

Commercializing **USCENTCOM** AERIAL PORTS

By **JOHN E. MICHEL** and **JEAN M. MAHAN**

Over the last 3 years, commercial aircraft have become a predominant in-theater conveyance for both Department of Defense (DOD) cargo and an increasing number of non-DOD activities. With more and more commercial aircraft converging on a limited number of U.S. Central Command (USCENTCOM) airfields, the need for a robust commercial port handling capability has never been greater.

As we examine ways to make our system operate more efficiently across the enterprise, it becomes readily apparent that the timing is right to address the commercialization of the USCENTCOM aerial port structure—the foundation from which our theater airlift system flows. Consider the potential savings: The U.S. Air Force spends over \$14 million per year to run the contract aerial port at Kuwait International Airport alone. A simple extrapolation of the costs associated with running the numerous aerial ports in the USCENTCOM area of responsibility, most of which are operated by DOD with large numbers of Guard and Reserve forces, nets our estimate of \$150 million a year.¹ This figure does not take into account the effects of extended deployments on personnel in critically stressed career fields such as air transportation management and other core competencies where manning and experience are stretched to meet global requirements.² The end effect of our current theater port posture substantially strains U.S. ability to respond to emerging requirements and reliably project global power when and where it is needed most.

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C-5 at Kuwait International Airport during mission to support U.S. forces in Iraq and Afghanistan



U.S. Air Force (Ted Theopolis)

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USCENTCOM airlift costs exceeded \$1.6 billion in fiscal year 2008. The Il-76 contract in Kuwait supporting the distribution of Mine Resistant Ambush Protected Vehicles exceeded \$200 million. Although commercial tenders netted the government hundreds of millions in savings over similar C-130 usage last year, the Air Force is estimated to have spent over \$400 million for the “Theater Express” mission in USCENTCOM. Additional C-17 and C-130 support in-theater cost the Air Force another \$800 million (see figure 1). When we add the expected \$150 million for maintaining a robust aerial port capability, we approach \$1.6 billion. These figures do not account for the vast amounts of mail moved by air throughout the theater or the in-theater airlift tender services utilized to expedite movement of World Wide Express (WWX) cargo by the Defense Logistics Agency and the Services.

The paradigm for working with commercial transportation partners has been to contract for individual components of a segmented system. Contracts are structured to benefit and protect the government, but they come at a premium. In traditional contractual

arrangements, the government accepts responsibility for providing the real estate, material handling equipment (MHE), and information technology systems to run the operation. The contractor is usually required only to deliver experienced personnel. In support of such programs, performance parameters are established at the inception of the contract. Process modifications during the course of the contract normally result in additional costs to the government. Even when process improvements might yield additional throughput efficiencies, commercial partners are not required or incentivized to consistently exploit opportunities for our collective system to run faster, better, cheaper, or safer. In effect, our traditional means of partnering in the business of theater port management provide no real mechanism or incentive for continuous improvement.

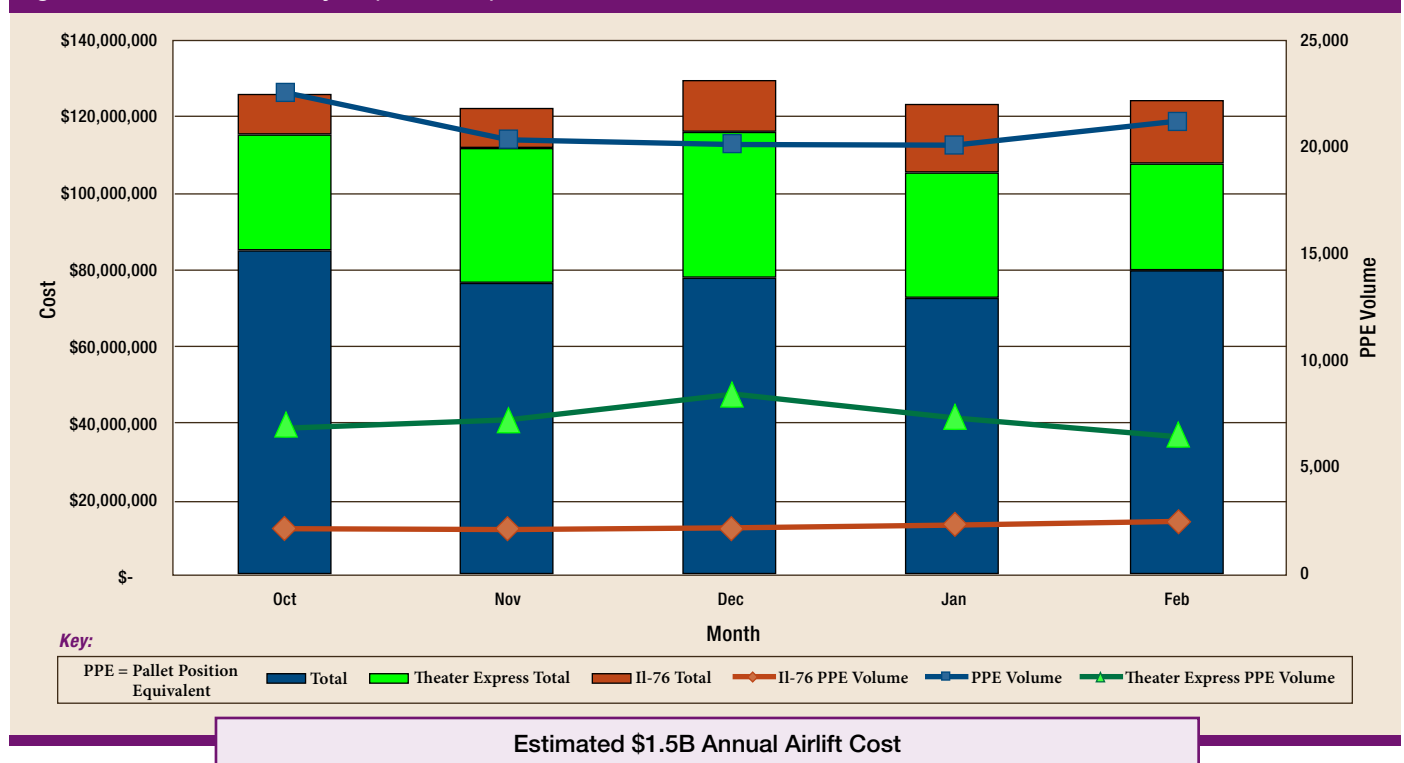
Opportunity

As we transition to long-term, sustainable operations in a rapidly maturing theater, there is an opportunity to leverage the strengths and motivations of current in-theater commercial players. Our Theater Express commercial partners, who provide

a significant portion of intratheater airlift, have a vested interest in performance. The carriers are contractually bound and committed to providing world-class service to the warfighter while operating in an environment of increasing systemic turbulence caused by limitations with parking, fuel, and airfield landing permissions. While use of Theater Express has increased nearly fourfold since January 2007, performance has declined steadily. In spring 2008, for instance, the Joint Distribution Process Analysis Center analyzed port velocity with a focus on “What the Customer Feels,” ultimately learning that the airlift system does not provide reliable service to the final destination for many of the busiest city pairs (see figure 2). With the increased challenges the carriers face and declining performance, port velocity is a renewed focus area that is important to each carrier’s future success.

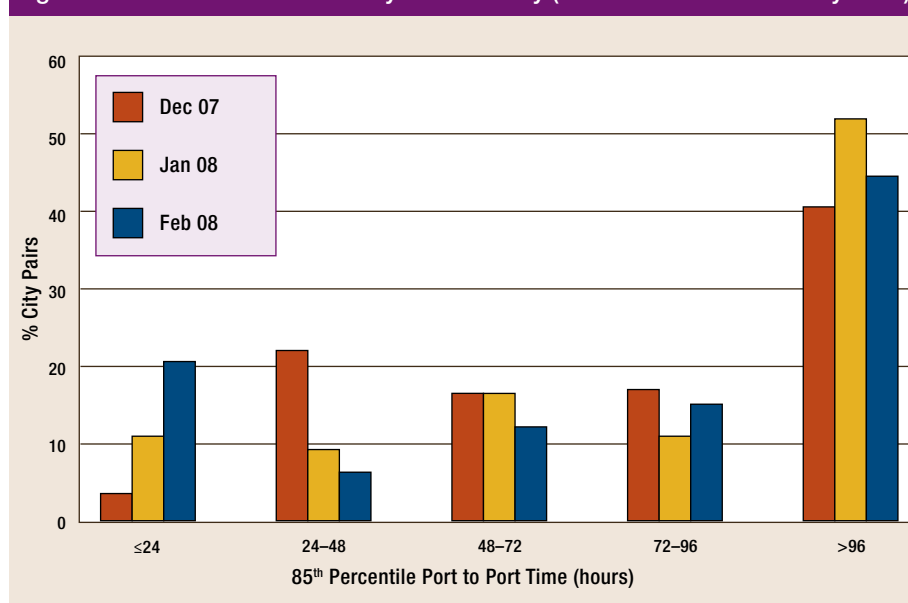
The theater is currently well positioned to reduce DOD presence sooner rather than later, if we focus on leveraging existing relationships with those commercial partners who already have a strong financial incentive for the aerial ports to run at optimum efficiency.

Figure 1. Theater Airlift Analysis (Total Cost)



Source: USTRANSCOM Joint Distribution Process Analysis Center briefing, “AOR by the Numbers,” March 2008. The briefing showed \$1.5 billion for intratheater airlift costs associated with organic airlift, Theater Express, and Il-76 contract.

Figure 2. Port Performance and System Velocity (December 2007–February 2008)



Source: Joint Distribution Process Analysis Center, "What the Customer Feels," March 2008.

In 2004, almost all air freight being delivered to the U.S. military in Iraq and Afghanistan was transported on military aircraft. This is no longer the case. Commercial aircraft have rapidly become the predominant conveyance for theater air cargo delivery. The combined force air component commander's objectives complement these realities with a goal to move 50 percent of the intratheater cargo commercially. This is in line with the current reality that half of DOD sustainment and contingency cargo is currently being flown by the Theater Express program on any given day. The magnitude of additional cargo flowing on WXX small package delivery (less than 300 pounds), mail contract vehicles, and other government-contracted movements on Skylink Arabia makes the percentage of DOD cargo flown on commercial aircraft higher than 50 percent. Beyond these DOD commercial movements, hundreds of other commercial aircraft are delivering cargo and personnel in support of contractors hired by various elements of the U.S. Government and its allies. With all of these disparate parties converging on a limited number of airfields, the need for a robust commercial port handling infrastructure to support increasingly commercial movements has never been greater. We should make this transition now while the conditions are right.

Indeed, our collective commitment as good stewards of taxpayer dollars requires that we address how to best synchronize

military needs with the long-term desire to support the establishment of a viable commercial infrastructure.³ The commercial port infrastructure must be flexible enough to adapt to emerging requirements while still being both cost-effective for DOD and profitable for our commercial partners. Just as important, the concept must be resilient enough to remain in place as military aerial port capability is redeployed.

Plan for Change

The transformation of an essentially military operation into a resilient, enduring commercial operation requires that we address several considerations, such as phased implementation, scope of commercialization, MHE, contractor selection, and cost reimbursement.

A phased port commercialization strategy is necessary to set maturation timelines and refine specifications for success since many ports are less developed in terms of infrastructure and sustainable commercial throughput. These commercialization efforts have implications for the future economic viability of Iraq. To ensure efforts are in sync with the overall development of Iraq's commercial distribution system, port development priorities and timelines should be defined by USCENTCOM.

To initially explore the concept, we recommend conducting a port commercialization proof of principle at a port with sufficient

inter- and intratheater commercial traffic. A commercial Theater Express partner would be selected who could meet the requirements to handle (load and offload) wide-body civilian aircraft and provide in-transit visibility information. The proof of principle would be evaluated by a team of aerial port specialists to assess the viability of the construct. Documented issues and lessons learned would be used to evaluate the merits of continued implementation as well as to refine the required specifications for follow-on implementation phases. We believe a port such as al Asad provides an ideal location to initially test the commercialization concept. This port does not experience the daily throughput constraints and competition for landing rights associated with Iraq's busier airfields; it supports both organic and commercial aircraft operations; and al Asad's location in Iraq provides new multimodal commercial options to the final destination such as the Iraqi Transportation Network.

In March 2008, al Asad was one of several ports evaluated in the joint U.S. Transportation Command (USTRANSCOM)/USCENTCOM Deployment Distribution Operations Center (CDDOC) study "Connecting the Pipes."⁴ The study was designed to assess the feasibility and benefits of an in-theater reception port to receive direct delivered stateside sustainment cargo, carried on both organic and commercial aircraft. The investigation found that interior reception ports closer to the warfighter, such as al Asad, provided the best results in terms of cost and delivery times. Additional cost savings are possible if there is a multimodal option to transload to commercial surface conveyances when the cargo volume and distances make it cost-effective to secure the convoy. This concept later became the centerpiece of a

investigation found that interior reception ports closer to the warfighter provided the best results in terms of cost and delivery times

CDDOC White Paper examining opportunities to expand and/or accelerate commercialization of distribution across the theater in concert with General David Petraeus' 2007 "Iraqi First" Program. Specifically, the paper suggests a hybrid proof of principle where

strategically delivered cargo is moved to its end destination by surface. By our estimates, this initiative offers a 30 to 50 percent savings over current intratheater airlift movement if commercial surface delivery contracts are established to locations such as Balad and Baghdad. If we target the roughly 250 pallets of cargo arriving at these locations weekly in the spring of 2008, this initiative could conservatively save more than \$12 million annually while providing immediate relief to an already overtaxed airlift system.

The scope of early phases of commercialization would cover only commercial aircraft performing commercial intertheater strategic lift missions and Theater Express missions. The commercial services would be limited solely to commercial cargo handling operations. These services are envisioned to include marshalling, parking, loading/unloading, in-transit visibility, and managing advanced notification to the proper command and control agencies.

Commercial partners would provide their own MHE based on commercial best practices, with the exception of specialized items required for military aircraft. As the concept matures and if it is determined to be in the best interests of the government, commercial partners could be provided with commercially available, specialized MHE on a cost-reimbursable basis so they can begin to handle military cargo flights.⁵ This would ensure that a viable port infrastructure for handling military cargo remains in place during the initial phaseout of deployed aerial port personnel.

Many considerations are important to ensure warfighter interests are protected and legal issues are anticipated. The commercial partner should be selected based on a determination of best value to the theater in terms of airlift and port velocity criteria. The government would need to establish a contractual agreement with the selected commercial partner to work and operate on the installation similar to agreements we have with other businesses operating on military installations outside the United States. The operator would need to sign hold-harmless agreements and comply with all local base regulations in addition to any other legal or contractual requirements. The commercial port operators should also be required to maintain established performance levels to ensure the agreement would not be terminated (within preestablished guidelines).

To ensure real-time, in-transit visibility in accordance with USTRANSCOM policies, the government would provide all necessary training and equipment for port operators to interface with systems specifically required by the government for DOD cargo.

We envision a pay-as-you-go system in contrast to the traditional fixed-price port contract where the U.S. Government assumes all risks and costs. With this system, the commercial partner who runs a port assumes responsibility for the business operation along with the financial risk of initial capitalization costs. Commercial partners would be responsible for all operating support costs associated with their personnel and equipment with reimbursement for additional required base services reflected in an appropriate memorandum of agreement.

The largest paradigm shift in this construct is how commercial operators are reimbursed for services rendered. Instead of the government paying millions in sunk infrastructure and operating costs to maintain port cargo services, commercial partners would be reimbursed by commercial aircraft using their services much the same way it occurs at commercial airports. The prevailing commercial rates for the respective country or region would be charged and validated by the appropriate authority at USTRANSCOM to ensure that they remain in line with industry standards. Theater Express operators would in turn build these additional costs into their airlift rates much as they do now, and these costs would become part of the normal commercial operating costs once military handling was no longer available.⁶ This would result in some increase to current tender rates, but it should also eliminate the need for the U.S. Government to continuously invest in ports and personnel for a maturing theater.

This approach is intended to provide a catalyst for maturation of best commercial practices at Iraqi airports, and we hope it will pave the way for other areas of growth—all at no risk to the U.S. Government, which no longer bears the burden of maintaining a fixed-price contract. Moreover, by selecting a commercial operator that is also an airlift provider—one of our Theater Express partners—both the government and the operator would maintain a vested interest in expediting the flow of cargo and aircraft in and out of the port while maintaining high levels of in-transit visibility. Some minimum level of assured throughput might have to be provided

by the U.S. Government in the initial stages of port transformation to help incentivize the commercial operator to make necessary long-term systemic investments.

Pay-as-you-go port handling provides the opportunity for substantial cost avoidance in the future. Under this new construct, additional port commercialization would not require establishing multimillion-dollar annual port handling contracts. To ensure a successful transition to commercialization, there would be value in establishing a solid performance-based incentive program for commercial partners. This program would be used to aggressively incentivize carriers to be successful, establish innovative process

minimum assured throughput might have to be provided in the initial stages of port transformation to incentivize the commercial operator to make long-term systemic investments

improvements, and encourage their investments in building world-class port handling capabilities. Although offering this form of incentive represents another departure in how we currently partner with commercial entities, it could be facilitated by including an independent third party logistics provider empowered to manage the Theater Express program and monitor and report on performance of commercialized USCENTCOM ports.⁷

Construct for a New Era

We advocate continued port commercialization and the transition to an approach that leverages commercial airlift partners in the Theater Express program. This new approach offers a win-win situation on many fronts. Commercial operators could begin to assume greater responsibility for servicing commercial aircraft at locations throughout the USCENTCOM theater in the near term, while the military enhances its efforts to reset low-density/high-demand air transportation managers and reduce overall theater operating costs. All efforts support continual commercial investment in infrastructure while netting long-term benefits to the citizens of Iraq (see table 1).

Unlike what it does for traditional contracts, the government would not have

to provide large amounts of resources to get the operation started or make large annual cash outlays to maintain predictable and sustainable levels of service. Furthermore, commercial operators with aircraft and personnel already operating in support of DOD would have a vested interest in quick-turning aircraft—in effect becoming enterprise partners instead of simply providers of a service detached from the outcomes of their efforts. In subsequent maturation phases, these same operators could be leveraged to enhance end-to-end distribution solutions by offering access to viable multimodal alternatives to final destinations via new vehicles such as the Iraqi Transportation Network and Iraqi Theater Wide Trucking contracts overseen by the Commercial Distribution Division at Multi-National Force–Iraq.⁸

The commercial potential in these markets is significant as stabilization in the region increases. The growth of the Iraqi dinar over the last 18 months is encouraging.

Based on conversations with current Theater Express providers during February and May 2008 conferences, and the substantial amount of cargo handled at the top airports shown in table 2, commercial operators should be willing to assume additional risk upfront for the opportunity to provide transportation services well into the future.⁹ We recommend that the government evaluate how to best leverage this unique opportunity for pursuing the establishment of a new era of theater port operations—an era of reduced costs, improved support to the warfighter, and the potential to bolster our nation's strategic goals while helping to propel the Iraqi population toward economic normalization well into the 21st century. **JFQ**

NOTES

¹ Kuwait International Airport's military side of the base is managed by a commercial entity (CAV International) for \$14 million annually. This figure does not account for equipment costs. The

lower bound figure of \$150 million used in this article reflects a rough extrapolation of this number for more than 20 in-theater ports. When cargo handling equipment and maintenance costs are considered, we estimate the total port operating figure approaches \$250 million.

² Typical deployments of 6 months are followed by 1 year at home prior to redeployment, which is referred to as a 1:2 deploy-to-dwell ratio. This ratio corresponds to one of five Tempo Bands. The Tempo Band has a corresponding risk level characterized/termed as "Significant Risk/Tempo Band D," which is the risk associated with a functional area's efforts to train and sustain the force. At Tempo Band D, if combatant commander requirements continue to increase or voluntary Reserve Component participation declines, the Active Component will require additional support by seeking partial mobilization.

³ Another funding source to explore is the government of Iraq. Discussions with the transportation staff at the U.S. Embassy in Iraq indicate that there is potential for the Iraqi government to support airport infrastructure investments where practical and where concession agreements with that government are in the best interests of the U.S. Government.

⁴ More specifically, this study examines the best way to connect inter- and intratheater distribution systems, as well as commercial and military solution sets across the modal spectrums.

⁵ They could also be provided with DOD-owned MHE if deemed necessary for the mission. Ultimately, a strategy that minimizes reliance on military force structure (manning and equipment) allows DOD the maximum flexibility for reposturing as required.

⁶ Current Theater Express program participants are provided a preferential bid allowance of 9 cents per pound to handle a load and 7 cents per pound for the offload of cargo.

⁷ We recommend the concept of an independent third party logistics provider be explored to oversee the Theater Express program either forward in the Air Mobility Division or USCENTCOM Deployment and Distribution Operations Center, or as a continental United States reachback organization.

⁸ Contracts were awarded in spring 2008 and are overseen by Gulf Region Division (GRD) Logistics, which has established a Logistics Movement Control Center for synchronizing scheduled commercial movements (that is, convoy and security team assets) and providing oversight, command and control, and in-transit visibility. GRD Logistics has demonstrated success in providing commercial logistics services to support Iraq reconstruction efforts since 2004.

⁹ In 2007, 9 of the 15 busiest ports in the area of responsibility had more than 20,000,000 pounds handled when loads and offloads were both considered.

Table 1. Bolstering Strategic Goals through Aerial Port Commercialization

Strategic Goals	DOD/Contract Ports	Hybrid Commercial Ports
Economic stabilization		✓
Increased local economic infusion		✓
Smaller DOD footprint		✓
Stay-behind capability		✓

Table 2. Theater Express Program: Cargo Handled at Top 15 Airports in Operation Iraqi Freedom/Operation Enduring Freedom

Pounds Handled Calendar Year 2007			
Airport	Pounds Offloaded	Pounds Onloaded	Total Pounds Handled
Al Taqaddum	33,328,471	65,370,079	98,698,550
Al Asad	54,697,197	33,926,691	88,623,888
Kuwait International	31,285,716	42,099,660	73,385,376
Balad	16,921,687	25,223,861	42,145,548
Bagram	22,899,702	9,376,977	32,276,679
Baghdad	19,559,410	4,643,077	24,202,487
Al Udeid	3,470,871	16,854,119	20,324,990
Q West	4,657,390	15,439,779	20,097,169
Tallil	6,375,392	13,717,608	20,093,000
Al Sahra	5,645,053	9,772,265	15,417,318
Al Kut	15,333,059	4,863	15,337,922
Kirkuk	7,624,380	3,217,286	10,841,666
Kandahar	4,161,474	4,522,561	8,684,035
Mosul	6,539,786	685,420	7,225,206
Kabul International	4,047,445	106,538	4,153,983