to measure customer satisfaction as the number of product defects customers report and the average DLA response time. However, the guidance specifically states that there are no defined performance goals. DSCC operates under an informal 60-day PQDR processing goal.

## Timeliness of Processing Deficiency Reports

DSCC did not always process PQDRs for our sampled M2 gun parts within the time frames set by DOD and DLA policy. Specifically, DSCC did not meet the processing time frames for providing interim replies and completing PQDR investigations, forwarding them to support points, or closing them after a support point finished its investigation. Untimely PQDR processing could negatively impact the customer service DLA provides to the warfighter.

We reviewed 127 PQDRs related to our 22 sample items where DSCC was the action point. Of the 127 PQDRs, DSCC performed the investigations for 106 and delegated the investigation to a support point for 21. Overall, DSCC did not process 81 of the 127 PQDRs in a timely manner. On average, DSCC PQDRs that did not comply with DOD processing criteria spent 116 days under investigation, not including any time spent waiting for an exhibit. We measured the DSCC processing time for our sampled PQDRs against the DOD processing guidelines, and Table 2 illustrates the results.

**Table 2. DSCC PQDR Processing Results**

<b>Processing Category</b>	<b>PQDRs Tested</b>	<b>Untimely PQDRs</b>
DSCC PQDR investigation or interim reply	106	67
DSCC delegating the PQDR to a support point or closing it after receipt from a support point	21	14*
<b>Total</b>	<b>127</b>	<b>81</b>

\* This includes 8 PQDRs that DSCC did not delegate timely and 10 PQDRs that DSCC did not close timely. There were 4 PQDRs that failed both tests, resulting in 14 [8+10-4] unique PQDRs.

DSCC product specialists did not always begin PQDR investigations in a timely manner. For example, DSCC generated a PQDR on November 28, 2007, after a Product Test Center quality test identified nonconforming parts. On the same day, the PQDR reached the product specialist, who acknowledged receipt immediately. The PQDR was then dormant for approximately 10 months, until October 2008, when we inquired about it. DSCC took prompt action and processed the PQDR. However, from the time of PQDR origination until completion, the contractor had delivered more than 9,000 parts on the same contract and a December 2008 product verification test found that the parts did not meet contract specifications.

In cases where DSCC provided interim replies to customers, the replies routinely lacked required information, such as the status of the PQDR investigation and an estimated completion date. For 137 interim replies that DSCC sent to customers,<sup>6</sup> only 70 included the status of the investigation, and only 36 contained an estimated completion date. For example, a U.S. Army unit originated a PQDR in March 2007, and DSCC closed it in October 2007. DSCC sent six interim replies during this period, and every reply contained the same generic statement that DSCC had received the PQDR and a product specialist was working on it. DSCC did not send the interim replies in 30-day intervals and also did not provide the status of the investigation or an estimate of the completion date. The interim replies served little purpose beyond assuring the screening point that the PQDR had not been lost or forgotten.

As another example, the Small Arms Support Center for Operation Iraqi Freedom in Iraq generated a PQDR in May 2008. DSCC did not send a final reply containing disposition

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<sup>6</sup> This number exceeds the total PQDRs we reviewed because a PQDR can have multiple interim replies.

instructions for the defective parts until February 2009, 290 days later. During this time, the Product Data Reporting and Evaluation Program history log showed only two system-generated late notifications the system sent to DSCC. The DSCC final reply was not timely and did not represent good customer service to the warfighter.

## **Resolution of Deficiency Reports**

DSCC did not adequately resolve PQDRs for M2 gun parts in accordance with DLA policy and fully pursue cost-free repair or replacement or reimbursement for defective materiel. Specifically, DSCC did not achieve an adequate resolution on 62 of 127 PQDRs for our sampled M2 gun parts. By not adequately resolving PQDRs, DLA missed opportunities to identify contractors with performance problems and obtain adequate compensation.

DSCC product specialists were not fully investigating PQDRs if the originator did not provide certain information. Missing information can make the investigation more difficult and may limit the product specialist's ability to resolve the situation. The DLA Technical Quality Deskbook specifies that the nonavailability of award document, contract number, or requisition number does not preclude further PQDR investigation. The policy further specifies that a product specialist's investigation should include examination of both open and resolved PQDRs. Product specialists did not always follow DLA guidance and dropped issues too quickly and prematurely closed PQDRs.

DSCC product specialists closed 37 PQDRs because of insufficient information. However, we determined that 31 of the 37 closed PQDRs contained sufficient information to warrant additional investigation. For example, product specialists did not appropriately apprise the responsible contractor about deficient cover assemblies on 12 PQDRs and indicated that they closed the PQDRs because of insufficient or inaccurate information. For these PQDRs, we determined that sufficient information did, in fact, exist to warrant additional investigation. For example, four of the PQDRs identified the responsible contractor.

In some cases, product specialists identified the responsible contractor that provided deficient parts but did not complete the PQDR process and fully pursue cost-free repair, replacement, or reimbursement for defective materiel. For 24 PQDRs, an error by a DLA storage depot and lack of DSCC monitoring precluded the return of the nonconforming cover assemblies for replacement. Specifically, DLA sent the wrong parts to the contractor for replacement, and DSCC never resolved the issue. Overall, for 233 deficient cover assemblies on 36 PQDRs that product specialists did not adequately resolve, DSCC did not hold the responsible contractor accountable for replacing the parts or for providing compensation for the \$36,638 purchase price.

## **Report Processing Controls and Metrics**

DLA did not establish adequate controls to monitor compliance with the PQDR program. In addition, DLA policy did not provide measurable performance goals and metrics for Supply Center PQDR processing. The DOD Joint Regulation that governs PQDR

processing provides specific guidelines on the maximum number of days organizations should take during each phase of the PQDR process. However, DLA’s policy specifically states that there are no established performance goals for the PQDR process. DLA cannot fully measure the effectiveness of its PQDR process without establishing goals and effective controls to monitor performance.

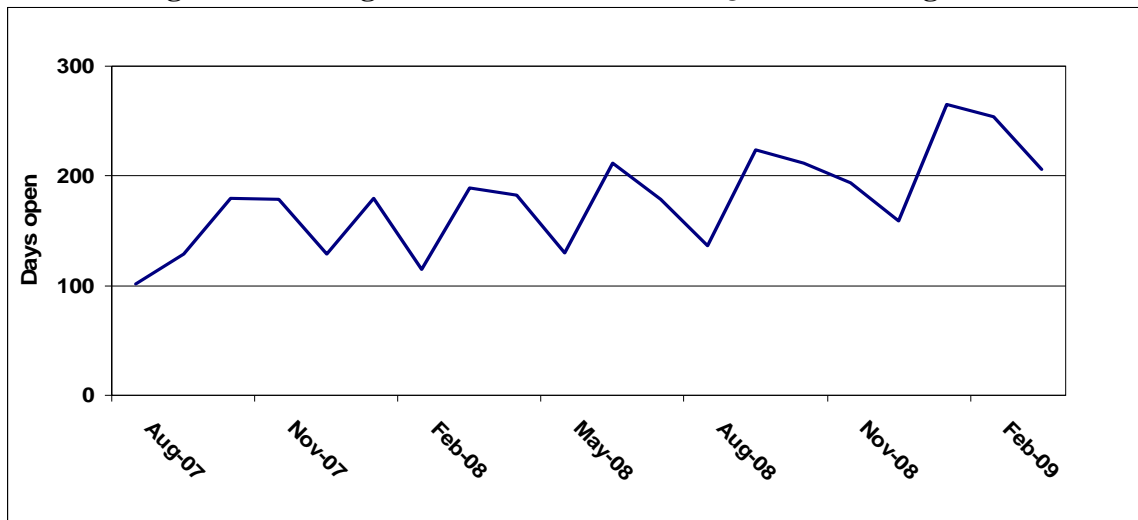
DSCC’s primary metric for evaluating the timeliness of PQDRs is the average number of days to process the PQDR. DSCC uses an informal 60-day goal for PQDR processing. Although this is its primary goal, DSCC has not come close to reaching it. DSCC’s secondary metric for evaluating PQDRs involves a monthly sample plan. The monthly sample consists of PQDRs DSCC randomly chooses from a population of recently closed PQDRs. The sample size is 5 percent of PQDRs from each DSCC division, and in our opinion, is too small to provide very reliable information. For example, the DSCC Land Division closes roughly 80 PQDRs per month, selects approximately 4, and reviews the processing time and compliance with a list of quality requirements.

DSCC also counts the total number of PQDRs customers submit and the most common PQDR sources. However, these metrics do not adequately measure the effectiveness of DSCC’s PQDR processing. DLA is missing metrics to fully test compliance with the DOD Joint Regulation and to adequately measure Supply Center PQDR resolution timeliness and quality. Specifically, the existing metrics do not address the quality of interim replies, timeliness of the third or greater interim reply, or the time DSCC spent to close a PQDR sent back by a support point.

## Overall DSCC Land Division PQDR Processing

Our analysis of all DSCC Land Division PQDRs showed a trend of untimely processing that was consistent with our analysis of M2 gun part-related PQDRs. Figure 2 shows the increase in the average PQDR processing time between August 2007 and March 2009.

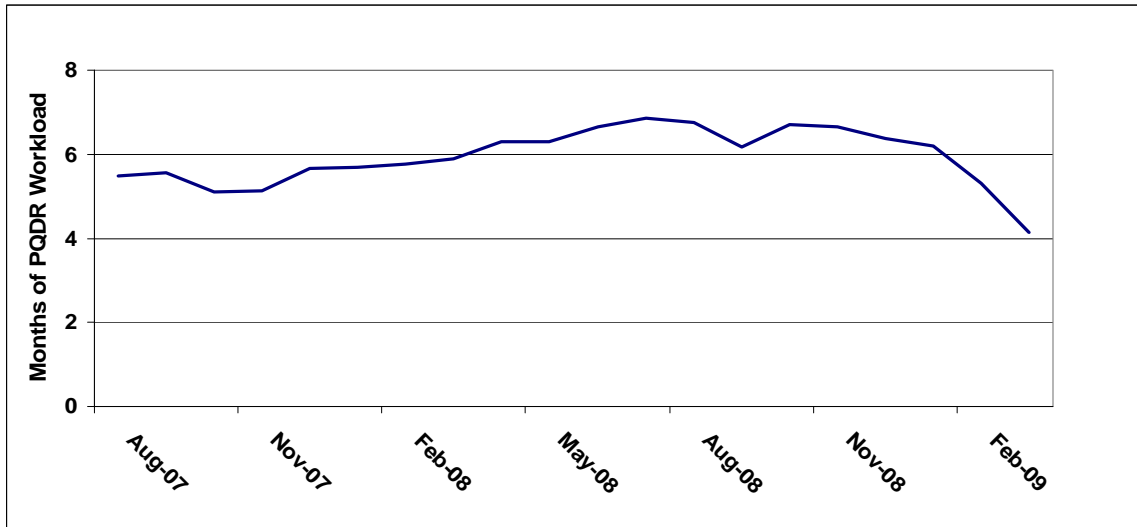
**Figure 2. Average DSCC Land Division PQDR Processing Time**



Overall, the average processing time for DSCC Land Division PQDRs was 183 days. Note that this measure of processing time does not directly correspond to the average of 116 days for our sampled M2 gun parts. The 116 days exclude generally small periods of time personnel spent in the early and final steps of a PQDR in addition to any time personnel spent waiting for an exhibit. The 183 days merely compares the PQDR opening and closing dates.

Figure 3 illustrates the backlog of DSCC Land Division PQDRs between August 2007 and March 2009.

**Figure 3. DSCC Land Division PQDR Backlog**



The backlog peaked in July 2008 at more than 6 months of workload, or 577 PQDRs. It then decreased from January to March 2009, bringing it to more than 4 months of workload, or 349 PQDRs. DLA should determine whether adequate staffing exists because DSCC has not processed PQDRs in a timely manner and a significant number of PQDRs were backlogged.

## U.S. Army Concerns

Members of the U.S. Army engineering community also expressed concerns regarding PQDR processing by DLA. Specifically, engineering officials cited problems in obtaining a cause, corrective action, and preventive action for PQDRs associated with DLA-managed items. Among these, they noted that DLA too often closed PQDRs for insufficient information or judged the deficiency to be an isolated incident. They also expressed concern about the lack of DLA requests for U.S. Army engineering support during DLA PQDR investigations.

## Management Actions

The DSCC Land Division has initiated corrective actions that should help solve some of the PQDR processing problems we identified. Between February and April 2009, DSCC officials implemented measures to filter out PQDRs that duplicated PQDRs for the same

issue that DSCC was investigating or had already investigated. In addition, DSCC developed measures to address PQDRs that were missing information and PQDRs that product specialists closed without a full investigation.

DSCC also developed a process that incorporates timeliness metrics for PQDR processing into the annual performance appraisals for responsible individuals. The latter process should help reduce processing times, but it could also lead to lower quality as those involved rush to meet timeliness goals. We could not analyze the effectiveness of either of these actions because DSCC instituted them at the end of our audit fieldwork. DLA should evaluate the effectiveness of these measures when addressing our audit recommendations.

## **Conclusion**

DSCC's Land Division has not processed PQDRs in a timely or effective manner. The PQDR process exists to correct problems and to prevent the recurrence of root issues. When Supply Center processing is slow or ineffective, DLA does not achieve these goals and can allow problems to recur. In addition, the lack of adequate DLA performance goals and metrics makes it difficult for DLA to measure performance. As a result, DLA is not providing effective customer support to the warfighter and is missing opportunities to identify contractors with performance problems and to obtain adequate compensation for deficient parts.

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

### **B. We recommend that the Director, Defense Logistics Agency:**

**1. Evaluate the Defense Supply Center Columbus Land Division's recent product quality deficiency report processing initiatives and establish controls and implement measures to improve timeliness and quality and ensure that responsible Defense Supply Center personnel:**

**a. Process product quality deficiency reports in a timely manner and provide interim replies to customers at least every 30 days that contain pertinent information on the status of the investigation and an estimated resolution date.**

**b. Fully and adequately research product quality deficiency reports to determine the root cause of the deficiency and obtain appropriate compensation from responsible contractors, even when information such as a contract number is missing.**

### ***Defense Logistics Agency Comments***

The Director, Acquisition Management, responded for the Director, DLA, and agreed with recommendations B.1.a and B.1.b. She stated that DSCC tracks PQDR aging and would establish FY 2010 management objectives. The Director also agreed that specific

and measurable metrics to manage the PQDR process should be included in the Defense Logistics Agency One Book.

### ***Our Response***

We consider the Director's comments to be responsive for Recommendation B.1.a. We consider the Director's comments to be partially responsive for Recommendation B.1.b because they did not identify corrective actions to address the recommendation. Specifically, the comments do not address establishing controls and measures to ensure that PDQRs are fully and adequately researched to determine the root cause of quality deficiencies and appropriate compensation is obtained from responsible contractors. We request that the Director, DLA, provide specific corrective actions to address Recommendation B.1.b in the response to the final report.

**2. Evaluate the metrics used to manage the product quality deficiency reporting process and update the applicable Defense Logistics Agency One Book Process Chapter, "Product Quality Deficiency Report." The updates should include sufficient and measurable performance goals to effectively guide the evaluation of product quality deficiency report processing timeliness and quality of resolution in accordance with the guidelines provided in the DOD Joint Regulation on product quality deficiency reporting (Defense Logistics Agency Regulation 4155.24).**

### ***Defense Logistics Agency Comments***

The Director, Acquisition Management, responded for the Director, DLA, and agreed with Recommendation B.2. She stated that specific and measurable metrics to manage the PQDR process should be included in the Defense Logistics Agency One Book.

### ***Our Response***

Although the Director agreed with the recommendation, we consider the comments to be partially responsive. The Director agreed that specific and measurable metrics to manage the PDQR process should be included in the Defense Logistics Agency One Book. However, the Director did not agree to actually include the specific and measurable metrics or provide supporting details. We request the Director, DLA, provide specific corrective actions for recommendation B.2 in the response to the final report.

**3. Evaluate the sufficiency of the sample plan that the Defense Supply Centers use to evaluate the product quality deficiency reporting process and consider increasing the sample size and aligning the evaluation criteria with performance goals established in response to recommendation B.2.**

### ***Defense Logistics Agency Comments***

The Director, Acquisition Management, responded for the Director, DLA, and agreed with the recommendation. She stated that DSCC would evaluate the sufficiency of the sampling plan.

### ***Our Response***

We consider the Director's comments to be responsive.

**4. Perform a staffing review to determine whether sufficient personnel are available to process the backlog of customer product quality deficiency reports in addition to handling the daily product quality deficiency report workload.**

### ***Defense Logistics Agency Comments***

The Director, Acquisition Management, responded for the Director, DLA, and agreed with the recommendation. She stated that as part of the monthly reviews of the PQDR backlog, DSCC would assess appropriate staffing targets.

### ***Our Response***

We consider the Director's comments to be responsive.

## **Finding C. Assembling Spare Part Kits**

Although the U.S. Army provided \$8 million to DSCC for 60 spare part kits to support an FY 2008 Anniston Army Depot M2 machine gun overhaul program, DSCC:

- did not deliver the 60 complete kits on time to support U.S. Army requirements to overhaul 2,600 guns,
- improperly included nonconforming parts in the kits, and
- mistakenly purchased items that the U.S. Army did not require for the kits.

These conditions occurred, in part, because DSCC personnel did not comply with DLA's existing policy on assembling spare part kits. In addition, as discussed in Finding A, DSCC's lack of proper contract quality procedures led to contractors' providing nonconforming parts. As a result, the Anniston Army Depot disassembled unserviceable M2 machine guns to obtain parts and also reworked nonconforming parts to complete the overhaul program in FY 2009. These efforts cost the Government at least \$375,000.<sup>7</sup> In addition, DSCC purchased unnecessary items.

### **Spare Part Kit and Overhaul Schedule**

In September 2007, the U.S. Army provided a final bill of materials to DSCC for the M2 gun kit. The bill of materials listed the 98 critical application spare parts that the U.S. Army needed for each M2 gun kit. Each kit supported 50 M2 gun overhauls. In October 2007, the U.S. Army provided DSCC with an \$8 million purchase request for 60 DLA kits. It required DLA to deliver the M2 kits to Anniston Army Depot to support the U.S. Army's overhaul of 2,600 M2 guns<sup>8</sup> originally scheduled to begin in February 2008 and continue through September 2008. DLA shipped the individual parts to the Defense Distribution Depot Anniston, where depot personnel assembled them into kits for delivery to the Anniston Army Depot small arms shop.

### **Criteria for Assembling Spare Part Kits**

The DLA Technical Quality Deskbook provides guidance on DLA spare part kit assembly and customer support. The policy specifies the following responsibilities for DLA personnel involved in assembling the kits.

- Ensure sources of supply and related component lead times can be met or aligned with the customer demand and delivery schedule. This includes maintaining oversight over the kit components at various stages in the assembly process,

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<sup>7</sup> The \$375,000 and the \$280,000 in Finding A total \$655,000, the amount the Government spent because of the contract quality issues.

<sup>8</sup> The U.S. Army originally planned to overhaul 3,000 M2 guns (60 kits x 50 guns = 3,000) but Anniston Army Depot scheduling data showed that they ultimately scheduled and completed 2,600.

making decisions on how to meet customer schedules, and monitoring the status of the process.

- Interface with demand and supply planners, product specialists, acquisition specialists, weapon system support managers, and other responsible personnel to ensure demands are met.
- Validate the completed kit bill of materials.

## DLA Kit Deliveries

DLA began delivering incomplete gun kits to Anniston Army Depot in April 2008. U.S. Army personnel identified 15 deficient parts when they opened the first kit. The deficiencies included 10 items that were rusty and not finished adequately with the proper phosphate surface coating. The remaining 5 items had other nonconformance problems.

Anniston Army Depot generated a PQDR to document the problem parts. The deficiencies resulted from the lack of proper DSCC contract quality procedures discussed in Finding A. In addition, DLA should have inspected the parts before kit assembly and delivery. DLA took action to have a quality inspector on site at the Anniston Army Depot to inspect the M2 gun kit parts upon arrival.

We visited Anniston Army Depot in December 2008 and determined that DLA had provided the U.S. Army with only 2 complete kits; the other 58 kits were missing parts. We obtained a listing of all parts missing from the kits. Table 3 shows the number of parts missing from the kits ranged from zero to 35.

**Table 3. DLA Kits and Missing Parts**

Number of	
Kits	Parts Missing
2	0
2	1
13	2
1	3
2	4
5	10
1	11
3	12
11	13
9	14
8	15
1	18
1	22
1	35

We also visited the DLA Defense Distribution Depot Anniston in December 2008 and observed the DLA kit assembly and delivery process, which involved DLA and U.S. Army personnel using multiple spreadsheets and hand receipts to track partial kit deliveries and account for missing items. DLA personnel informed us that manual workarounds were required because of limitations with the depot information system. Because of the urgency of the M2 overhaul program, DLA provided the small arms shop with 50 incomplete kits and agreed to provide any missing parts at a later date. Personnel at the small arms shop stated that 28 kits were substantially complete and 22 kits were missing a significant number of parts. The DLA Distribution Standard System records showed that 28 kits had been issued to the U.S. Army and 22 were still on hand. As of December 2, 2008, DSCC billing records showed that DSCC had only sold one kit and charged it against the \$8 million purchase request<sup>9</sup> that the U.S. Army provided in October 2007.

## **DSCC M2 Gun Part Kit Assembly**

In addition to providing the U.S. Army with nonconforming parts, DSCC did not always follow DLA policy on kit assembly and ensure that sources of supply and related component lead times could be met and aligned with the customer's demand and delivery schedule. DSCC officials we interviewed could not provide evidence that they had assurance at the beginning of the M2 gun part kit assembly effort that sufficient stock would be available for all 98 kit parts to meet the customer's requirements. In addition, DSCC did not validate the customer's completed bill of materials and purchased unnecessary items that were not part of the M2 gun kit.

The U.S. Army's FY 2008 demands for gun kits represented special future requirements, and DSCC had to load the forecasted kit demands into its supply management system to track that sufficient stock was on hand and on order to meet these requirements as well as the normal recurring demands for the items. Our audit sample included 15 items that were part of the M2 machine gun overhaul kit. For these items, we determined whether DSCC properly loaded the special requirements for the kits into the supply management system.

### ***Demand Forecasting***

DSCC did not properly load into the supply management system the kit demands for five of our sample items and attributed a likely cause of the problems to the supply management system. In some instances, DSCC personnel could not determine whether the demands had ever been loaded. For example, we reviewed the M2 back plate and determined that personnel did not load forecasted gun kit demands into the system. In September 2007, when DSCC should have loaded the kit demands, prior customer requisitions for 293 items were on backorder, and 550 items were due in from contractors. The U.S. Army demand, however, required an additional 2,600 back plates to support the M2 gun overhaul program, which was scheduled to begin in February

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<sup>9</sup> Our followup revealed that as of May 2009, DSCC had only billed 9 of the 60 kits against the purchase request.

2008. In January 2008, DSCC initiated an emergency buy for 3,000 items. Due to the shortage, the back plate appeared on all of the monthly backorder listings from September 2007 through June 2008.

In addition, DSCC personnel did not always ensure that contractor lead times could be met and aligned with the gun kit delivery schedule as DLA policy for kit assembly requires. For example, our sample included latch bolts. In September 2007, DSCC loaded the forecasted M2 gun kit demands into the supply management system. However, at that time, there was no stock on hand, and 3,316 items were on backorder. In addition, the item had a manufacturing lead time of 210 days, so that it would take approximately 7 months for a new order to be processed and delivered.

The initial scheduled DLA delivery of M2 kits to Anniston Army Depot to support the overhaul of 2,600 M2 machine guns was February 2008. DSCC ordered 5,013 latch bolts in September 2007. However, the contract delivery date for the initial 1,000 parts was June 2008, and the delivery date for the remaining quantity was FY 2009. We discussed the lead time issue with a DSCC demand planner, who informed us that there was not sufficient lead time to add the M2 kit demands and purchase the stock to meet the kit delivery schedule.

### ***Bill of Materials Validation***

DSCC did not validate the customer's completed bill of materials and purchased unnecessary inventories for items that were not part of the M2 gun kit. Specifically, DSCC improperly loaded M2 gun kit demands for four of our sample items that the U.S. Army did not order on the completed M2 gun kit bill of materials. DSCC personnel loaded the items based on preliminary M2 kit lists and did not reconcile the preliminary lists to the completed bill of materials. For example, DSCC personnel improperly loaded forecasted kit demands for stripper links and subsequently awarded a contract for 8,734 each to meet the anticipated kit demands. The U.S. Army did not need the stripper links for the M2 overhaul program and did not order them on the final M2 gun kit bill of materials. As a result, the on-hand balance exceeded 7,200 items. The item had an average monthly demand of 127, so DSCC had about 56 months of stock on hand.

For two of the four items, DSCC improperly loaded kit demands for both the individual parts and the next complete higher assemblies that contained the parts. The completed bill of materials for the gun kit only contained the higher assemblies and not the individual parts within the assemblies. If the depot was replacing the next higher assembly as part of the overhaul, it would not have to replace the individual parts contained within the higher assembly. DSCC personnel improperly loaded the demands because they did not reconcile the preliminary lists they used to load the kit demand to the completed bill of materials.

For example, we reviewed the requirements for retracting slides, which were a component of the higher retracting slide assembly. Both of these items appeared on the preliminary list that DSCC personnel used to load the kit demands for both items. However, only the higher assembly was listed on the final bill of materials. As a result,

DSCC purchased more than 10,500 retracting slides, which resulted in a total on-hand stock balance of 13,248. The average monthly demand for the retracting slides was 223 per month, so DSCC had approximately 59 months of stock on hand.

## **Cost to Obtain Parts and Unnecessary Buys**

The Anniston Army Depot small arms shop was forced to implement other than ideal means to obtain the necessary parts to complete its FY 2008 M2 machine gun overhaul program, which carried over into FY 2009. Specifically, the U.S. Army had to disassemble unserviceable M2 machine guns to obtain parts and also rework nonconforming parts. The U.S. Army and DSCC expended \$375,000 on these efforts.

Despite the DLA gun kit problems, Anniston Army Depot overhauled 2,110 of the planned 2,600 guns in FY 2008 and completed the remaining guns in FY 2009. Personnel conducted the overhauls using incomplete DLA part kits supplemented by M2 gun parts from the Anniston Army Depot small arms shop.

U.S. Army officials informed us that because of the problems with the DLA kits, they had to resort to other means to obtain the required parts. The U.S. Army authorized a program, costing \$222,300, to disassemble 1,300 unserviceable M2 guns at Anniston Army Depot. Personnel obtained select parts from the guns to compensate for DLA M2 gun kit shortages. When depot personnel completed the disassembly program, they returned the guns to stock in an unserviceable (incomplete) condition. Depot personnel showed us these guns, which were basically a shell of an M2 gun consisting of a receiver that would require close to 100-percent replacement in a future overhaul program.

Anniston Army Depot personnel also had to rework substandard parts that DLA provided in the M2 gun kits, and they had to refinish items that did not have a proper phosphate coating. Depot personnel estimated that they devoted at least 47 hours to reworking parts. In addition, DSCC provided \$153,229 to the U.S. Army to refinish the parts DLA included in the M2 kits that lacked proper phosphate coating.

DSCC purchased unnecessary inventories for four items that were not part of the M2 gun kit. The unnecessary inventory purchases used DSCC funds that could have been spent on other DSCC requirements.

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

**C. We recommend that the Director, Defense Logistics Agency establish controls to require personnel involved with future spare part kit assemblies to comply with existing Defense Logistics Agency policy. Specifically, personnel involved in the assembly process should validate:**

**1. Sources of supply and related component lead times to meet the customer demand and delivery schedule.**

**2. The completed bill of materials before making more purchases for the kit requirements.**

***Defense Logistics Agency Comments***

The Director, Acquisition Management, responded for the Director, DLA, and agreed with the recommendations. She stated that the recommended actions would be incorporated on all future kits.

***Our Response***

We consider the Director's comments to be responsive.

## **Finding D. Contractor Deliveries**

DSCC did not pursue adequate compensation when contractors routinely delivered critical application M2 gun parts significantly later than contracted delivery dates on 49 contracts. In addition, DSCC did not always document its justifications for modifying contract delivery dates. These conditions occurred in part because:

- DSCC business practices did not require contracting personnel to consistently request contractor compensation in accordance with DLA acquisition policy, and
- contracts for M2 gun parts did not specifically require contractors to provide consideration for late deliveries without a contract modification.

In addition, DLA and DSCC acquisition policies provided inconsistent guidance on the formulas contracting officials should use to determine the amount of consideration to obtain from contractors, and DSCC did not use either formula. As a result, DSCC did not consistently hold contractors accountable for failing to meet contractual delivery terms and provided little incentive for on-time contractor deliveries. The late deliveries contributed to the M2 gun part backorder situation discussed in Finding A. Further, DSCC missed an opportunity to obtain approximately \$405,000 in contractor compensation.

### **Criteria for Contractor Deliveries**

FAR Subpart 8.406-3, “Remedies for Non Conformance,” specifies that the ordering activity may terminate an order for cause or modify an order to establish a new delivery date, after obtaining compensation as appropriate, when the contractor fails to perform or take appropriate corrective action.

DLAD Subpart 43.103, “Contract Modification,” specifies actions contracting personnel may take to extend delivery schedules. DLA policy specifies that contracting officials may process contractor-caused delivery extensions when they are in the Government’s best interest, but contracting officials should obtain compensation. The DLA policy states that the most appropriate form of compensation is monetary.

The DSCC Acquisition Guide, Subpart 43.102, “Contract Modifications,” also specifies that DSCC should obtain compensation when processing modifications to provide contractor relief. The DSCC Acquisition Guide also specifies that contracting officials are responsible for protecting the Government’s interest and obtaining adequate compensation for extending delivery schedules. Compensation may be monetary or include stepped up delivery schedules on the same or other contracts or may consist of obtaining more units at no cost. The policy specifies that monetary compensation is preferred.

## Contractor Late Deliveries

Contractors routinely delivered critical application M2 machine gun parts significantly later than the original and modified contract delivery dates, and DSCC did not consistently request compensation. Specifically, for 21 of our sampled M2 parts, contractors delivered parts on average between 13 and 455 days later than the original contract delivery dates. For 13 M2 parts, contractors delivered them on average between 15 and 279 days later than the modified contract delivery dates. In some cases, DSCC modified the contract to extend delivery dates but did not always justify the modification.

### ***Original Contract Delivery Terms***

For 265 of the 336 sampled contract line items, contractors delivered critical application M2 gun parts later than the original contracted delivery date. Table 4 illustrates the comparison of the original DSCC contract terms with the actual contractor deliveries.

**Table 4. Contractor Late Deliveries - Original Contract Terms**

<b>Item</b>	<b>Contract Line Items</b>	<b>Line Items Delivered Late</b>	<b>Average Days Late</b>
Cartridge Ejector	16	15	455
Accelerator Lock	13	13	306
Cover Subassembly	22	21	260
Belt Slide Assembly	28	26	237
Extension Assembly	35	32	197
Breechlock Cam	28	24	176
Sleeve Buffer Tube	15	13	161
Stripper Link	6	4	150
Retracting Plunger	2	2	149
Back Plate	7	7	149
Breech Lock	14	12	128
Trigger Bar	17	13	111
Machine Accelerator	21	18	68
Recoil Buffer	7	5	67
Firing Pin	9	7	63
Latch Bolt	21	14	56
Automatic Gun Stop	19	5	50
Rear Sight	32	22	35
Retracting Slide	12	4	29
Gunsight Cover	10	6	19
Handle Lock	2	2	13
<b>Total</b>	<b>336</b>	<b>265</b>	

## **Modified Contract Delivery Terms**

For 98 of the 336 line items, DSCC processed contract modifications to extend the delivery dates. For 89 of the 98 modified contract line items, contractors delivered material later than the extended delivery date, and DLA only obtained compensation in three instances. DSCC processed the modifications as a result of both Government- and contractor-caused delays. Table 5 illustrates the number of contract line items for which contractors delivered material later than the modified contract terms and the average number of days late.

**Table 5. Contractor Late Deliveries - Modified Contract Terms**

<b>Item</b>	<b>Contract Line Items</b>	<b>Line Items Delivered Late</b>	<b>Average Days Late</b>
Cartridge Ejector*	7	6	279
Belt Slide Assembly	17	17	210
Sleeve Buffer Tube	5	5	174
Firing Pin	1	1	162
Cover Subassembly*	8	7	136
Accelerator Lock	11	11	111
Stripper Link	4	4	83
Back Plate	2	2	52
Extension Assembly	21	19	51
Breechlock Cam	10	6	36
Trigger Bar	5	5	32
Breech Lock	5	5	23
Machine Accelerator	1	1	15
Latch Bolt	1	0	0
<b>Total</b>	<b>98</b>	<b>89</b>	

\*DLA obtained compensation to extend the delivery schedule on three contract line items for these items. See Table 6 for additional information.

DSCC did not always document the reasons for modifying contracts. Specifically, for 13 of the 98 modified contract line items, DSCC could not provide justification for the contract modifications. Therefore, we could not determine whether the reason for the modification was a Government- or contractor-caused delay.

## **DSCC Practice of Requesting Compensation**

DSCC business practices did not involve consistently requesting compensation from contractors in accordance with DLA acquisition policy. The policy provides that contracting officials should obtain compensation, preferably monetary, when processing

contractor-caused delivery extensions in the Government's best interest. For the 265 contract line items having contractor late deliveries, DSCC obtained compensation, through a contract modification, on only three line items.

Several DSCC contracting officials stated that, in many cases, they simply chose not to modify contracts and allowed contractors to deliver material late. For example, contractors delivered retracting plungers an average of 149 days late, and DLA did not obtain compensation. A DSCC contracting official informed us that DSCC allowed the contractors to deliver in delinquent status and did not process contract modifications for the late deliveries.

In another instance, a DSCC contracting official stated that DSCC often does not pursue compensation and just leaves the award in delinquent status instead of extending the delivery date. The official further explained that regardless of the program involved, it is DSCC's decision whether or not to pursue compensation, and the urgency of the requirement plays a part in the decision. Another DSCC official stated that there was a limited supplier base for small arms parts. In any event, we acknowledge that there may be valid reasons for occasionally extending contract delivery terms for the benefit of a contractor. However, in our opinion, the practice occurred too frequently at DSCC for the contracts we examined.

### ***DSCC Contracts for M2 Gun Parts***

DSCC contracts for M2 gun parts did not specifically require contractors to provide compensation for late deliveries without a contract modification. Therefore, the only way DSCC could obtain compensation for a contractor's late delivery was if the contractor agreed to provide it and signed a contract modification. If the contractor requested an extension before the scheduled delivery date, DSCC could consider the offer and negotiate a modified delivery date with compensation. Once the delivery date passed, the contract would be in a delinquent status. DSCC's only other recourse for contractor nonperformance would be to terminate the contract.

DSCC tracks contractor late deliveries in the Automated Best Value System and uses this information to make future best value awards. However, this process loses effectiveness if DSCC routinely allows contractors to deliver parts late, and most end up having low Automated Best Value System delivery scores. For example, a DSCC contracting official who purchases M2 gun parts cited concerns with having to select from groups of small businesses who all have a history of poor contract delivery performance.

### **Compensation Formulas and Amounts DSCC Obtained**

DLA and DSCC acquisition policies provided inconsistent guidance on the formulas contracting officials should use to determine the amount of compensation to obtain from contractors. In addition, DSCC did not use either formula in the few instances where they obtained contractor compensation.

DLAD Subpart 43.103 encourages contracting officials to use the “amount of consideration” formula to assess contractors. The formula multiplies a prescribed Supply Center cost per day ratio by the days and value extended plus a processing cost.

For example, the amount of compensation for a 30-day extension on a \$50,000 contract equals \$1,846.

$$\text{DLAD Compensation: } (0.00118 \times 30 \times \$50,000) = \$1,770 + \$76 = \$1,846^*$$

\* The DLAD lists a \$291 direct cost for DCMA-administered contracts, so for this example, the formula would be  $(0.00118 \times 30 \times \$50,000) = \$1,770 + \$291 = \$2,061$ .

The DSCC Acquisition Guide calculation uses a “one percent per month of the value of the delinquency” formula and adds a \$110 administrative cost. For example, the consideration for a 30-day extension on a \$50,000 contract equals \$610.

$$\text{DSCC Compensation: } (\$50,000 \times 1 \text{ percent} \times 1 \text{ month}) = \$500 + \$110 = \$610$$

For the DLAD formula, calculating compensation based on the DSCC cost-per-day ratio results in a 3.7-percent compensation amount for a 30-day extension. In contrast, the DSCC formula results in a 1-percent amount for the same extension.

DSCC did not use either of the prescribed formulas for the three instances where they obtained contractor compensation. In all three instances, DSCC extended the delivery dates but failed to obtain sufficient compensation based on DLAD or DSCC policy. Table 6 illustrates the compensation DSCC obtained along with the compensation amounts based on DSCC and DLAD formulas.

**Table 6. Compensation Obtained Compared With DSCC and DLAD Formulas**

<b>Item</b>	<b>Days Extended</b>	<b>Compensation Obtained</b>	<b>DSCC Formula</b>	<b>DLAD Formula</b>
<b>Cover Subassembly</b>	116	\$700	\$3,562	\$12,724
<b>Cartridge Ejector</b>	283	538	1,155	4,044
<b>Cartridge Ejector</b>	230	262	629	2,146
<b>Total</b>		<b>\$1,500</b>	<b>\$5,346</b>	<b>\$18,914</b>

For cover subassemblies, the contractor cited problems obtaining castings and requested a delivery extension of 116 days and offered \$700 as compensation. DSCC accepted the compensation offer and modified the delivery terms on the contract. However, \$700 was significantly less than the amount would have been had DSCC used the DLAD or DSCC Acquisition Guide formulas.

## Unrealized Potential Compensation

For 49 contracts with 173 contract line items, DSCC missed an opportunity to obtain approximately \$405,000 in compensation for contractor late deliveries.<sup>10</sup> Table 7 illustrates the compensation amounts DSCC could have pursued based on the formula in its Acquisition Guide.

**Table 7. Value of Compensation DSCC Could Have Pursued**

	<b>30-59 Days Late</b>	<b>60-119 Days Late</b>	<b>120+ Days Late</b>	<b>Total</b>
<b>Contract Line Items</b>	41	31	101	<b>173</b>
<b>Line Item Value</b>	\$2,700,039	\$3,073,656	\$4,151,350	<b>\$9,925,045</b>
<b>Forgone Compensation</b>	\$29,985	\$79,446	\$295,281	<b>\$404,712</b>

For belt slide assemblies, a contractor delivered material an average of 269 days late on six contract line items, and DLA did not obtain monetary compensation. DSCC modified the six contract line items for 3,243 parts for its convenience and extended the delivery date by approximately 96 days. However, when the extended delivery date arrived, the contractor informed DSCC of production and scheduling problems. Ultimately, the contractor delivered the parts 269 days past the modified delivery date, and DLA did not obtain monetary compensation. Subsequent orders for thousands of parts with the same contractor were more than 250 days past due at the completion of our audit. If contracting officers had pursued compensation, they could have obtained \$5,075 based on the DSCC Acquisition Guide formula or \$18,202 based on the DLAD formula.

## Conclusion

DSCC contracting officials were not holding contractors accountable for late deliveries of critical application M2 gun parts. Monetary compensation for nonperformance is a key element DSCC can use to hold contractors accountable for complying with contract delivery terms. According to FAR, DLAD, and DSCC acquisition guidance, contracting officers may establish new delivery dates with adequate compensation. DSCC contracting officials have adopted a business practice of allowing contractors to deliver critical application M2 gun parts in a delinquent status without pursuing adequate compensation. We determined that DSCC contracting officers could have pursued approximately \$405,000 in compensation for late deliveries. DLA needs to implement measures that will allow the Supply Centers to consistently hold contractors accountable and obtain sufficient compensation when contractors deliver late.

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<sup>10</sup> For this analysis, we focused on contractor deliveries more than 30 days late and excluded contractor late deliveries resulting from Government-caused delays, such as product verification testing.

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

### **D. We recommend that the Director, Defense Logistics Agency:**

- 1. Establish controls and implement measures to ensure that Defense Supply Center contracting officials hold contractors accountable for delinquent deliveries and consistently pursue consideration when extending delivery schedules for the convenience of the contractor.**
- 2. Ensure that the Defense Supply Center Acquisition Guide provides policy that is consistent with Defense Logistics Agency Directive Subpart 43.103 guidance.**
- 3. Ensure that the Defense Supply Center contracting officials fully disclose the justification for contract modifications in the contract file.**
- 4. Evaluate contractor delivery performance for small arms critical application items and determine whether additional contract language is necessary to specifically require contractors to compensate the Government for late deliveries.**

### ***Defense Logistics Agency Comments***

The Director, Acquisition Management, responded for the Director, DLA, and agreed with recommendations D.1 through D.4. She stated that each supply chain has established an associate position for contract quality control to audit pre- and post-award performance and that the contract quality associate and management team would monitor specific corrective actions as part of the audits.

### ***Our Response***

We consider the Director's comments to be responsive for recommendations D.1 and D.4. However, although the Director agreed with recommendation D.2, we consider the comments to be partially responsive because the Director did not provide specific corrective actions to address the inconsistency between the Acquisition Guide and the DLAD. In addition, although the Director agreed with recommendation D.3, we consider the comments to be partially responsive because the Director did not provide specific corrective actions to ensure that Defense Supply Center contracting officials fully disclose the justification for contract modifications in the contract file. We request that the Director, DLA, provide specific corrective actions to address recommendations D.2 and D.3.

## Appendix A. Scope and Methodology

We conducted this performance audit from May 2008 through September 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We originally announced this audit in May 2008 and reannounced it in August 2008 to clarify that the audit would focus on vehicle-mounted small arms spare parts. This report focuses on DLA contracts for M2 machine gun spare parts.

We reviewed Federal and DOD acquisition requirements to evaluate whether DLA used appropriate and effective contracting procedures. Specifically, we examined sections of the FAR, Defense FAR Supplement, DOD Regulations and Instructions, DLA Regulations and Directives, and DSCC Policy. We examined the methods DSCC used to purchase a sample of M2 gun parts. We used nonstatistical methods and judgmentally selected a sample of 22 unique items by national stock number to examine. We chose these M2 gun parts based on the presence of both backorders and PQDRs. The following table lists the national stock numbers of the M2 gun parts we examined.

**Table. National Stock Numbers Examined**

National Stock Number	Item Name
1005-00-336-8608	Rear Sight
1005-00-501-3541	Stripper Link
1005-00-515-2869	Recoil Buffer
1005-00-550-4060	Latch Bolt
1005-00-550-4081	Cover Subassembly
1005-00-550-4082	Extension Assembly
1005-00-550-4094	Sleeve Buffer Tube
1005-00-550-8141	Machine Accelerator
1005-00-600-8935	Gunsight Cover
1005-00-600-8990	Retracting Plunger
1005-00-600-9732	Cartridge Ejector
1005-00-614-7583	Breechlock Cam
1005-00-614-7893	Retracting Slide
1005-00-625-7592	Trigger Bar
1005-00-626-1110	Belt Slide Assembly
1005-00-701-2730	Handle Lock
1005-00-716-1300	Accelerator Lock
1005-00-716-1301	Automatic Gun Stop

<b>National Stock Number</b>	<b>Item Name</b>
1005-00-716-1302	Breech Lock
1005-00-731-0080	Firing Pin
1005-00-918-2618	Back Plate
1005-01-557-8376	Parts Kit

We limited our scope to recent contracts and management functions related to our sample items. We reviewed recent DSCC electronic contract files for our sampled items. Specifically, we reviewed 103 contracts consisting of 382 individual contract line items and evaluated contractor performance. We reviewed 97 contract modifications. We reviewed PQDRs that DOD personnel originated between October 1, 2005, and July, 1, 2008. We reviewed DSCC end-of-month listings of open backorders for each month from July 2007 through June 2008. We met with various DSCC contracting and supply management personnel. We also coordinated our sample items with DSCC Senior Fraud Counsel for contracting integrity and with Defense Criminal Investigation Service agents responsible for investigating contractor fraud at DSCC. During the audit, we visited or contacted the following organizations:

**DLA Headquarters**

Defense Supply Center Columbus  
 Defense Distribution Depot Anniston

**U.S. Army Materiel Command**

U.S. Army TACOM Life Cycle Management Command, Rock Island  
 U.S. Army Research, Development and Engineering Command  
 U.S. Army Armament Research, Development and Engineering Center  
 U.S. Army Joint Manufacturing and Technology Center  
 Anniston Army Depot

**DCMA Headquarters**

DCMA Hartford, Huntsville, Orlando, Pittsburgh, and Santa Ana Offices

**Use of Computer-Processed Data**

We relied on computer-processed data on backordered customer requisitions, PQDRs, and contractor deliveries from the DLA Enterprise Business System. In addition, we relied on computer-processed data on PQDRs from the U.S. Navy-hosted Product Data Reporting and Evaluation Program. The computer-processed data were determined to be reliable. For our sample items we reviewed the contracts, PQDRs, and other source documents that supported the computer-processed data. Nothing came to our attention as a result of our procedures that caused us to doubt the reliability of the computer-processed data.

**Prior Coverage**

No prior coverage has been conducted on DLA contracts for M2 gun parts during the last 5 years.

## **Appendix B. Other Matters of Interest**

### **Technical Data Packages for M2 Machine Guns**

During the audit, we met with U.S. Army Research, Development and Engineering Command personnel to discuss quality problems associated with DLA-managed M2 gun parts. U.S. Army personnel cited concerns with the technical data packages DLA uses in its contracts.

Technical data packages are the engineering specifications, such as drawings and characteristics, that describe the Government's requirements for an item. DLA includes the technical data package information in its contracts. Engineers periodically make revisions to the drawings. Therefore, it is important for DLA to use the most recent technical data package information when purchasing a particular part. The scope of our review did not include a full assessment of the technical data package process, but we believe that the concerns raised by U.S. Army officials are valid and also represent important information that could benefit other weapon system managers.

The U.S. Army ARDEC is the engineering support activity for the M2 gun. However, DLA purchases a majority of the M2 gun spare parts. ARDEC officials cited concerns that DLA does not always use the most current technical data packages when purchasing M2 gun parts. ARDEC provided us with the results of a study it performed on the accuracy of technical data packages for 15 DLA-managed M2 gun parts used to support Anniston Army Depot overhaul projects. ARDEC determined that discrepancies existed with the technical data packages for all 15 parts. The discrepancies included missing engineering changes and missing or out-of-date drawings.

To ensure that DLA uses current technical policy, ARDEC signed a memorandum of agreement with DSCC. The memorandum outlined a process for DSCC to provide M2 gun part technical data packages to ARDEC for review and certification. The memorandum also provided details on DSCC's reimbursing ARDEC for the engineering services associated with the certification efforts. The memorandum only addressed technical data packages for M2 gun parts, which only represent a small portion of DLA-managed items.

### **DSCC Process Improvements**

In response to a discussion draft of this report, DSCC provided a list of additional process improvements it had recently implemented to improve the quality of its spare parts. We did not validate the effectiveness of these management actions. DSCC indicated it developed and implemented internal process reviews to improve the following areas:

- Phosphate procedure receipt/review/determination.
- First article test report receipt/review/determination.
- Improved visibility of outstanding post-award actions.

- Timely and effective quality assurance letter of instructions.
- Contractor performance history/pre-award survey process training, which includes how to use the DCMA pre-award survey database.

DSCC also indicated that it implemented the following process improvements over the last 6 months:

- Developed, trained, and implemented procedures for managing the phosphate coating process.
- Implemented a requirement for buyers to ensure potential offerors identify the actual manufacturer and the phosphate and packaging subcontractors on all quotes and on the award.
- Trained product specialists on DCMA Electronic Web Access Management Electronic Tool Web site, which is used to evaluate pre-award survey history of the contractor in line for award.
- Developed training aides that included minimum contract requirements for all small arms procurements.
- Improved the quality assurance letter of instructions for all small arms procurements.
- Trained product specialists on the technical data review process outlined in the ARDEC memorandum of agreement.

## Appendix C. Quality Letter of Instruction for M2 Gun Part Contracts

A quality letter of instruction consists of information or instruction provided to the activity responsible for Government contract quality assurance actions at source or destination for the purpose of ensuring the integrity of DLA-procured products and services. The letter may specify the type and extent of Government inspection of selected product or process characteristics, or it may provide adverse quality history on an item or contractor. DSCC developed the following instructions for M2 gun part contracts.

An alternate release procedure will not be utilized on subject contract until a coordinated surveillance plan has been implemented and the results indicate the supplier is compliant with the International Organization for Standardization requirement, and the DCMA receives concurrence from the DSCC product assurance specialist point of contact (POC) for this contract.

The identified product assurance specialist must be notified when a surveillance assessment is to be performed.

The identified product assurance specialist must be informed of any degradation in the quality management system or product quality throughout the life of the contract. All “corrective action requests” (CAR) issued to the prime and all sub-vendors will be furnished to the DSCC product assurance specialist point of contact.

This contract contains deliverables identified in the DD form 1423. Contract Data Requirements List requirements relative to phosphate coating process approval must be filled out by the [quality assurance representative] and submitted to DSCC within 15 days of contract award. A checklist will be provided to the [quality assurance representative] for submission to the addresses indicated on the DD form 1423.

Related drawings indicate this contract is for M2 machine gun material. The [quality assurance representative] must ensure contractor and any sub vendors are aware that only manganese phosphate coating per mil-DTL-16232G is acceptable.

Critical characteristics and all major characteristics indicated on the associated drawings and technical data package will be verified by the [quality assurance representative].

DCMA will review contractors purchasing system to assure proper documentation is provided of materials used and sub vendor processes and testing procedures that cannot be verified at the prime contractor level.

The DSCC product assurance specialist assigned responsibility for this contract, does not consider a quality assurance post award conference necessary, however, if the [quality assurance representative] desires a conference, please notify the DSCC product assurance point of contact.

# Defense Logistics Agency Comments



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

IN REPLY  
REFER TO

J-7

NOV 05 2009

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL

SUBJECT: DSCC Management Comments on Defense Logistics Agency (DLA) Contracts for  
M2 Machine Gun Spare Parts in support of the Global War on Terror (GWOT)  
(D2008-D000FD-0214 000)

The DLA has reviewed subject draft audit report and we concur with all of the findings  
and recommendations. A copy of our response to each of the recommendations is attached.

The point of contact for this effort is [REDACTED]  
[REDACTED]  
[REDACTED]

NANCY M. HEIMBAUGH  
Director, Acquisition Management

Attachment

Federal Recycling Program



Printed on Recycled Paper

**DSCC Management Comments on Defense Logistics Agency  
Contracts for M2 Machine Gun Spare Parts in Support of the Global  
War on Terror (Project No. D2008-D000FD-0214 000)**

Please see Defense Supply Center, Columbus management comments applicable to DODIG audit, Defense Logistics Agency Contracts for M2 Machine Gun Spare Parts in Support of the Global War on Terror (Project No. D2008-D000FD-0214 000). Responses directly follow individual findings and recommendations.

**Finding A: Contract Quality Procedures**

Recommendations A.1.a, A.1.b.:

- a. Establish an action plan with metrics to ensure that Defense Supply Center personnel fully implement and sustain the corrective actions initiated before and during the audits and use appropriate contract quality assurance procedures for all future purchases of M2 gun spare parts.
- b. Review all critical application small arm parts with specific technical requirements, critical characteristics, or specific acquisitions concerns to ensure that appropriate contract quality assurance provisions exist in the material master record prior to any purchase actions. These quality assurance provisions should include inspection and acceptance at origin, first article test (FAT) reports, fully document the testing and acceptance of the results, and retain the results in the contract file.

**DSCC Response**

- A.1.a: Concur. Each supply chain has established a Contract Quality Position to audit pre- and post-award performance. Specific corrective action as a part of the audits will be monitored by the contract quality associate and the management team. A plan is in place to review technical requirements for critical application small arm parts.
- A.1.b: Concur. We will review all critical application small arm parts to ensure that appropriate contract quality assurance provisions exist. The product specialist in accordance with policy will determine the applicable provisions. In addition, we will ensure test/acceptance results are documented and retained in the contract file.

**Finding B: Processing Quality Deficiency Reports Recommendations**

**B.1.a., B.1.b., B.2, B.3, B.4:**

1. Evaluate the DSCC Land's Division recent product quality deficiency reports (PQDRS) processing initiatives and establish controls and implement measures to improve timeliness and quality and ensure that responsible Defense Supply Center personnel:

- a. Process PQDRs in a timely manner and provide interim replies to customers at least every 30 days that contain pertinent information on the status of the investigation and an estimated resolution date.
  - b. Fully and adequately, research PQDRs to determine root cause of the deficiency and obtain appropriate compensation from responsible contractors, even when information such as a contractor number is missing.
2. Evaluate the metrics used to manage the product quality deficiency reporting process and update the applicable Defense Logistics Agency One Book Process Chapter, "Product Quality Deficiency Report." The updates should include sufficient and measurable performance goals to effectively guide the evaluation of PQDR processing timeliness and quality of resolution in accordance with the guidelines provided in the DOD Joint Regulations on product quality deficiency reporting (Defense Logistics Agency Regulation 4155.24.)
  3. Evaluate the sufficiency of the sample plan that the Defense Supply Centers use to evaluate the product deficiency reporting process and consider increasing the sample size and aligning the evaluation criteria with performance goals established in response to recommendation B.2.
  4. Perform a staffing review to determine whether sufficient personnel are available to process the backlog of customer PQDRs in addition to handling the daily PQDR workload.

#### **DSCC Response**

Concur. DSCC tracks PQDR aging and will establish FY10 management objectives. We agree with the recommendations for specific and measurable metrics to manage the Product Quality Deficiency process with inclusion in the Defense Logistics Agency One Book. We will evaluate the sufficiency of the sampling plan. As part of our monthly reviews of PQDR backlog, DSCC will assess appropriate staffing targets.

#### **Finding C: Assembling Spare Part Kits**

Recommendations C.1, C.2:

It was recommended that controls be established to require personnel involved with future spare part kit assemblies to comply with existing DLA policy. Specifically, personnel involved in the assembly process should validate:

1. Sources of supply and related component lead times to meet customer demand and delivery schedule.
2. The completed bill of materials before making more purchases for the kit requirements.

**DSCC Response**

Concur. The recommended actions will be incorporated on all future kits.

**Finding D: Contractor Deliveries**

Recommendations D.1, D.2, D.3, D.4:

- a. Establish controls and implement measures to ensure that Defense Supply Center contracting officials hold contractors accountable for delinquent deliveries and consistently pursue consideration when extending delivery schedules for the convenience of the contractor.
- b. Ensure that the Defense Supply Center Acquisition Guide provides policy that is consistent with DLA Directive Subpart 43.103 guidance.
- c. Ensure that the Defense Supply Center contracting officials fully disclose the justification for contract modifications in the contract file.
- d. Evaluate contractor delivery performance for small arms critical application items and determine whether additional contract language is necessary to specifically require contractors to compensate the Government for late deliveries.

**DSCC Response**

Concur. Each supply chain has established a Contract Quality Position to audit pre- and post-award performance. The contract quality associate and the management team will monitor specific corrective action as a part of the audits.

Attachment 1

# Defense Contract Management Agency Comments



IN REPLY  
REFER TO DCMA-OC

DEFENSE CONTRACT MANAGEMENT AGENCY  
6350 WALKER LANE, SUITE 300  
ALEXANDRIA, VIRGINIA 22310-3226

14 October 2009


MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE  
[REDACTED]

SUBJECT: Defense Logistics Agency Contract for M2 Machine Gun Spare Parts in Support of the Global War on Terror (Project No. D2008-D00FD-0214 000)

The DoDIG recommendation was that the Director, Defense Contract Management Agency (DCMA), establish controls and implement measures to ensure that Quality Assurance Representatives perform adequate and thorough reviews of contractor first article test reports, fully document the testing and acceptance of the results, and retain the results in the contract file.

DCMA concurs with the DoDIG conclusion and recommendations. Along with the enhancements to DCMA policy instructions cited in the report, DCMA is also establishing an additional control requiring Quality Assurance First Line Supervisor (FLS) performance evaluation. The newly revised instructions for First Article inspection and test include emphasis on the importance of thorough reviews of supplier (contractor) First Article Test reports, the importance of proper documentation, including minimum data requirements, and the requirement to retain and use the data. The FLS performance evaluation will be required to be performed annually. This evaluation requires the FLS to review all of their subordinates' performance to all Quality Assurance instructions, including the instruction for performance in accordance with the First Article inspection and test.

The DCMA External Audit Liaison point of contact is [REDACTED]

  
Marie A. Greening  
Executive Director,  
Operations Management and  
Customer Relations





# Inspector General Department of Defense

