Report No. DODIG-2012-108 August 31, 2012

Inspector General
United States Department of Defense

Questionable Data Cast Doubt on the Need for Continuing the Defense Transportation Coordination Initiative

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Acronyms and Abbreviations

COR	Contracting Officer's Representative
DLA	Defense Logistics Agency
DoDI	DoD Instruction
DTCI	Defense Transportation Coordination Initiative
GFM	Global Freight Management
GSA	General Services Administration
PMO	Program Management Office
QASP	Quality Assurance Surveillance Plan
USTRANSCOM	United States Transportation Command

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

August 31, 2012

MEMORANDUM FOR COMMANDER, U.S. TRANSPORTATION COMMAND

SUBJECT: Questionable Data Cast Doubt on the Need for Continuing the Defense Transportation Coordination Initiative (Report No. DODIG-2012-108)

We are providing this report for review and comment. We considered management comments on a draft of this report when preparing the final report. The Defense Transportation Coordination Initiative (DTCI) Program Management Office personnel did not provide effective oversight of the DTCI contract, valued at $1.76 billion. The third-party logistics contractor, Menlo, reported cost reductions of $167.4 million for 699,157 freight shipments. However, the reductions were not verifiable because of questionable data.

DoD Directive 7650.3 requires that recommendations be resolved promptly. The comments from the Commander, United States Transportation Command, on Recommendations 1.c, 1.d, 1.e, 1.g, 1.h, 1.i, 1.j, and 1.k were responsive, and no further comments are required. We deleted draft report Recommendation 1.c. from the report. The comments on Recommendations 1.a, 1.b, and 1.f were not responsive. Therefore, we request additional comments by October 1, 2012.

Please provide comments that conform to the requirements of DoD Directive 7650.3. If possible, please send a portable document format (.pdf) file containing your comments to aud-colu@dodig.mil. Copies of your comments must have the actual signature of the authorizing official for your organization. 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) 604-8905.

Amy J. Frontz
Principal Assistant Inspector General
for Auditing

Report No. DODIG-2012-108 (Project No. D2010-D000FJ-0246.000) August 31, 2012

Results in Brief: Questionable Data Cast Doubt on the Need for Continuing the Defense Transportation Coordination Initiative

What We Did

We determined whether the Defense Transportation Coordination Initiative (DTCI) Program Management Office (PMO) oversight of the third-party logistics contractor, Menlo, was effective and the contract reduced costs. The contract, valued at $1.76 billion, was awarded in August 2007 for 3 base years, 2 option years, and 2 award-term option years.

What We Found

PMO personnel did not provide sufficient oversight of the DTCI contract, and Menlo reported unverified cost reductions of $167.4 million for 699,157 freight shipments from March 2008 through September 2010. The reductions were not verifiable because of questionable data. In addition, PMO officials did not develop and include in the contract an effective methodology to establish baseline transportation costs and calculate cost reductions from shipments and did not effectively implement the Quality Assurance Surveillance Plan. As a result, PMO officials did not:

- identify that $118 million of reported cost reductions were based on flawed baseline transportation costs and that it is questionable whether these reductions were achieved; and
- deduct $56.9 million in program costs from reported cost reductions.

If the $167.4 million in cost reductions were offset by the $118 million in questionable cost reductions and $56.9 million in program costs, then costs were about $7.5 million greater than cost reductions.

The exercise of future contract options will require implementing corrective actions to verify that program benefits occur and offset the contract costs.

What We Recommend

Among the recommendations we made, we recommended that the Commander, U.S. Transportation Command, not exercise future options on the DTCI contract until he can certify that there are cost reductions. In addition, he should revise oversight guidance.

Management Comments and Our Response

The Commander, U.S. Transportation Command, agreed with 10 draft recommendations and disagreed with 2. We requested additional comments on three recommendations. As a result of management comments, we deleted one draft recommendation. Please see recommendations table on the back of this page.

Recommendations Table

Management	Recommendations Requiring Comment	No Additional Comments Required
Commander, U.S. Transportation Command	1.a, 1.b, and 1.f	1.c, 1.d, 1.e, 1.g, 1.h, 1.i, 1.j, and 1.k.

Please provide comments by October 1, 2012.

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Introduction

Audit Objective

The objective of the audit was to determine whether the United States Transportation Command (USTRANSCOM) effectively monitored the use of third-party logistics contracting efforts to improve the coordination of freight shipments in the continental United States. See Appendix A for a discussion of the scope and methodology and prior coverage on Defense logistics contract monitoring.

Contract Oversight Guidance

On April 12, 2006, USTRANSCOM published a business case analysis that predicted 33-percent cost reductions on the shipment of freight within the continental United States by using a contractor to coordinate and consolidate shipments. The effort was titled the Defense Transportation Coordination Initiative (DTCI) and was part of DoD transformational efforts that were intended to improve operations and save money. The DTCI program excluded many shipments, including small packages, household goods, firearms, ammunition, and explosives. Other than the excluded items, the DTCI program consisted of all second-destination freight shipments within the continental United States, such as shipments from Defense depots.

On August 17, 2007, USTRANSCOM awarded the DTCI contract (HTC711-07-D-0032) for transportation coordinator to Menlo Worldwide Government Services (Menlo). The contract period of performance covered 7 years, including 3 base years, 2 option years, and 2 award term option years.[1] As of August 31, 2010, the total value of the contract was $1.76 billion (see Table 1).

Table 1. Contract Line Item Amounts for the DTCI Contract

Contract Line Item	Amount
Transportation	$1,643,551,873
Management Services	108,066,712
Award Fee	10,806,671
Management Services – Surge	1,514,835
Indian Incentive Program	192,074
Total	**$1,764,132,165**

The DTCI contract was a hybrid contract containing both reimbursable and fixed-price cost provisions. Transportation costs were processed on a reimbursable basis, and

[1] Per the contract, Menlo may earn up to two 1-year award term option periods based on its performance in option years 1 and 2.

management services were based on fixed-price provisions. Invoiced transportation costs were paid to Menlo, and Menlo then paid the carriers that moved DoD freight from one location to another. Management services and award fees were paid to Menlo for arranging the shipments with the carriers. The award fee was determined semiannually by the fee-determining official. Menlo was responsible for coordinating and executing DoD shipments from 91 locations using such industry best practices as mode conversions, which allowed Menlo the flexibility to select the most efficient method of moving items; that is, by air, land, or rail. This was meant to optimize and consolidate orders, and the contract established a goal of reducing freight costs by 19.1 percent for the 6 months preceding October 2010.

USTRANSCOM estimated the total program management costs would be about $24.7 million per year, including management and consulting services provided by Menlo, UNISYS, and LMI. According to its contract (HTC711-07-D-0008, performance period of February 15, 2008, through September 30, 2010), UNISYS was required to provide technical, analytical, and process improvement services relating to Menlo's performance. UNISYS was also responsible for preparing and posting the metric presentations and briefs to the Program Management Office (PMO) Web sites. As of September 30, 2010, annual costs of the contract with UNISYS were about $375,000.

USTRANSCOM also established contracts (HTC711-07-F-0025, performance period of October 1, 2007, through March 31, 2009, and HTC711-09-F-0025, performance period with options of April 1, 2009, through September 30, 2011) with LMI to provide technical, analytical, and implementation support services relating to DTCI. The contract documents indicated that LMI possessed transportation design expertise and experience with world-class third-party logistics providers. Annual costs of the LMI contracts were about $1.5 million per year.

USTRANSCOM established the PMO in January 2005. According to a draft document it provided to us, the PMO was created to implement and administer the DTCI-related contracts in coordination with contracting officials. From FY 2008 through FY 2010, program management costs totaled $56.9 million. USTRANSCOM dissolved the PMO in 2011 and transferred the program to the Surface Deployment and Distribution Command.

Performance Requirements

DoD Instruction (DoDI) 5000.02, "Operation of the Defense Acquisition System," December 8, 2008, requires all acquisitions of services to be based on clear, performance-based requirements; include identifiable and measurable cost, schedule, and performance outcomes consistent with customer needs; and receive adequate planning and management to achieve those outcomes. The DTCI performance work statement required Menlo to perform transportation coordination services in a manner that would improve the reliability, predictability, and efficiency of DoD materiel moving within the continental United States, including achieving 19.1 percent in cost reductions in the 6 months preceding October 2010.

The DTCI performance work statement also identified six key performance objectives for measuring the contractor's performance. The performance objectives were on-time pickup, on-time delivery, information system availability, loss/damage-free shipments, timely claims processing, and small business subcontracting goals.

Contract Oversight

The Defense Transportation Regulation, Chapter 213, "Defense Transportation Coordination Initiative," July 2008, prescribes responsibilities and procedures for DTCI shipments. Chapter 213 specifies that the Service or Agency contracting officer's representative (COR) is responsible for monitoring and verifying that the coordinator's performance is meeting minimum standards.

In following the requirements of chapter 213, ordering officers from the Military Services and the Defense Logistics Agency (DLA) were appointed by the contracting officer to provide oversight of the shipments. The DTCI PMO personnel were required by the regulation to monitor the contractor's performance.

In addition to the regulation, USTRANSCOM developed a "DTCI User's Guide." The purpose of version 2.1, issued February 2009, was to describe key operational processes and activities and to provide users of DTCI services with a reference tool for day-to-day operations. PMO personnel told us they developed the "User's Guide" as a local regulation and day-to-day operational tool. We reviewed the "User's Guide," which requires CORs and ordering officers to report problems as part of their oversight and requires post-payment audits by the Defense Contract Audit Agency. The "User's Guide" states that "It is imperative that any experience of poor performance be reported using the Menlo Customer Feedback Tool." The Customer Feedback Tool was a system developed by the contractor to log customer complaints regarding contractor performance, such as late deliveries and pickups. The "User's Guide" also states that it is the contracting officer's responsibility to ensure that the payments are proper and correct per the terms of the contract and that the payments are provisional and subject to post-payment contract audit by the Defense Contract Audit Agency.

Review of Internal Controls

An internal control weakness in the oversight of the DTCI contract existed as defined by DoDI 5010.40, "Managers' Internal Control Program (MICP) Procedures," July 29, 2010. We determined that USTRANSCOM did not develop and include in the contract an effective methodology to establish baseline transportation costs and calculate cost reductions from shipments to verify cost reductions and performance on the DTCI contract. We will provide a copy of the report to the senior official responsible for internal controls at USTRANSCOM.

Finding. Questionable Benefits and Ineffective Program Oversight

DTCI Program Management Office (PMO) officials did not provide sufficient oversight of the DTCI contract, totaling $1.76 billion, and Menlo reported unverified cost reductions of $167.4 million for 699,157 freight shipments. This occurred because PMO officials did not develop and include in the contracts an effective methodology to establish baseline transportation costs and calculate cost reductions from shipments, and they did not effectively implement the Quality Assurance Surveillance Plan (QASP) that would oversee contractor performance for reported cost reductions, on-time deliveries, and customer complaints. As a result, PMO officials:

- did not identify that $118 million of reported cost reductions were based on flawed baseline transportation costs, and it is questionable the reductions were achieved;

- did not deduct $56.9 million in program costs from reported cost reductions; and

- had no assurance that portions of award fees based on cost reductions and delivery performance were warranted.

If the $167.4 million of cost reductions were offset with the $118 million of questionable cost reductions and $56.9 million of program costs, then costs were about $7.5 million greater than cost reductions. The exercise of future contract options requires implementing corrective actions to verify that program benefits occur and offset the contract costs.

Effectiveness of DTCI Depended on Cost Reductions

Based on guidance from PMO officials and the contracting officer, Menlo estimated that it achieved $167.4 million in cost reductions on DoD shipments within the continental United States through September 2010 by comparing DTCI shipment costs to a historical baseline provided by LMI. Menlo used the estimated cost reductions to show it met the 19.1 percent goal of cost savings on the DTCI contract. The amounts Menlo reported for DoD customers, as shown in Table 2, indicate that DTCI decreased costs by 30.3 percent.

Table 2. Cost Reductions Reported to DoD Customers
March 2008-September 2010
($ in millions)

Service/Agency	Shipments	Baseline Cost	DTCI Cost	Cost Reduction
DLA	575,706	$388.1	$284.3	$103.7
Army	51,905	74.5	47.9	26.5
Navy	28,603	37.0	25.5	11.5
Air Force	37,209	32.8	21.5	11.3
Marine Corps	5,734	20.6	6.3	14.3
Total	**699,157**	**$552.9**	**$385.5**	**$167.4**

Note: Totals may not sum because of rounding.

Menlo provided us supporting information that consisted of $267 million in cost reductions and $100.5 million in cost increases, or a net cost reduction of $166.5 million. Menlo's information was $900,000 less than the $167.4 million it reported to DoD customers.

Accuracy and Completeness of Historical Baseline

The historical baseline is a key component of determining cost reductions and cost increases resulting from the DTCI contract. During the audit, we obtained the version of the LMI baseline used by Menlo to estimate DTCI cost reductions. We asked LMI personnel for the methodology they used to develop the baseline, and they told us in an e-mail that developing and cleansing[2] the historical information was "part art," and they did not have a written process to replicate the original baseline. LMI indicated that the process required workarounds.

> *LMI personnel told us in an e-mail that cleansing the historical information was "part art."*

PMO personnel did not verify the accuracy of the baseline that we examined during the audit. When we asked LMI why small arms, ammunition, and explosives were still in the baseline throughout the audit, the LMI program manager stated that LMI scrubbed the information but that "you never catch all of them when dealing with so many determinants."

We also questioned the use of small shipments in the baseline to calculate savings on very large shipments. In transportation, there is a relationship between weight, distance, and cost. Shipments of 100 pounds cost more per pound than does a shipment weighing 10 tons. The Menlo system also incorrectly used the cost from a single 120-pound shipment to compute $1.16 million in cost reductions on 23 larger shipments in the thousands of pounds each. LMI should have excluded the shipment from the baseline.

[2] Process that removed unusable and excluded data (such as ammunition and international shipments).

Single small shipments generally would not produce a representative historical average. PMO personnel should have identified this type of error.

We asked PMO personnel and the contracting officer whether they had verified the accuracy and completeness of the LMI baseline before accepting the information from LMI. They indicated they had not and told us they did not have the expertise to do it. As a result, flawed information remained in the baseline throughout the audit.

PMO personnel told us that an inaccurate baseline would cause the cost reductions Menlo generated in its reports to be inaccurate, but did not act to review the historical information provided to Menlo by LMI.

PMO personnel told us that an inaccurate baseline would cause the cost reductions Menlo generated in its reports to be inaccurate, but did not act to review the historical information provided to Menlo by LMI. Menlo used a formula approved on March 31, 2008, to calculate the cost reductions. However, PMO personnel reported the Menlo cost reductions on the PMO Web site without any further review of the accuracy of the information.

Scheduled Shipments Did Not Match Information in the Menlo System

Another problem in determining potential cost reductions was the inability to track the use of scheduled shipments (called dedicated lanes). Menlo used its information system to automatically compute gross cost reductions by shipping lane. However, we could not match the shipment information in the Menlo system to payment records because Menlo's system did not identify costs of the individual items shipped on a dedicated truck. As a result, the cost reductions related to small shipments on dedicated lanes were misstated and unreliable.

For example, bill of lading number 148615S2 represented a shipment of 109 mixed pieces, with a total weight of more than 27,000 pounds, using a truck from the DLA Distribution Depot Susquehanna, Pennsylvania, to the Distribution Depot in San Joaquin, California. One of the pieces was a 10-pound item. According to information in the Syncada[3] system, Menlo billed and was paid $4,868 for the 10-pound item rather than $71 that DLA expected to pay. Menlo then used the shipment cost of the 10-pound item in its cost avoidance calculations and showed a loss of $4,182. A DLA official indicated that Menlo apparently billed the entire truckload cost to the 10-pound item. USTRANSCOM personnel claimed that Menlo allocated a portion of the $4,868 to each of the 109 items in the shipment. They provided us additional information from Syncada, but it did not show that Menlo allocated the cost to any of the other 108 items. This demonstrated a lack of review of invoices by PMO personnel. They should have detected these types of overstated shipment costs as part of their oversight of the DTCI contract.

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[3] Syncada is a third-party payment system and its use is mandated for DTCI shipments per the Defense Transportation Regulation, chapter 213, July 2008.

The Commander, USTRANSCOM, should review the actions of the PMO personnel and contracting officials and, based on that review, determine whether any administrative actions are necessary.

Questionable Cost Reductions

PMO personnel did not identify that $118 million of reported cost reductions were based on flawed baseline transportation costs, and it is questionable the reductions were achieved. The $118 million in questionable cost reductions included:

- $84.8 million in extreme cost reductions (outliers), and
- $33.2 million attributable to missing information on large shipments.

The following two sections discuss the questionable cost reductions.

Outliers

As shown in Table 3, the Menlo information contained $84.8 million in extreme cost reductions (outliers are beyond 3 standard deviations as discussed in Appendix B) that were questionable.

Table 3. Outliers and Corresponding Costs
($ in millions)

Category	Number of Shipments			Cost Reported		
	Cost Reduction	Cost Increase	Total	Cost Reduction	Cost Increase	Total
Within 3 Std Dev	271,254	422,296	**693,550**	$(181.2)	$99.5	**$(81.7)**
Outliers	4,640	75	**4,715**	(85.8)	1.0	**(84.8)**
Total	**275,894**	**422,371**	**698,265**	**$(267.0)**	**$100.5**	**$(166.5)**

Std Dev – standard deviation

We used basic statistical methods and calculated that $86.8 million (absolute value[4]) in cost reductions were attributable to 4,715 shipments with extreme cost reductions that exceeded 3 standard deviations of the mean. We considered the shipments beyond three standard deviations to be outliers. Our analysis indicated that although the outliers made up only 0.68 percent of the total shipments, they accounted for nearly 51 percent of the reported cost reductions. The outlier cost reductions were questionable because they reflected unusual and extreme cost reductions (see Table 4).

[4] A nonnegative number equal in value to a given real number. For example, 85.8 is the absolute value of negative 85.8 (-85.8). Therefore, the absolute value of $(85.8 million) and $1 million is $86.8 million.

LMI did not identify the outliers, even though Section 5.2, "Data Analysis and General Analytic Support," of the LMI contract included a deliverable on DTCI cost and cost savings projection models and results. LMI should have used similar basic statistical techniques, identified the 4,715 suspect outliers, and brought them to the attention of the PMO officials. The extreme outliers–those with the highest reported cost reductions–are shown in Table 4.

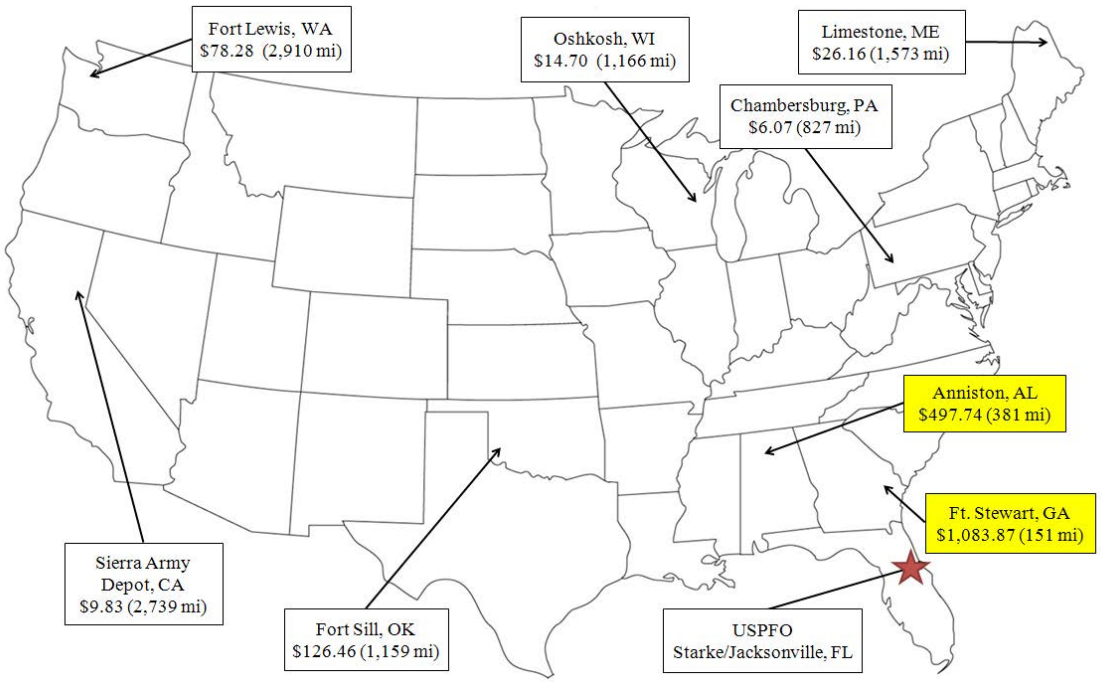
Table 4. Top 10 Unsupported Cost Reductions
March 2008-September 2010

	State		Cost			
Item/Shipment Number	**From**	**To**	**DTCI**	**LMI Baseline**	**Reported Reduction**	**% Saved**
1. S421945446	FL	AL	$3,500	$536,765	$533,265	99.35
2. HEAGAG00168651	GA	CA	3,306	455,253	451,947	99.27
3. HEAGAG00194968	GA	CA	2,350	373,515	371,165	99.37
4. S473686445	UT	IN	3,524	304,604	301,080	98.84
5. HWBCYC00075613	CA	FL	4,670	290,547	285,877	98.39
6. S507690212	FL	GA	600	281,590	280,990	99.79
7. S507689740	FL	GA	600	281,590	280,990	99.79
8. LJMLD362006	CA	FL	4,585	282,221	277,636	98.38
9. S438394489	KY	KS	862	268,950	268,088	99.68
10. S446478560	WA	IL	2,787	252,446	249,659	98.90
Total			**$26,784**	**$3,327,481**	**$3,300,697**	**99.20**

Outlier numbers 1 and 6 are highlighted in Figure 1 to illustrate how extreme the average costs were compared to other shipments from the same transportation office. The remaining items are discussed in Appendix C. LMI should have identified the extreme costs per hundred pounds and removed the shipments from the LMI historical baseline.

We created Figure 1 using baseline transportation costs that were used by Menlo to calculate cost reductions. Figure 1 illustrates that there was not the expected relationship between distance and transportation cost per hundred pounds for shipments. For example, the average cost of a shipment from U.S. Property and Fiscal Office, Florida National Guard, to Fort Stewart, Georgia, was more than double the average cost of a shipment to Anniston, Alabama, despite similar distances shipped.

Figure 1. LMI Average Cost Per Hundred Pounds Shipments From U.S. Property and Fiscal Office Florida National Guard



USPFO = United States Property and Fiscal Office

Shipment No. S421945446 – Outlier Item 1

Menlo's records showed that shipment no. S421945446 went from Starke, Florida, to Anniston at a cost of $3,500 and weighed 107,840 pounds. This was a cost of $3.24 per hundredweight. Menlo calculated a cost reduction of $533,265 on this shipment. This outlier occurred because LMI included only one historical shipment in the historical baseline. LMI should have deleted the transaction from the baseline because the shipment description was related to firearms, which are excluded from the DTCI program. The historical shipment weighed 310 pounds and cost $4.97 per pound, and LMI used it to calculate a baseline cost per hundredweight of $497.74. The information from a small shipment of 310 pounds was clearly unmatchable to a shipment of 107,840 pounds.

Shipment No. S507690212 – Outlier Item 6

Menlo's records showed shipment no. S507690212 went from Starke to Fort Stewart at a cost of $600 and weighed 25,980 pounds. This was a cost of $2.31 per hundredweight. Menlo calculated a cost reduction of $280,990. This outlier occurred because LMI used only two historical shipments, with weights under 150 pounds, to calculate the baseline. LMI used the average cost of $10.83 per pound to calculate a baseline cost per hundredweight of $1,083.87. Extrapolating the cost of 150-pound shipments to a shipment of 25,980 pounds does not represent a realistic cost reduction.

PMO personnel did not apply appropriate procedures in overseeing the reported cost reductions, which would have made them aware of anomalies. Consequently, PMO personnel did not identify or investigate the anomalies. Both LMI and Menlo are professional logistics companies. The companies should have identified that the shipping rates per hundredweight and cost reductions were questionable and not achievable.

Information Missing From the Baseline

The LMI baseline excluded shipment information on shipments greater than 20,000 pounds for some of the shipping lanes. Specifically, Menlo reported 14,291 shipments greater than 20,000 pounds that did not have similar large shipments in the LMI baseline. In aggregate, Menlo reported a cost reduction of $81.2 million on the 14,291 large shipments. Of the $81.2 million, $48 million related to 2,424 shipments greater than 3 standard deviations beyond the mean (outliers), and $33.2 million related to 11,867 shipments within 3 standard deviations of the mean. Large shipments, such as those over 20,000 pounds, generally cost less per pound to ship than smaller shipments. PMO personnel should have identified that historical information on large shipments for some of the shipping lanes was missing and corrected the historical information or not reported cost reductions because of the lack of comparable information.

Transportation Accounts Did Not Reflect a Decrease in Costs

We asked the Military Services and DLA whether DoD had reduced their respective transportation budgets to account for the $167.4 million in reported DTCI cost reductions. An actual cost reduction, had it occurred, would likely trigger a corresponding decrease in transportation budgets. Under Secretary of Defense for Acquisition, Technology, and Logistics officials stated that DTCI might have caused reprogramming actions to occur. However, we found no evidence that this had occurred, which cast further doubt on the validity of the reported cost reductions.

The DTCI program goal was to decrease costs. The Commander, USTRANSCOM, needs to develop a plan that identifies and tracks DTCI cost reductions within the Military Services and DLA budgets, appropriations, and reprogramming actions.

Navy Questioned DTCI Cost Savings

Navy transportation specialists found that, on average, DTCI shipments cost 68 percent more than the GFM system rates.

Navy officials told us that Menlo's cost savings were not believable and that PMO personnel had not been responsive to the complaints that the DTCI costs were considerably higher than market-based rates. Specifically, line rate analyses performed by Navy personnel indicated that Menlo did not obtain rates lower than the market-based prices available in the GFM System. GFM is a shipping system used by the Navy to process non-DTCI shipments and the rates do not provide guaranteed service. Navy transportation officers had filed complaints about DTCI costs with the PMO officials during one evaluation period we examined (Period No. 6).

For example, Navy transportation specialists at the Trident Refit Facility, Kings Bay, Georgia, found that, on average, DTCI shipments cost $189 more (68 percent) than the GFM System rates. Of the 435 DTCI shipments it reviewed, the Navy found 305 had lower rates available in the GFM System. In aggregate, the DTCI shipments cost $202,348 and the GFM rates totaled $120,063, a difference of $82,285. At the time of our audit, Menlo reported cost savings of about $338,000 on 584 shipments out of Trident Kings Bay. The Navy analyses concluded that DTCI was not reducing transportation costs on 435 sampled shipments and that the Menlo-reported savings were not believable.

One Navy cost comparison indicated that Menlo selected a GFM carrier at a quoted price of 41 percent more than the GFM System rate. The comparison showed that Menlo agreed to pay Mercer Transportation $12,937 for a DTCI shipment from Kings Bay to Long Beach, California. Concurrent GFM System rate quotes included 20 potential shippers. The lowest quote was $6,909, and the highest quote was Mercer Transportation at $9,180. The $12,937 rate appeared to include a 40-percent markup over the Mercer Transportation quote and was 87 percent more than the lowest available quote. This example is an indicator that the guaranteed service provided by DTCI can result in substantial increases in costs.

The Navy analysis also showed higher air shipment costs using DTCI. The Navy provided 15 other examples of higher DTCI costs related to shipments from four Navy sites that also showed evidence of recurring cost issues related to expedited air shipments.

PMO officials confirmed they received numerous Navy cost complaints and told us GFM rates were not applicable to DTCI[5] because the lowest cost carrier in GFM may not be available when needed. However, the large difference in costs between DTCI and GFM should have led PMO officials to validate the accuracy of Menlo-reported savings.

Army Identified Higher Costs Under DTCI

An Army G-4 Logistics official indicated he received cost complaints from four locations. He compared 38 DTCI shipments to GFM System rates and found mixed results. On nine shipments, DTCI had the lowest rate available. For the remaining 29 shipments, the GFM System offered lower rates. In one example, GFM included 91 tender rates lower than the DTCI shipment (bill of lading number W68P4L0044098). He stated that he stopped his review because a PMO official did not believe that comparing DTCI costs to GFM System rates was a valid method for analyzing cost reductions and increases. The PMO official should have reviewed the validity of Menlo-reported savings.

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[5] Per DoDI 4100.57, "Transportation and Traffic Management," March 18, 2008, non-FAR procurement instruments such as tenders of service and bills of lading will not compete with FAR procurements and shall only be used in limited situations when FAR procurements cannot meet customer requirements.

Management Services Costs Not Deducted

The USTRANSCOM Web site reported $167.4 million in cost reductions, but did not deduct the $56.9 million in management service costs incurred by DTCI. The original DTCI contract required the deduction of the cost of DTCI management services in the cost reduction calculation. PMO personnel did not explain why they did not deduct $56.9 million in management services before reporting the cost reductions on the Web site. For this and any other contracts, USTRANSCOM needs to deduct management service costs before reporting cost reductions.

Preparation of Performance Work Statements

PMO and USTRANSCOM contracting officials did not develop and include in the contracts an effective methodology to establish baseline transportation costs and calculate cost reductions from shipments. The inaccurate estimates of cost reductions could have been avoided if the PMO and USTRANSCOM contracting officials prepared performance work statements that required LMI and Menlo to comply with the DoD standards and procedures on economic and cost analysis.

The LMI baseline was not adjusted for inflation.

DoDI 7041.3, "Economic Analysis for Decisionmaking," November 7, 1995, provides procedures for conducting cost-effectiveness analysis in DoD. Economic analysis is a systematic approach to the problem of choosing the best method of allocating scarce resources to achieve a given objective. For each alternative, an economic analysis needs to identify the pertinent costs and benefits, estimate the magnitude of those costs and benefits, and estimate the timing of costs and benefits. DoDI 7041.3 requires results of economic analyses, including all calculations and sources of data, to be documented down to the most basic inputs to provide auditable and stand-alone documents. DoDI 7041.3 also encourages the use of automated information tools and data sources to reduce paperwork and provide the audit trail.

Some key provisions from DoDI 7041.3 were not performed by PMO personnel as part of their oversight of the DTCI. For example, Enclosure 3 provides detailed procedures on economic analysis and requires economic analyses to be adjusted for inflation. However, the LMI baseline was not adjusted for inflation, even though economic conditions changed significantly from 2008 through 2010.

Specifically, the Transportation Services Index, created by the U.S. Department of Transportation, Bureau of Transportation Statistics, measures the movement of freight and passengers. According to the Bureau of Transportation Statistics, the Transportation Services Index acts as a measure of the economic activity added by the transportation sector. The Transportation Services Index for freight fell about 4 percent from March 2008 through September 2010. This indicates a decline in freight shipments, and the baseline should have been adjusted. LMI's lack of adjustments for economic changes did not conform to adjustments made on the Tailored Transportation Contract.

As an illustration, in 2004, the Surface Deployment and Distribution Command used Bureau of Labor Statistics data on transportation pricing to adjust for inflation on the Tailored Transportation Contract. However, LMI did not adjust the baseline for the change in the Transportation Services Index or for inflation because the performance work statement did not require LMI to comply with DoDI 7041.3. As a result, the LMI baseline was not adjusted for inflation.

PMO personnel and contracting officials did not include any DoD criteria in the performance work statements for LMI and Menlo. The Commander, USTRANSCOM, should develop an effective and accurate methodology to establish baseline costs used to calculate cost reductions or another method to compare DTCI freight shipment prices with DoD or market-based prices. The Commander should certify in writing that there are cost reductions, using data prepared by DoD personnel and a process similar to DoDI 7041.3.

Followup on Customer Complaints

PMO personnel did not effectively use the DTCI QASP and the "DTCI User's Guide" in monitoring the DTCI contractor's performance. PMO personnel did not adequately follow up on customer complaints about Menlo's performance, including the lack of verifiable cost reductions on customer shipments and untimely performance. They also did not comply with QASP procedures that required PMO personnel to visit shipping and receiving activities randomly to conduct real-time contractor performance measurements and onsite quality assurance training.

The purpose of the DTCI QASP was to ensure that the Government was receiving the services specified in the DTCI contract and that the services met performance standards. PMO personnel and USTRANSCOM contracting officials should have fully implemented quality assurance procedures as required in the QASP. This did not occur.

The QASP was intended to ensure that Menlo achieved required goals. DTCI QASP, Section 2.5.1, "Surveillance Objective," states that quality assurance personnel are to evaluate contractor performance through submissions of performance evaluation reports, using a Web-based tool (called Customer Feedback Tool) or through daily independent monitoring, or both.

Additionally, the "DTCI User's Guide" required CORs and users, such as transportation officers and ordering officers, to report poor performance by the contractor. The "DTCI User's Guide" states "It is imperative that any experience of poor performance be reported using the Customer Feedback Tool provided by the coordinator. Without input, the PMO will not be able to gauge the state of performance on the program."

PMO instructed transportation officers not to submit complaints on single events (late pickups and deliveries).

From March 2008 to October 2010, Menlo recorded 7,039 complaints on about 700,000 shipments. Users mostly complained about late pickups (3,212) and late deliveries (1,156). However, the number of complaints was understated due, in part, to instructions given to transportation officers by the PMO officials. Specifically, on March 18, 2010, a PMO official issued a customer advisory that instructed transportation officers not to submit complaints on single events (late pickups and deliveries) and, instead, hold the individual complaints until they observed a trend and then submit only a single complaint. This negated the usefulness of the Customer Feedback Tool as a measure of performance since the events were not identified separately. The Commander, USTRANSCOM, should direct the PMO officials to withdraw this customer advisory.

We also followed up with CORs to determine whether the PMO personnel fully considered the users' complaints. The Army and Navy CORs provided us with information indicating that its users were dissatisfied with Menlo's performance. Specifically, they provided survey results from 37 sites that showed about 54 percent of the respondents did not consider the DTCI shipping process to be any better than the process before DTCI. Army and Navy respondents also indicated that DTCI rates for shipping freight appeared to be higher than concurrent tender rates in the GFM System. PMO personnel should have followed up on customer complaints and fully analyzed the information. USTRANSCOM told us that it had withheld over $115,290 in management service fees because of poor performance.

Assessing Performance and Awarding Incentive Fees

Since the inception of the DTCI contract, the DTCI Award Fee Board provided portions of the award fees to Menlo. The DTCI contract contained a requirement that twice a year, the DTCI Award Fee Board assess the contractor's performance. The assessment, according to the contract, was to be used to rate the contractor's performance in accordance with evaluation criteria in the performance work statement.

We examined documents related to Award Fee Period No. 6, April 17, 2010, through October 31, 2010. The documents showed Menlo did not meet its performance goal in one area, on-time delivery, and it did not receive the related award fee. The documents showed the Board recommended that $625,573 of the available $798,739 be awarded to the contractor for its performance in other performance areas, including Information Technology.

According to Award Fee Board documents dated December 2010, Menlo reported that it met five of the six key performance indicators. Table 5 shows the performance information, which the Board used to make its award in the Award Fee Period No. 6.

Table 5. DTCI Key Performance Indicators for Rating Period No. 6
April 17- October 31, 2010

Target	Goal (percent)	Performance (percent)
On-time Pickup	97	98.9
On-time Delivery	97	95.6
Information Technology System Availability	99	99.6
Loss/Damage-Free Shipments	98	99.9
Manage Claims in Timely Manner	99	100.0
Small Business Participation	25	43.7*

*Supplemental information provided by the Acquisition Director, USTRANSCOM.

We believe there were areas where performance may have been overstated or the award fees were granted based on questionable contractor data and without fully considering ordering officer evaluations, as described below.

Contractor Use of "Exceptions" Affected Reported On-time Delivery Information

PMO personnel did not adequately determine whether the DTCI contractor was meeting expected on-time delivery performance metrics, and might have overstated the performance. Information showed on-time delivery performance results were distorted in part because of the use of "exception" reporting.

On the basis of Menlo's information, the PMO believed that Menlo's performance was an improvement over the pre-DTCI process. However, customers complained about Menlo using exception reporting to mask poor performance.

According to the Defense Transportation Regulation, chapter 213, exception codes are to be used for instances where the DTCI coordinator (Menlo) cannot perform because of factors beyond its control. Valid exceptions include when weather conditions prohibit delivery or when the installation is closed. Customers complained that Menlo inappropriately used exceptions on late pickups and deliveries.

Although the customers claimed this distorted Menlo's true on-time performance, PMO personnel told us that DTCI performance was improving and better than the prior Tailored Transportation Contracts.[6] We analyzed six months of exception data under the Tailored Transportation Contract II and compared the exception data to results under DTCI. Without the use of exceptions, DTCI delivery performance was nearly identical to

[6] The Tailored Transportation Contracts (I and II) were Federal Acquisition Regulation-based contracts for freight transportation services and were performance based.

the Tailored Transportation Contract II: 86.8 percent for DTCI compared to 86.7 percent for Tailored Transportation Contract II. We did not test the exceptions for validity; however, if all the exceptions were valid, delivery performance was slightly higher for DTCI: 96.9 percent (October 2010) versus 95.5 percent (April 2008).[7]

UNISYS reported indications that Menlo had changed delivery performance data.

PMO personnel also used a contractor (UNISYS) to perform analyses of the key performance indicators. We reviewed the process and concluded that UNISYS identified problems to be considered by the PMO as it evaluated contractor performance. For example, UNISYS reported on December 1, 2010, indications that Menlo had changed delivery performance data and that the use of exceptions had "significantly escalated." Two months later, UNISYS reported that Menlo had changed delivery performance data for 10 consecutive months (January 2010 through October 2010). However, PMO personnel did not include these findings in the documents prepared for the Award Fee Board. The Commander, USTRANSCOM, should review Menlo's potentially questionable use of exceptions and, based on the results of that review, take appropriate action.

Ordering Officer Evaluations Showed Customers Were Only Partially Satisfied With Contractor Performance

The PMO also requested quarterly evaluations from DoD transportation ordering officers. The objective was to provide the PMO personnel with an independent evaluation of the contractor's performance during the rating period. The award fee process for the period we examined (Period No. 6) included evaluations from 74 DoD transportation ordering officers. Of the 74 evaluations, 27 showed customers were not satisfied with Menlo's performance.

The evaluations indicated problems with deliveries, exceptions, and cost savings. For example, an Army transportation officer indicated the contractor did not abide by the DoD standard transit time guides and that the contractor had not been truthful regarding the use of exceptions. A Navy transportation officer indicated that he concluded the cost reductions could be inaccurate and potentially inflated. An Air Force transportation officer submitted three examples where timeliness affected a Mission Impaired Capability Awaiting Parts (a classification used when an aircraft is grounded) scenario. Another Air Force transportation officer stated that the Customer Feedback Tool was not user-friendly and that the contractor hastily closed items without adequately resolving the issues.

The evaluations indicated problems with deliveries, exceptions, and cost savings.

[7] October 2010 was the last month of DTCI Period No. 6 and April 2008 was the last month of available Tailored Transportation Contract II data.

The comments did not support the Award Fee Board's high ratings for the information management metric, which included customer complaints and information technology system availability. Customer evaluations indicated problems with the contractor's transportation management system and Customer Feedback Tool. For example, the Customer Feedback Tool received an average rating of 3.57 (neutral, less than satisfied) on a scale of 1 to 5 by the transportation officers.[8] However, the Award Fee Board appeared to overlook these problems, overrelying on the contractor's performance data (see Table 5) and recommending a near-perfect rating (98.84 out of 100) for the contractor's information management metric.[9] The Board awarded Menlo $197,369 for this metric. The results of the quarterly evaluations, however, suggest the award fee to Menlo was not warranted.

The Commander, USTRANSCOM, should review the Menlo award fee process to determine whether a portion of the award fees should be refunded in light of the questionable performance achieved and the inaccurate cost reduction information provided by Menlo.

Should the DTCI Contract Continue?

We concluded that the questionable cost reductions, distorted on-time delivery information, and weak contract oversight cast doubt on the benefits of continuing the DTCI contract. The cost benefits are questionable, and performance indicators for on-time deliveries were overstated and did not show improvement over past practices. Also, the PMO officials seemed ill-prepared to provide the amount of oversight required to overcome the obstacles with the contract. Our analysis of the reported cost reductions and program costs are demonstrated in Table 6.

Table 6. DTCI Cost Reductions and Offsets
March 2008-September 2010
(in millions)

Category	Amount
Reported Cost Reduction	$(167.4)
Outliers	84.8
No Large Shipments in History	33.2
Program Management Costs	56.9
Total Net Cost Increases	**$7.5**

Note: Total does not sum because of rounding.

Instead of reducing costs in the 30-month period ending September 2010, it is possible that the net program costs were $7.5 million, or $174.9 million more than reported. The

[8] The evaluations were scored as follows: 1 = Extremely Unsatisfied, 2 = Unsatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Outstanding

[9] This metric included system availability and customer complaints.

cost reductions could not be verified because of inaccurate, unmatchable, and incomplete contractor information, and program costs were not deducted from the reported cost reductions.

The option to extend the contract 1 year was exercised in October 2010 and again in October 2011. Decisions on continuing the contract must be made in October 2012 and October 2013. The contract methodology is flawed because it allows the contractors to determine the cost reductions and get rewarded based on reported cost reductions. USTRANSCOM must establish baseline costs and a process to calculate cost reductions using a methodology that meets statistical and cost analysis standards. Once developed, the Commander, USTRANSCOM, should certify that the process is valid for the contract. Then the Commander, USTRANSCOM, needs to establish procedures that require a senior DoD employee certify quarterly that reported cost reductions actually occurred.

The Commander, USTRANSCOM, must make future decisions on continuing the contract based upon a certified process for calculating cost reductions and certified cost reduction data and achievement of key performance indicators. The majority of the funds used on the DTCI contract come from the Military Services and DLA. Thus, any decisions on continuing the contract should be based on cost efficiencies that benefit the Military Services and DLA.

On June 11, 2011, the USTRANSCOM contracting officer modified the DTCI contract to make improvements to the way Menlo estimates cost reductions and cost increases on the DTCI contract in the future. The contract modification required Menlo to improve performance based on actual DTCI data instead of the historical baseline. As a result, the contract modification will not correct the questionable information from the baseline used to justify continuing the contract.

Effect of Not Exercising the Contract Options

On August 16, 2010, the Secretary of Defense issued a series of initiatives, including reducing funding for service support contractors by 10 percent per year for FY 2011 through FY 2013. USTRANSCOM budget documents for FY 2013 through FY 2014 indicate annual DTCI contract costs would be about $24.8 million and $24.3 million, respectively.[10] If the DTCI contract were discontinued, this would contribute $49.1 million toward the Secretary's goal.

The Military Services and DLA currently use their respective shipping systems to coordinate DTCI freight. Freight consolidation is another area that ending the contract would not significantly affect, as consolidation savings were an unrealized goal of the DTCI program, according to DLA officials. They indicated that DTCI did not achieve cost reductions for freight consolidation because DLA had an effective system already in

[10] Contract costs include management services and award fees but exclude transportation costs.

place to consolidate freight shipments before implementation of the DTCI program. We observed the consolidation process at DLA's largest depot, Distribution Depot Susquehanna, Pennsylvania (see Figure 2).

Figure 2. Freight Consolidation Process
Distribution Depot Susquehanna, Pennsylvania

Pallets of consolidated freight prepared for shipment on a roller-bed truck. As part of an automated process, DLA's Distribution Standard System routinely prioritizes, sorts, and routes the freight for consolidation.

DLA personnel stated that moving away from DTCI would not adversely affect the process of using dedicated shipments. DLA personnel told us that DLA coordinates with its customers to identify shipping lanes requiring dedicated trucks and that Menlo was not a part of the selection process. Menlo verified that it did not control the use of dedicated trucks.

Although efficiencies were a goal of the DTCI program, savings related to personnel reductions were not an objective of DTCI. Ordering officers at three locations indicated that DTCI had actually increased their workload.

Conclusion

PMO personnel could not show that the DTCI program achieved the DTCI goal of reducing costs on DTCI freight shipments. In addition, the DTCI Award Fee Board paid portions of $2.8 million in award fees to Menlo based on inaccurate performance information. Questionable cost reduction data and program costs exceed any reported cost reductions from the DTCI contract. Contract oversight and accountability for DoD resources needed improvement. Further, customer complaints from the Military Services about the contract performance and additional costs were not addressed. The questionable benefits and performance problems with the contract make exercising the FY 2013 option problematic. Future decisions on the contract should be based on a certified process for determining that program benefits occur and offset the contract costs.

Management Comments on the Finding and Our Response

USTRANSCOM Comments

The Commander, USTRANSCOM, provided comments on the internal control weakness. He indicated that USTRANSCOM modified the DTCI contract in June 2011 to adjust the methodology used to determine cost avoidances. He stated that the new method improves cost avoidance calculations and was reviewed and approved by the Military Services and DLA.

Our Response

The Commander's comments were responsive. We did not audit the cost avoidances reported after the modification of the contract in June 2011.

Recommendations, Management Comments, and Our Response

Deleted and Renumbered Recommendations

As a result of management comments, we deleted draft Recommendation 1.c. Draft Recommendations 1.d through 1.l have been renumbered as Recommendations 1.c through 1.k.

1. We recommend that the Commander, United States Transportation Command:

a. Perform a review of the lack of compliance with the Quality Assurance Surveillance Plan by the Program Management Office personnel and contracting officials and based on that review, consider any administrative actions, as appropriate.

USTRANSCOM Comments

The Commander agreed with the recommendation. He stated that PMO and contracting personnel were in compliance with the QASP and that Government files documented adherence to the QASP.

Our Response

The Commander's comments were not responsive. Based on work we performed, there was no evidence of compliance with the QASP and the Commander did not indicate whether he performed the review, and if so, what the conclusions were. We request that he provide the Government files that show compliance.

b. Establish a plan to identify and track all Military Service and Defense Logistics Agency budget and reprogramming actions that occur as a result of Defense Transportation Coordination Initiative contract cost reductions.

USTRANSCOM Comments

The Commander disagreed with the recommendation and stated that budget or reprogramming actions by the Services and DLA were not within the scope of USTRANSCOM authority.

Our Response

The Commander's comments were not responsive. We did not request that USTRANSCOM perform any budgeting or reprogramming actions in the Military Services and DLA. We recommended that USTRANSCOM establish a plan to identify what benefits the Military Services and DLA achieved through DTCI.

We believe this is a program management function and is a necessary part of management of the program. It is the responsibility of USTRANSCOM to demonstrate

the results of the DTCI program, and USTRANSCOM could request the information from the Military Services and DLA.

To justify continuance of the contract, we continue to believe that USTRANSCOM needs a plan to track the fiscal effect of DTCI on the Services and DLA budgets. We request that the Commander provide further comments.

c. Provide the Military Services and Defense Logistics Agency with information on the additional costs and the option of canceling or reducing participation in the Defense Transportation Coordination Initiative.

USTRANSCOM Comments

The Commander agreed that a full review of the baseline was warranted. He stated that USTRANSCOM was in the process of conducting a DTCI enterprise-wide review and would coordinate with the Services and DLA to address areas needing improvement. He stated that it was premature to discuss canceling or reducing the scope the DTCI program.

d. Deduct program management services from reported cost reductions.

USTRANSCOM Comments

The Commander agreed with the recommendation and stated that USTRANSCOM would ensure the consistent reporting of all future cost reductions.

e. Develop an effective and accurate methodology to establish baseline costs used to calculate cost reductions or another method to compare Defense Transportation Coordination Initiative freight shipment prices with DoD or market-based prices and certify in writing that there are cost reductions, using data prepared by DoD personnel using a process similar to DoD Instruction 7041.3, "Economic Analysis for Decisionmaking," November 7, 1995.

USTRANSCOM Comments

The Commander agreed and stated that although DoDI 7041.3 did not apply to service contracts, USTRANSCOM had considered it and complied with Enclosure 3, paragraph 4.2.2 by using cost-estimating techniques reasonably based on the amount and quality of available data.

Our Response

The Commander's comments on Recommendations 1.c through 1.e were responsive and no further comments were required.

f. Verify that a complete Quality Assurance Surveillance Plan is implemented.

USTRANSCOM Comments

The Commander agreed and stated that USTRANSCOM had a fully implemented Quality Assurance Surveillance Plan.

Our Response

The Commander's comments were not responsive. While he agreed he fully implemented a QASP, there was no evidence of it. We request the Commander provide the information demonstrating he fully implemented the QASP.

g. Rescind the March 18, 2010, customer advisory on submission of customer complaints.

USTRANSCOM Comments

The Commander agreed to issue a new customer advisory by the end of April 2012. We confirmed that the advisory was issued on June 29, 2012.

h. Follow up on customer complaints and UNISYS findings related to Menlo's increased use of exceptions.

USTRANSCOM Comments

The Commander agreed with the recommendation and stated that the PMO would ensure all customer complaints are addressed. The Commander also stated that the UNISYS findings were inaccurate and that the PMO and Menlo had adjudicated the issue.

i. Review the award fee process for Menlo to determine whether it should return a portion of the award fees because of the questionable cost reduction and on-time delivery information it provided.

USTRANSCOM Comments

The Commander agreed with the recommendation and stated that PMO personnel validated on-time delivery information and that the award fees earned and paid to Menlo were valid.

j. Establish procedures that require a senior DoD employee certify quarterly the reported cost reductions or cost increases accrued.

USTRANSCOM Comments

The Commander agreed to establish procedures and certify the costs. He stated that the first certification would occur by the end of June 2012. The certification was rescheduled for October 2012.

k. Decide whether to continue the contract in FY 2013 based on certified data that show the Defense Transportation Coordination Initiative achieves cost savings goals and other key performance indicators.

USTRANSCOM Comments

The Commander agreed to review Menlo's performance before exercising the next option. He stated that the Award Term Option Determining Official would review Menlo's performance against the criteria set forth in the Award Term Option Plan.

Our Response

The Commander's comments on Recommendations 1.g through 1.k were responsive, and no further comments were required.

Appendix A. Scope and Methodology

We conducted this performance audit from August 2010 through December 2011 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

We obtained information on the effectiveness of the DTCI during site visits to the Distribution Depot Susquehanna, Pennsylvania; USTRANSCOM; and Menlo Worldwide Government Services, Aurora, Illinois. We interviewed CORs, ordering officers, transportation officers, information technology personnel, financial personnel, USTRANSCOM PMO personnel, and Menlo staff. We also obtained information on DTCI from official Government and contractor Web sites.

We analyzed more than 473,000 historical cost records used to develop the DTCI baseline. Specifically, we used analytical review procedures to identify anomalies and items typically ineligible for shipment under the DTCI program (such as items weighing less than 150 pounds and excluded items).

We analyzed more than 698,000 DTCI shipping records, from March 2008 through September 2010, with an extended cost of about $384.5 million and a reported cost reduction of $167.4 million. Using analytical review procedures, we identified $85.8 million in anomalies. We assessed DoD's oversight of the system and records, but we did not verify the underlying data to DoD shipping and payment systems.

We reviewed the DTCI contract with Menlo and support services contracts with LMI and UNISYS to identify performance measures and work requirements. We examined official contract files and identified quality assurance documentation, including required checklists.

We reviewed $2.8 million in award fees provided to Menlo since the contract began in FY 2008. We examined in detail the supporting records for Award Fee Period No. 6 (April 2010 through October 2010). The examination included 75 customer evaluations submitted to the PMO during the award fee process for Period No. 6.

We examined 7,039 customer complaints filed in the Customer Feedback Tool (from FY 2008 through FY 2010) and identified areas with widespread problems, such as late pickups and deliveries.

We reviewed the results of Navy analyses of 435 DTCI shipments (from April 2010 through May 2011) that compared DTCI costs to GFM System tender rates. We also reviewed the results of an Army analysis of 38 DTCI shipments that occurred in calendar years 2009 and 2010. We did not verify the supporting information on the Navy and

Army comparisons. The Army and Navy used the analyses to question the validity of Menlo-reported cost savings when the Army and Navy believed DTCI costs were high.[11]

We summarized USTRANSCOM DTCI budget documents for FY 2011 through FY 2014 that projected DTCI program costs of $73.8 million.

Use of Computer-Processed Data

We used computer-processed data to perform this audit and tested it for reliability. Specifically, we obtained a universe of DTCI shipment data from the DTCI contractor's information system, Menlo's One Network Enterprise Transportation Management System. We obtained data for the period March 2008 through December 2010; however, we limited our scope to coincide with the end of the fiscal year (September 2010). During our analysis of the shipment data, we determined that cost reduction estimates computed by the system were unreliable. Specifically, we identified 4,715 shipment records that were statistical outliers and had produced unreliable cost reductions totaling $84.8 million. We also identified unreasonably low and high cost per hundredweight, shipments with either zero cost or zero weight, and shipments with invalid states and zip codes. We found that the costs on dedicated shipments in Menlo's system were unreliable and did not match the costs identified in the Syncada payment system.

We obtained four versions of historical shipment data compiled by LMI that we tested for reliability. We determined that the LMI data were inaccurate, incomplete, and unmatchable. For example, we identified shipments that were ineligible for the DTCI program that LMI should have excluded from the database (items such as arms, ammunition, explosives, and small items). We also found that the LMI data did not always include information on large shipments that weighed more than 20,000 pounds and that the data had not been adjusted for inflation.

Use of Technical Assistance

Personnel from the Quantitative Methods Division assisted us in evaluating DTCI shipment data provided by Menlo. See Appendix B for details on our statistical analysis.

Prior Coverage on DTCI

During the last 5 years, the Government Accountability Office (GAO) and the Defense Contract Audit Agency (DCAA) have issued five reports and one GAO decision discussing the DTCI. Unrestricted GAO reports can be accessed over the Internet at http://www.gao.gov. DCAA reports are restricted.

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[11] Per DoDI 4500.57, "Transportation and Traffic Management," March 18, 2008, non-FAR procurement instruments such as tenders of service and bills of lading will not compete with FAR procurements and shall only be used in limited situations when FAR procurements cannot meet customer requirements.

GAO

GAO Report No.11-569, "Defense Logistics: DoD Needs to Take Additional Actions to Address Challenges in Supply Chain Management," July 28, 2011

GAO Report No. GAO-07-675R, "Defense Transportation: DoD Has Taken Actions to Incorporate Lessons Learned in Transforming Its Freight Distribution System," May 8, 2007

GAO Protest Decision B-298651, "2B Brokers et al.," November 27, 2006

DCAA

Defense Contract Audit Agency Report No. 4411-2009P17900002, "Report on Audit of Recorded Direct Freight Transportation Costs Under Task Order 0001," June 24, 2010

Defense Contract Audit Agency Report No. 4411-2009P27000006, "Report on Audit of Parts of a Proposal for Defense Coordination Transportation Initiative Phase IV," October 13, 2009

Defense Contract Audit Agency Report No. 06211-2009C21000007, "Report on Audit of Subcontract Proposal to Menlo Worldwide Government Services (MWGS)," September 11, 2009

Appendix B. Statistical Analysis

We performed a statistical analysis on DTCI shipment data from March 2008 through December 2010 that the contractor provided in an Access database. The database included 774,830 records and 14 data fields. Our statistical analysis began with the 698,276 shipments made from March 2008 through September 2010, as they corresponded with the time period of the cost reduction amounts reported by USTRANSCOM. We reduced our analysis to include 698,265 shipments, as 11 records were incomplete and missing key data elements.

We used an Access expression to filter all shipments that were outside the March 2008-September 2010 time period. We used the basic "Count" function to determine the total number of shipments (698,265) and "Sum" function to total the amounts in the "Savings" field ($166.5 million). We used the "PivotChart" function to determine the mean ($238.48) and standard deviation ($2,663.43) of the cost reduction.

We added or subtracted the standard deviation to and from the mean to determine the range of the first standard deviation from the mean. To determine the range of the second and third standard deviation, we added or subtracted the standard deviation to and from the first and second standard deviation. We considered all shipments outside the range of three standard deviations from the mean to be outliers. Table B-1 shows the low and high range for each of the three standard deviations and outliers.

Table B-1. Standard Deviation Ranges for the DTCI Shipment Data March 2008-September 2010

	Low Range	High Range
1st Std Dev	$(2,424.95)	$2,901.91
2nd Std Dev	(5,088.38)	5,565.34
3rd Std Dev	(7,751.81)	8,228.77
Outliers	< (7,751.81)	> 8,228.77

Note: Std Dev – standard deviation

We determined that 4,715 shipments with an absolute value of $86.8 million (net $84.8 million) were outliers. Using Access, we separated the information by shipments that had a positive and negative value. Therefore, the count is based on shipments with a cost reduction within the standard deviation range and separated by values above (positive) and below (negative) zero. For example, of the 4,715 outliers, 4,640 had a positive value and 75 had a negative value. As displayed in Table B-2, of the 4,715 outliers, there were $85.8 million in cost reductions and $1.0 million in cost increases.

Table B-2. Analytical Review of DTCI Cost Reductions
March 2008-September 2010
($ in millions)

Category	No. of Shipments			Cost Reported		
	Cost Reduction	Cost Increase	Total	Cost Reduction	Cost Increase	Total
Within 1st Std Dev	253,594	417,516	671,110	($101.2)	$83.6	**$17.7**
1st Std Dev – 2nd Std Dev	14,048	4,458	18,506	(55.7)	14.0	**41.7**
2nd Std Dev – 3rd Std Dev	3,612	322	3,934	(24.3)	1.9	**22.4**
Outliers	4,640	75	4,715	(85.8)	1.0	**84.8**
Total	**275,894**	**422,371**	**698,265**	**($267.0)**	**$100.5**	**$166.5**

Std Dev – standard deviation

As shown in Table B-2, we calculated that $86.8 million (absolute value) in reported cost reductions were outliers, beyond three standard deviations, that required further investigation because they reflected unusual and extreme cost reductions. Table B-3 shows the 10 most extreme outliers in the 4,640 that fell outside three standard deviations.

Table B-3. Top 10 Extreme Cost Reduction Outliers
March 2008-September 2010

Shipment Number	State		Cost		
	From	To	Line Haul*	Baseline	Reported Reduction
S421945446	FL	AL	$3,500	$536,765	$533,265
HEAGAG00168651	GA	CA	3,306	455,253	451,947
HEAGAG00194968	GA	CA	2,350	373,515	371,165
S473686445	UT	IN	3,524	304,604	301,080
HWBCYC00075613	CA	FL	4,670	290,547	285,877
S507690212	FL	GA	600	281,590	280,990
S507689740	FL	GA	600	281,590	280,990
LJMLD362006	CA	FL	4,585	282,221	277,636
S438394489	KY	KS	862	268,950	268,088
S446478560	WA	IL	$2,787	$252,446	$249,659

*Cost of the shipment, but does not include accessorials or fuel surcharges

We determined that the outliers accounted for 0.68 percent of the total DTCI shipments between March 2008 and September 2010 and, as shown in Table B-4, accounted for more than 50 percent of the reported cost reductions.

Table B-4. Standard Deviations of DTCI Shipments With Corresponding Cost Reduction Percentage

	Shipments (percent)	**Cost Reduction (percent)**
Within 1st Std Dev	96.11	10.60
1st Std Dev – 2nd Std Dev	2.65	25.02
2nd Std Dev – 3rd Std Dev	0.56	13.43
Outliers	0.68	50.94
Total	**100.00**	**100.00**

Note: Std Dev - standard deviation, and totals may not sum because of rounding.

Appendix C. Extreme Outliers

The outliers listed here had extreme baseline costs ranging from $63 to $2,586 (per hundredweight) that distorted the calculated cost reductions. The baseline rates for the outliers exceeded those in the General Services Administration (GSA) Baseline Rate Publication No. 1000-D. Specifically, GSA publications for the transportation of freight by civilian agencies indicated that baseline rates range from $5.24 to $59.14 depending on the transported distance (Cost per hundredweight rates for less than truckload shipments per the GSA publication, current as of August 17, 2011).

1. Shipment No. S421945446. Menlo's records indicated that this shipment went from Florida to Alabama at a cost of $3,500 and weighed 107,840 pounds. This was a cost of $3.24 per hundredweight. Menlo calculated a cost reduction of $533,265 on this shipment. This outlier occurred because LMI used only one historical shipment to calculate the baseline. Also, the historical shipment had a description of firearms or parts, which are excluded from the DTCI program. The historical shipment cost $4.97 per pound, and LMI used it to calculate a baseline cost per hundredweight of $497.74.

2. Shipment No. HEAGAG00168651. Menlo's records indicated this shipment went from Georgia to California at a cost of $3,306 and weighed 17,600 pounds. This was a cost of $18.78 per hundredweight. Menlo calculated a cost reduction of $451,947. This outlier occurred because LMI used only one historical shipment that weighed less than 150 pounds. LMI used the cost of $25.86 per pound to calculate a baseline cost per hundredweight of $2,586.67.

3. Shipment No. HEAGAG00194968. Menlo's records indicated this shipment went from Georgia to California at a cost of $2,350 and weighed 14,440 pounds. This was a cost of $16.27 per hundredweight. Menlo calculated a cost reduction of $371,165. The cost reduction on this shipment used the same baseline cost per hundredweight of $2,586.67 as shipment 2.

4. Shipment No. S473686445. Menlo's records indicated this shipment went from Utah to Indiana at a cost of $3,524 and weighed 36,630 pounds. This was a cost of $9.62 per hundredweight. Menlo calculated a cost reduction of $301,080. This outlier occurred because LMI used only one historical shipment to calculate the baseline, and it was a shipment of guns, machine, or parts for small arms, which are excluded from the DTCI program. LMI used the cost of $8.31 per pound to calculate a baseline cost per hundredweight of $831.57.

5. Shipment No. HWBCYC00075613. Menlo's records indicated this shipment went from California to Florida at a cost of $4,670 and weighed 36,800 pounds. This was a cost of $12.69 per hundredweight. Menlo calculated a cost reduction of $285,877. LMI used nine historical shipments to calculate the baseline. This outlier occurred because the historical data included two shipments of parts for fire arms and guns and shipments with

weights under 150 pounds, which are excluded from the DTCI program. LMI used the average cost of $7.89 per pound and calculated a baseline cost per hundredweight of $789.53.

6. Shipment No. S507690212. Menlo's records indicated this shipment went from Florida to Georgia at a cost of $600 and weighed 25,980 pounds. This was a cost of $2.31 per hundredweight. Menlo calculated a cost reduction of $280,990. This outlier occurred because LMI used only two historical shipments to calculate the baseline and the historical data included shipments with weights under 150 pounds. LMI used the average cost of $10.83 per pound to calculate a baseline cost per hundredweight of $1,083.87.

7. Shipment No. S507689740. Menlo's records indicated this shipment went from Florida to Georgia at a cost of $600 and weighed 25,980 pounds. This was a cost of $2.31 per hundredweight. Menlo calculated a cost reduction of $280,990. This outlier used the same baseline cost per hundredweight of $1,083.87 as shipment 6.

8. Shipment No. LJMLD362006. Menlo's records indicated this shipment went from California to Florida at a cost of $4,585 and weighed 24,500 pounds. This was a cost of $18.71 per hundredweight. Menlo calculated a cost reduction of $277,636. This outlier occurred because LMI used only one historical shipment to calculate the baseline. The historical shipment had a description of guns, machine, or parts for use of small arms, which are excluded from the DTCI program. LMI used the cost of $11.51 per pound to calculate a baseline cost per hundredweight of $1,151.92.

9. Shipment No. S438394489. Menlo's records indicated this shipment went from Kentucky to Kansas at a cost of $862 and weighed 34,400 pounds. This was a cost of $2.51 per hundredweight. Menlo calculated a cost reduction of $268,088. This outlier occurred because LMI used only one historical shipment to calculate the baseline cost of $7.81 per pound and a baseline cost per hundredweight of $781.83.

10. Shipment No. S446478560. Menlo's records indicated this shipment went from Washington to Illinois at a cost of $2,787 and weighed 400,000 pounds. This was a cost of $0.70 per hundredweight. Menlo calculated a cost reduction of $249,659. LMI used only two historical shipments to calculate the baseline cost of $0.63 per pound and a baseline cost per hundredweight of $63.11. This outlier occurred because LMI relied on only two shipments to formulate the baseline and because Menlo reported an erroneous shipment weight. The Army COR provided information that the correct weight should have been 40,000 pounds, with a cost per hundredweight of $6.97. The incorrect weight overstated the cost reduction by $227,196.

United States Transportation Command Comments

UNITED STATES TRANSPORTATION COMMAND
508 SCOTT DRIVE
SCOTT AIR FORCE BASE, ILLINOIS 62225-5357

9 March 2012

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL

FROM: COMMANDER, UNITED STATES TRANSPORTATION COMMAND

SUBJECT: GAO DRAFT Report, Project No. D2010-D000FJ-0246.000, "Questionable Data Cast Doubt on the Need for Continuing the Defense Transportation Coordination Initiative," dated February 7, 2012

1. United States Transportation Command (USTRANSCOM) and our Army Component Command, Military Surface Deployment and Distribution Command (SDDC), have reviewed subject report and provide the responses contained in the attachment.

2. USTRANSCOM POC is [redacted]. She can be reached at [redacted], or NIPR e-mail: [redacted]; or SIPR e-mail: [redacted].

WILLIAM M. FRASER III
General, USAF
Commander

Attachment:
USTRANSCOM/SDDC Comments

cc:
USTRANSCOM/TCAQ
SDDC

Final Report Reference

DoDIG Draft Report on Audit of the Defense Transportation Coordination Initiative (DTCI) "Questionable Data Cast Doubt on the Need for Continuing the Defense Transportation Coordination Initiative" (Project No. D2010-D000FJ-0246.000)
Recommendations and Responses

Recommendation 1.a: Perform a review of the lack of compliance with the Quality Assurance Surveillance Plan by the Program Management Office personnel and contracting officials and based on that review, consider any administrative actions, as appropriate.

USTRANSCOM Response: Concur with comment. Program Management Office (PMO) and contracting personnel are in compliance with the DTCI QASP. Government files document adherence to the QASP. The Quality Assurance Surveillance Plan (QASP) consists of performance objectives and thresholds, the surveillance responsibilities of the government, the procedures for evaluating performance and resolving issues, and the process to be followed to reduce contractor payment for non-performance of services.

Recommendation 1.b: Establish a plan to identify and track all Military Service and Defense Logistics Agency budget and reprogramming actions that occur as a result of Defense Transportation Coordination Initiative contract cost reductions.

USTRANSCOM Response: Non-concur. Budget or reprogramming actions by the military Services or Defense Logistics Agency (DLA) as a result of DTCI cost avoidance does not fall within the scope of USTRANSCOM authorities.

Recommendation 1.c: Determine whether 60 percent of the Defense Transportation Coordination Initiative shipments that did not result in cost reductions should continue under the contract.

Deleted

USTRANSCOM Response: Non-concur. The contractual cost avoidance calculation methodology is not designed to evaluate each shipment at a transactional level, but rather at the enterprise level.

Recommendation 1.d: Provide the Military Services and Defense Logistics Agency with information on the additional costs and the option of canceling or reducing participation in the Defense Transportation Coordination Initiative.

Renumbered as Recommendation 1.c.

USTRANSCOM Response: Concur with comment. USTRANSCOM agrees a full review of the baseline is warranted. USTRANSCOM and Military Surface Deployment and Distribution Command (SDDC) are currently conducting a DTCI enterprise-wide review with a planned completion date of June 2012. The Program Management Office (PMO) will coordinate with the military Services, DLA, and the contractor to address any areas needing improvement. We think it is premature at this time to discuss canceling or reducing the scope of the DTCI program.

Recommendation 1.e: Deduct program management services from reported cost reductions.

Renumbered as Recommendation 1.d.

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Final Report Reference

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Recommendations and Responses

USTRANSCOM Response: Concur. USTRANSCOM deducts management services from reported cost reductions to DTCI stakeholders on a quarterly basis. We will ensure all future cost reduction figures are consistently reported.

Recommendation 1.f: Develop an effective and accurate methodology to establish baseline costs used to calculate cost reductions or another method to compare Defense Transportation Coordination Initiative freight shipment prices with DoD or market-based prices and certify in writing that there are cost reductions, using data prepared by DoD personnel using a process similar to DoD Instruction 7041.3, "Economic Analysis for Decisionmaking," November 7, 1995.

Renumbered as Recommendation 1.e.

USTRANSCOM Response: Concur with comment. DoDI 7041.3 does not apply to contracts for services. We did, however, consider DODI 7041.3 and complied with paragraph 4.2.2., Enclosure 3 methodologies for the DTCI business case analysis, by using cost estimating techniques reasonably based on the amount and quality of data available.

Recommendation 1.g: Verify that a complete Quality Assurance Surveillance Plan is implemented.

Renumbered as Recommendation 1.f.

USTRANSCOM Response: Concur. USTRANSCOM is in compliance with a fully implemented QASP. The QASP will be reviewed and modified as necessary prior to exercising the next contract option.

Recommendation 1.h: Rescind the March 18, 2010, customer advisory on submission of customer complaints.

Renumbered as Recommendation 1.g.

USTRANSCOM Response: Concur. A new customer advisory will be issued by the end of April 2012 to clarify the transportation officer's ability to provide feedback.

Recommendation 1.i: Follow up on customer complaints and UNISYS findings related to Menlo's increased use of exceptions.

Renumbered as Recommendation 1.h.

USTRANSCOM Response: Concur. DTCI PMO will ensure all customer complaints are addressed by Menlo. Unisys' findings related to Menlo's increased use of exceptions were adjudicated between Menlo and the PMO and were found to be inaccurate.

Recommendation 1.j: Review the award fee process for Menlo to determine whether it should return a portion of the award fees because of the questionable cost reduction and on-time delivery information it provided.

Renumbered as Recommendation 1.i.

USTRANSCOM Response: Concur with comment. The award fee process used for this contract was reviewed by various government organizations during the DTCI acquisition process and was deemed acceptable. The most recent award fee plan was approved on 5 Nov 2010. The award fees earned and paid to Menlo are valid and approved by the Fee Determining Official during each Award Fee Review Board. Award fees are based upon a review of Menlo's

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Final Report Reference

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Recommendations and Responses

performance against the criteria outlined in the Performance Work Statement (PWS) and set forth in the award fee plan. On-time delivery information was validated by PMO personnel and determined to be accurate. The next Award Fee Review Board is scheduled for June 2012.

Recommendation 1.k: Establish procedures that require a senior DoD employee certify quarterly the reported cost reductions or cost increases accrued.

Renumbered as Recommendation 1.j.

USTRANSCOM Response: Concur. USTRANSCOM will establish procedures which will require the PMO to submit costs to a Senior DoD official on a quarterly basis for certification. Procedures will be in place and the first certification will take place by the end of June 2012.

Recommendation 1.l: Decide whether to continue the contract in FY 2013 based on certified data that show the Defense Transportation Coordination Initiative achieves cost savings goals and other key performance indicators.

Renumbered as Recommendation 1.k.

USTRANSCOM Response: Concur. USTRANSCOM will perform a review of contractor performance prior to exercising an option period. Award term option periods earned by the contractor will be determined by the Award Term Option Determining Official (ATODO) based upon a review of the contractor's performance against the criteria set forth in the Award Term Option Plan. The decision to exercise the next option will be made by mid-Aug 2012.

Internal Control Weakness: USTRANSCOM did not develop and include in the contract an effective methodology to establish baseline transportation costs and calculate cost reductions from shipments to verify cost reductions and performance on the DTCI contract.

USTRANSCOM Response: USTRANSCOM utilized the services of GENCO, a premier third party logistics company, as well as LMI, a longstanding defense research contractor, to aide in the development of the baseline. The methodology used was jointly reviewed and approved by USTRANSCOM, the military Services and DLA. USTRANSCOM assisted in the development of and subsequently approved the baseline transportation costs and cost reduction calculations to verify cost avoidance and performance on the contract.

The DTCI contract was modified in June 2011 to adjust the methodology used to determine cost avoidance. The modification requires Menlo to improve its performance on a year-to-year basis with a 2 percent annual increase in cost savings (1 percent increase in the final year), using the prior year's baseline. This method improves cost avoidance calculations and was reviewed and approved by the military Services and DLA.

Inspector General
Department of Defense