Current DoD Demonstration Program to Improve the Quality of Personal Property Shipments of the Armed Forces

Evaluation Plan

Introduction

The Military Traffic Management Command (MTMC) manages the Department of Defense's (DoD) $1.2 billion personal property program and is responsible for moving approximately 650,000 shipments annually for the military departments, DoD agencies, and the U.S. Coast Guard. DoD uses over 1200 commercial carriers to provide movement and storage services. Managing the use of such a vast number of carriers requires complex processes to qualify carriers, solicit rates, distribute traffic, evaluate performance, pay bills, and settle claims.

Frequently, the process results in unsatisfactory service for Service members and their families, causing increased levels of stress, frustration, and dissatisfaction with military life. For example, a MTMC survey of 3,000 moves in the summer of 1996 revealed that over 60 percent of shipments suffer loss and/or damage; however, not all result in submission of a claim.[i] Less than 60 percent of the Service members surveyed rated the service they received as very good or excellent.

In June 1994, the Deputy Commander-in-Chief, U.S. Transportation Command (TRANSCOM), recognizing the poor quality of personal property movement and storage services Service members receive, tasked the MTMC to reengineer DoD's personal property program.

Section 376 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999, Public Law 105-261 requires submission of progress reports to Congress. The first report was submitted on 27 Feb 99, the second and third consolidated report was submitted on 31 Aug 99 and a supplemental evaluation report will be submitted on 15 Dec 99.

To ensure independence in preparing these reports, the DoD contracted with PricewaterhouseCoopers LLP (PwC), a professional services firm, to evaluate MTMC's pilot and industry's alternative program. This report serves as the formal evaluation plan.

DoD's Reengineered Concept

The mission of DoD's reengineered program is to improve the quality of life for DoD Service members and their families. The reengineered concept achieves that mission by focusing on the application of commercial best practices and standards of service. Surveys conducted by the General Accounting Office (GAO)[ii] and MTMC reveal that world-class companies are negotiating longer-term contracts with fewer contractors than DoD.[iii] They award business to companies proposing the best service, not the lowest cost, and once awarded, they monitor performance through employee satisfaction surveys. Some of the services provided to commercial companies that Service members and their families do not currently enjoy include better liability coverage, toll free telephone numbers for resolving customer problems and tracking shipments, and direct contractor contact with employees for arranging shipments and resolving claims.

Other improvements made by MTMC include maximum use of electronic commerce technology. MTMC has developed a new Web-based information management system that will be used during the pilot test. That system, called Pilot Transportation Operational Personal Property Standard System (PTOPS), links the origin personal property shipping offices (PPSOs), destination PPSOs, contractors, certifying officers, pre-payment auditor, and the finance centers and provides real time data availability.

The MTMC pilot test encompasses approximately 18,500 eligible outbound personal property shipments from Florida, South Carolina, and North Carolina to destinations in the continental United States (CONUS) and Europe. This represents less than half of all shipments originating in those states and about three percent of all DoD shipments.

Movement and in-transit storage services for the pilot were acquired under a negotiated best value, firm fixed price, indefinite delivery, indefinite quantity (IDIQ), contract under the Federal Acquisition Regulation (FAR). Using advances in electronic commerce, MTMC developed a source selection system that supported the automated submission and analysis of proposals. MTMC's solicitation generated excellent competition, with 60 offers.

In August, September and October 1998, MTMC awarded 43 long-term contracts covering 53 channels. Of these 43 contracts, one company voluntarily dropped out of the contract and another was removed for non-responsibility due to a small business challenge. Consequently, there were 41 long-term contracts associated with the pilot at start-up.

Each channel represents shipment moves from 1 of the 3 outbound origin states to 1 of 13 CONUS destination regions or 5 European regions. One channel, Florida to Florida, was not included in the solicitation because intrastate movements are not part of the pilot. Between 7 and 29 contracts were awarded for each channel. The duration of the contracts is one year with two one-year option periods.

A major challenge to awarding contracts to small businesses is validating whether they meet small business criteria. In this solicitation, MTMC forwarded the names of five self-certified small business contract awardees to the Small Business Administration (SBA) for validation. The SBA found that three of the five companies were actually qualified large businesses. MTMC subsequently removed those companies from small business set aside channels and also removed one company for non-responsibility due to a false small business size certification.

Seventeen of the 41 prime contractors (41 percent) are small businesses, as defined by the SBA, having revenues less than $18.5 million. MTMC has established a process that encourages small businesses to compete and, in fact, small businesses competed well in the solicitation. For example, 13 of the 17 small businesses won contracts in channels that were open to competition from large businesses. Furthermore, 17 channels, including high volume channels, representing 36 percent of contract dollars and tonnage, were set aside exclusively for small businesses. MTMC also required large businesses to submit subcontracting plans. On the average, large businesses proposed to share over 38 percent of their traffic with small businesses.

MTMC also contracted for a billing and customer/contract auditor (BCCA). The BCCA is the designated billing office for the prime contractors and is responsible for compiling and reporting contractor performance data, including surveying Service members and receiving claims reports; conducting pre-payment investigative audits of transportation bills; providing the electronic invoice to the government; and providing management information reports consisting of program statistics.

Evaluation Plan

During the summer of 1996, at the request of Congress, MTMC hosted a series of Industry/DoD Working Group meetings. While not all issues were resolved, consensus was reached on a number of goals that reengineering should achieve. These were to:

1. Provide quality service
2. Improve on-time pickup
3. Improve on-time delivery
4. Achieve high customer satisfaction in relationship to the entire move process
5. Adopt corporate business processes that lead to world-class customer service
6. Lower loss/damage and lower claims frequency and claims averages
7. Simplify the system, including reducing administrative workload
8. Ensure capacity to meet DoD's needs for quality moves
9. Provide opportunity for small businesses offering quality service to compete for DoD business as a prime contractor
10. Provide best value moving services to the government

MTMC's demonstration program will be evaluated as to how well it satisfies these goals. The methodology for evaluating each goal is described below. Where possible, metrics will be used to quantify improvements over the current personal property program. In many cases, PwC previously established baseline metrics during a 1998 analysis of the "as-is" program.[iv] Baseline metrics not previously established will be collected during MTMC's test since about 50 percent of the shipments in the test regions will move under existing procedures.

Success of the program will be determined by tallying the number of goals that are satisfied by the program. Goals one through nine are weighted equally. Goal ten will be based on a business decision of whether improvements to quality of service for Service members outweigh total program cost increases. If the pilot achieves five of the first nine goals and goal ten is determined to be best value, then the pilot program will be determined to be superior to the current program.

The evaluation process will depend on roles and responsibilities of several organizations. PwC will receive data, assess the data, evaluate the programs, and report to MTMC. MTMC will ensure that PwC has access to the data. Some of the data such as on-time pickup and delivery and transportation costs are available through PTOPS; customer satisfaction data is available through MTMC's BCCA; and claims data is available via a report from the contractors themselves. Process cost information, including direct labor costs, will be collected via interviews with PPSOs, MTMC, finance centers, and claims offices. The DoD Inspector General (IG) will assess the data collection process and the costing methodology.

Provide Quality Service

MTMC included several service improvement requirements in the pilot solicitation. Many of those improvements were identified as best corporate practices by MTMC. In 1995, MTMC interviewed commercial companies to identify best practices, including, among others, GTE Corporation, Chevron Corporation, and UPS Corporation[iii]. Some of the key improvements extracted from the pilot solicitation include:

1. Providing full replacement protection to Service members for loss and damage
2. Providing toll-free telephone numbers to allow Service members the opportunity to resolve problems directly with contractors and to inquire about status of shipments
3. Providing direct contractor contact with Service members for arranging personalized movement and settling claims
4. Paying Service members for inconvenience when contractors do not accommodate accepted pickup or delivery times
5. Providing free storage for Service members when contractors do not accommodate accepted delivery times
6. Providing faster payment of claims

Improvement numbers one through five will be evaluated by observing whether any negative feedback has been reported to MTMC through the PPSOs or Service members. Improvement two is currently satisfied because toll-free numbers are provided by the

contractors and available via PTOPS. PPSOs and Service members have access to these numbers and use them to interact with the contractors. If a key improvement is not required during the pilot period, such as inconvenience claims, then that improvement will be omitted from consideration.

Improvement number six will be evaluated by measuring the change in number of days that it takes contractors to settle claims. Today, the average claim settlement requires 126 days for the Service member to receive payment from the carrier[iv]. The companies utilizing best corporate practices require direct settlement of employees' claims by the contractor within 30 days[iv]. In the new program, MTMC and industry agreed that contractors will settle claims directly with Service members within 60 days of the submission of a claim.

The claims data will be collected through reports that the contractors are required to submit to the BCCA. These reports document several key elements including date of incident, date claim filed with contractor, amount claimed, amount of settlement, and date of settlement. The occurrence of loss and damage is validated by the BCCA during the customer satisfaction survey process.

This goal will be satisfied if improvements one through five, which are contractual obligations of the contractors, are satisfied by the contractors during the pilot, and the average number of days required to settle claims decreases with respect to the current program.

Improve On-time Pickup

Evaluating on-time pickup is measured by identifying whether pickup is started on the date or within the range of dates agreed to by the Service member and the contractor. On-time pickup will be compared against the baseline to measure improvement. Both actual and planned pickup dates are available through PTOPS. On-time pickup is also validated by the BCCA through the customer satisfaction survey.

The current program experiences 98 percent on-time pickup[i]. The companies utilizing best commercial practices report up to 99 percent on-time pickup[iv]. The standard that MTMC has established for the pilot is 99 percent on-time pickup.

This goal will be satisfied if the on-time pickup percent is better than 98 percent.

Improve On-time Delivery

Evaluating on-time delivery is measured by identifying whether delivery is started on the date or within the range of dates agreed to by the Service member and the contractor. On-time delivery will be compared against the baseline to measure improvement. Both actual and planned delivery dates are available through PTOPS. On-time delivery is also validated by the BCCA through the customer satisfaction survey.

The current program on-time delivery experience is 93 percent[i]. The companies utilizing best commercial practices report 95 percent on-time delivery[iv]. The standard that MTMC has established for the pilot is 95 percent on-time delivery.

This goal will be satisfied if the on-time delivery percent is better than 93 percent.

Achieve High Customer Satisfaction

MTMC is conducting a customer satisfaction survey with each Service member who had a shipment delivered to residence under the pilot program. The frequency of responses to the survey is expected to be excellent. MTMC is discussing the importance of the survey with each Service member participating in a pilot move. In addition, the BCCA is conducting the survey telephonically which should improve the survey return rate. The information is captured by the BCCA and transmitted electronically to PTOPS.

Customer satisfaction will be evaluated based on Service members' responses to three survey questions. They are:

1. Would you use the contractor again
2. Evaluate overall service at origin (the Service members are asked to evaluate services on a scale of excellent, very good, good, fair, and poor)
3. Evaluate overall service at destination (the Service members are asked to evaluate services on a scale of excellent, very good, good, fair, and poor)

Customer satisfaction will be compared against the baseline to measure improvement. In the MTMC 1996 customer satisfaction survey[i], 71 percent of the Service members surveyed would use the origin personal property service provider again and 78 percent of the Service members surveyed would use the destination personal property service provider again. Therefore, the average customer satisfaction rating is 75 percent. Additionally, 58 percent of the Service members rated origin services very good or excellent, while 56 percent rated destination services very good or excellent. The variance of the survey results is ± 4.2 percent with a 95 percent confidence.

For the pilot program, two scores will be reported for the average customer satisfaction rating. The first score will report the overall customer satisfaction score, which includes all contractors who have provided transportation services under the program. The second score will be an adjusted customer satisfaction score, which removes the scores for the contractors who have been placed in a non-use status for poor performance. By comparing the two scores, MTMC is able to demonstrate the effect that poor performers have on the pilot program. MTMC is also able to ensure that only the best value contractors are awarded traffic.

The companies utilizing best commercial practices achieve a customer satisfaction level of 95 percent based on the question regarding subsequent use of the contractor. Distribution Magazine in November of 1990 published an article on quality household good services.[v] In this article, GTE set a standard of 95 percent or better for customer satisfaction. Although they did not achieve this standard in 1990, they provided MTMC

with updated information in 1993 that showed a GTE rating of 95 percent customer satisfaction. The standard that MTMC has established for the pilot is 95 percent customer satisfaction.

This goal will be satisfied if the percent of favorable responses to each question increases with respect to the baseline. The adjusted customer satisfaction rating under the pilot program will be compared against the average customer satisfaction rating under the current program.

Adopt Corporate Business Processes

World-class companies that provide the best personal property services to their employees point to several practices that contribute to their success. Surveys conducted by the General Accounting Office (GAO)[ii] and a study contracted for by MTMC[iii] reveal that world-class companies are:

1. Establishing long term contractual arrangements with suppliers
2. Adopting the growing trend of using relocation companies to perform personal property movement services
3. Using commercial documentation
4. Increasing the use of electronic commerce advances, such as Electronic Data Interchange and Web-based applications
5. Using a smaller number of carriers to provide transportation services

As a result of the pilot solicitation process, MTMC's pilot program has already achieved some of the corporate practices listed above. MTMC's pilot program concept acquires personal property services through FAR contracts. The contracts are one year in length with two one-year options, which is longer than the current program's six-month solicitation cycle. This acquisition approach offers an opportunity for contractors to compete on a best value as opposed to low cost basis. Longer-term relationships with fewer carriers should make DoD's business a prized commodity to contractors, increase competition, and improve the quality of service. In addition, the pilot solicitation allowed the participation of relocation companies. In fact, several relocation companies won contracts.

MTMC's new program eliminates the use of Government Bills of Lading (GBL), in favor of commercial documentation. In addition, MTMC has developed PTOPS, a worldwide web-based, near real time, data information system to support the pilot. The elimination of the GBL and the operation of PTOPS will be validated during the pilot.

To determine if the pilot program reduces the number of transportation service providers that DoD uses, the percent change in number of providers will be evaluated. The number of carriers will be calculated, as a baseline, from data provided by the current Transportation Operational Personal Property Standard System (TOPS) by obtaining the number of unique carriers moving 50 percent of the shipments under the current program in the pilot regions. This baseline will then be compared to the number of unique contractors moving the other 50 percent of shipments under the pilot program. Likewise,

the number of unique contractors used during the pilot will be calculated by accessing contractor information entered into PTOPS.

This goal will be satisfied if GBLs are no longer used, PTOPS is operational, and the number of transportation service providers is reduced with respect to the current program.

Lower Loss and Damage, Claims Frequency, and Average Claims Dollar

Five factors will be considered in evaluating this goal. These are:

1. Loss and damage (L&D) frequency
2. Claims frequency
3. Average dollar amount per claim
4. Claims frequency requiring government intervention
5. Average dollar amount per claim not recovered from carriers/contractors

In MTMC's 1996 customer satisfaction survey[i], Service members reported that 65 percent of DoD's shipments had loss and/or damage. In that same survey, MTMC reports that 54 percent of Service members with loss or damage filed a claim, meaning that 35 percent of DoD's shipments had claims filed. According to PwC's baseline assessment, the average claim amount was $740 per claim[iv]. In the current program, 100 percent of claims filed require government intervention since claims are not settled directly between Service members and contractors. Furthermore, an average $466 per claim was not recovered from the carrier requiring out-of-pocket government costs of almost $55 million per year[iv].

The initial standards that MTMC established for the pilot are no more than 17 percent loss and damage frequency and no more than $500 average dollar amount per claim for the first year. The standards increase to 16 percent loss and damage frequency and $400 average dollar amount per claim in option years two and three. The companies utilizing best commercial practices report an average loss and damage claims frequency of 12 percent and an average dollar amount per claim of $275[iv].

This goal will be satisfied if all factors improve: L&D frequency below 65 percent, claims frequency below 35 percent, average dollar per claim below $740, claims frequency requiring government intervention below 100 percent, and average government out-of-pocket cost per claim lower than $466. Loss and damage data will be collected by the BCCA during the customer satisfaction survey. Other claims information will be reported by the contractors and the claims offices.

Simplify the System

Simplification of the system will be evaluated by measuring the change in the administration and operating costs of MTMC's demonstration program compared to DoD's current program. The assumption is that simplifying the system is related to

streamlining the processes. Measuring the change in labor and other process-related costs is a method of measuring success among process improvement alternatives. Key cost components in this analysis are direct labor, operations and maintenance costs of automated information systems, facilities, consumables, and equipment. Processes included in the cost analysis are: managing the program (governing the program, managing carrier participation, performing strategic analysis), providing personal property services (providing counseling services, booking movements, moving personal property), ensuring quality, and processing financial transactions (verifying services, certifying and paying invoices, processing claims). Process owners considered during the evaluation include MTMC, PPSOs, claims offices, regional storage and management office, billing and customer/contract auditor, and finance centers.

A baseline will be established for average process costs per shipment for the current program. The baseline cost will be derived from a 1998 PwC report[iv] that updated costs from a 1995 study conducted by Systems Research and Applications Corporation (SRA) for MTMC[iii]. The SRA study captured "as-is" program costs. The DoD IG will assess the methodology that was used to derive this baseline.

This goal will be satisfied if the pilot process costs are lower than the baseline average process costs per shipment.

Ensure Capacity to Meet DoD's Needs

The capability of the program to meet DoD capacity requirements will be measured by evaluating the frequency of contractor shipment refusals. MTMC believes that shipment refusals are a good measure of the contractor's capacity to meet DoD needs. Currently, refusals are almost nonexistent during winter months. During the summer peak season, when corporate and government demand are high, refusals increase dramatically. Measurement of contractor capacity should be done during peak season. In the current program, DoD has little control over carriers who refuse to move shipments. In the pilot program, the contractor is contractually obligated to accept shipments until its contract-specified committed daily capacity (CDC) is met.

The current baseline refusal rate is 24 percent during the peak season of May through September, broken down as follows:

- May – 27 percent
- June – 27 percent
- July – 31 percent
- August – 18 percent
- September – 13 percent

This data was captured from TOPS for fiscal year 1997 for shipments originating from the pilot regions[iv]. The refusal percentages for the pilot program will be gathered for the same peak season months. The pilot refusal data is available in PTOPS.

This goal will be satisfied if the pilot refusal rates for May, June, July, August and September are less than the refusal rates for the equivalent months in the current program.

Provide Opportunity for Small Businesses

MTMC has established an acquisition process that encourages small businesses to compete. Thirteen small businesses competed successfully, winning contracts in unrestricted channels that were also open to large business competition. Seventeen channels, including high volume channels, representing 36 percent of contract dollars and tonnage, were set aside exclusively for small businesses. Seventeen of the 41 prime contractors in MTMC's pilot program are small businesses, having revenues less than $18.5 million.

MTMC required large businesses to submit subcontracting plans and to subcontract at least 10 percent of the contract value: 50 percent to small businesses, 5 percent to small disadvantaged businesses, and 2 percent to woman owned businesses. Large businesses proposed subcontracting an average of 38 percent of contract value to small business.

Opportunity for small businesses will be measured by comparing the number of shipments moved by small businesses under the pilot with the number moved under the current program. However, the baseline is difficult to derive. Numerous companies registered to do business with DoD are really "paper companies" formed by large carriers to increase the allocation of shipments they receive under the current personal property program. Many other companies certify themselves as small businesses, knowing that MTMC does not confirm revenue, and are actually large businesses.

In the 1998 baseline assessment[iv], PwC collected a sample of 50 shipments from each of five PPSO sites located in the pilot regions. The shipment data was available through TOPS. PwC found that carriers who self-certified themselves as small businesses in MTMC's carrier profile records moved 62 percent of the shipments. Upon public investigation of revenue records, PwC found that 44 percent or less of the shipments were actually moved by small businesses that meet SBA's revenue requirement. PwC analysts could only locate revenue records for 52 of 72 carriers that self-certified themselves as small businesses. The carriers whose revenue could not be confirmed may have been "paper companies," affiliated with large businesses. This would reduce the baseline estimate of small business use to 34 percent of the shipments.

For the purpose of the pilot evaluation, it is assumed that half the companies whose revenue records were not available for verification through public investigation were small businesses and the other half were affiliated with large businesses. Therefore, the baseline established for small business use is 39 percent (halfway between 34 and 44 percent) of shipments. The pilot data will be gathered by comparing the number of shipments moved by the 17 small business contractors to the total number of shipments for the pilot. The prime contractor receiving the shipment is identified through PTOPS; however, PTOPS does not collect information when a subcontractor actually moves the

shipment. MTMC receives a semi-annual report from large business contractors identifying the dollar value of business moved by subcontractors. That report will be made available to PwC and the dollar value will be translated into number of shipments.

This goal will be satisfied if the use of small businesses as the prime contractor is greater than 39 percent of the shipments.

Provide Best Value Moving Services

MTMC's concept is based on acquiring best value personal property services, rather than strictly lowest cost services. Best value is a two-tier process. First, during the pilot solicitation, MTMC evaluated past performance/experience, and subcontracting plans independently from price. Proposals were ranked on the basis of the non-price evaluation factors on a scale from marginal to excellent. Price was evaluated for reasonableness only for those proposals that ranked satisfactory or better on the best value scale.

Second, to ensure that best value is maintained during the contract period, the Service member evaluates contractor performance after the shipment is delivered. Once the minimum guarantee of business is met, shipments are placed with the best performers, based on the Service member evaluations. The PPSOs are empowered to make business decisions for assigning shipments based on the contractor's performance data and priorities established by Service members. MTMC will periodically review the process via a report from PTOPS to ensure that the PPSOs are using good business judgment.

This goal will be evaluated by assessing service-related goals, to determine if, overall, service has improved, and by comparing the service level with the change in total program cost. Total program cost includes process costs, transportation costs, and government out-of-pocket costs. MTMC expects total program cost to increase because transportation costs are the major component of the total program cost. The question is whether the increases in transportation costs are reasonable compared to the improvements in quality of life for Service members?

Service-related goals under the control of the contractor are: improved quality of service (1), improved on-time pickup and delivery (2 and 3), higher customer satisfaction (4), and lower loss and damage (6). A baseline average transportation cost per shipment for the total current DoD program will be established. A baseline average transportation cost per shipment, separating international and domestic, will be established if possible. Transportation costs will be compiled for the pilot and compared with the baseline figures.

The evaluation of this goal will be based on a MTMC business decision taking into account improvements in the service-related goals and the change in total program cost. This goal will be considered satisfied if the increase in total program cost is considered reasonable by MTMC when compared to the improved quality of life for the Service members.

[i] Headquarters, Military Traffic Management Command, Executive Summary: Personal Property Customer Satisfaction Survey, July 31, 1997.

[ii] GAO/NSIAD-94-26, Defense Transportation: Commercial Practice Offer Improvement Opportunities, November 26, 1993.

[iii] Systems Research and Applications (SRA) Corporation, Business Process Reengineering Support to the Military Traffic Management Command for Administering the Personal Property Program, December 28, 1995.

[iv] PricewaterhouseCoopers, "Functional Economic Analysis of the Military Traffic Management Command's Personal Property Reengineering Program: Draft "As-Is" Program Evaluation Report", July 28, 1998.

[v] Distribution Magazine, "Pay for Performance Boosts HHG Service", November 1990.