Introduction
The United States Army is entering a period of transition from an era dominated by the conflicts in Afghanistan and Iraq to one that will blend both familiar and new challenges around the world. America’s decisive force brings a versatile mix of capabilities that provide formations the ability to maneuver, communicate and survive while sustaining operations in any theater. The United States’ ability to move operational equipment and supplies around the world is unmatched by any other nation. Ultimately these logistics, transportation and sustainment competencies allow the United States Army to fulfill its Title 10 responsibilities to conduct prompt and sustained combat operations on land. As part of the era of transition, the Army will focus on becoming more flexible and agile while building partner nation capacity. To achieve that global versatility, the Army must balance its worldwide presence, strategic mobility and equipment prepositioning to ensure it is prepared for potential conflicts. The ability to quickly prepare, deploy and redeploy personnel and equipment is a key component of the new global strategy. Going forward, the Army must retain and build on the experience and lessons learned from the past decade at war and apply that knowledge in new ways that support small-footprint, rotational deployments.

A prime example of Army achievements over the past decade is the operational retrograde of U.S. forces from Iraq at the end of 2011. This complex operational maneuver demanded integrated planning by Army, joint and interagency organizations to address the required communications, security, mobility, logistics and sustainment capabilities. These capabilities are the often unheralded but inherently critical fields that enable worldwide operations. The joint Third U.S. Army/U.S. Army Central (ARCENT)—U.S. Forces—Iraq (USF-I) withdrawal effort built on the process and lessons accumulated since the first Gulf War. Third Army orchestrated and integrated the many special capabilities within the Army and joint force to support USF-I’s final operations. The command partnership was able to efficiently and effectively retrograde, redeploy or repurpose all of the U.S. property, equipment and facilities in Iraq—a scale of effort not seen since World War II. The Iraq retrograde and redeployment provides a benchmark for the skill sets necessary to sustain the prosecution of continuous combat operations while providing some indications of how those skill sets need to evolve to meet emerging requirements.

Background
The 14 December 2008 Status of Forces Agreement signed by the governments of the United States and Iraq set the deadline for the phased withdrawal of all American combat forces and equipment at 31 December 2011. Between the signing and the withdrawal deadline the Army was directed to reduce its strength in Iraq to 50,000 (down from 150,000 at the time of the agreement’s signing) while simultaneously providing more forces for a surge in Afghanistan by 31 August 2010. To meet both operational requirements, Third U.S. Army/ARCENT, the Army Service Component Command to U.S. Central Command, executed Operation Nickel II. Nickel II—a historical head-nod to then-Lieutenant...
General George Patton’s Operation Nickel that repositioned Third Army during the Battle of the Bulge in World War II—redeployed 95,000 Soldiers, 44,000 shipping containers, 24,500 vehicles and more than one million other items of equipment from Iraq by the August deadline. At the same time, Third Army expanded the Afghanistan theater by 30,000 Soldiers and thousands of armored vehicles, to include 5,100 Mine-Resistant Ambush Protection (MRAP) vehicles. In the end, over 50 percent of the rolling stock used to support the Afghanistan buildup came from Iraq and the Army saved over $1 billion by shifting equipment rather than purchasing and deploying new items.

Even with the successful completion of Nickel II, USF-I deliberately preserved significant forces, bases and equipment in Iraq for as long as possible to maintain the strategic flexibility to respond to any potential changes in the security situation or government-to-government agreements between the United States and Iraq. As a result, when the final order was given that all U.S. Soldiers must be out of Iraq by the end of 2011, there were still more than 40,000 U.S. servicemembers and 36,000 contractors spread across 24 bases in Iraq. There also were 45,000 pieces of rolling stock, 13,000 containers and more than 2.5 million pieces of equipment to remove and redistribute. The 58-day period from the President’s announcement in October 2011 until the last convoy crossed into Kuwait on 18 December 2011 was one of historic effort and organization that warrants a closer look to explore the context of the expeditionary logistics environment.

**Materiel Enterprise Players and Enablers**

As early as April 2009, more than two years ahead of the withdrawal deadline for U.S forces, representatives from in-theater commands, continental United States-based commands and other Department of Defense (DoD) agencies met in Kuwait for a USF-I/ARCENT-led rehearsal-of-concept drill that outlined the major themes and developed the requirements for the drawdown effort. The rehearsal allowed planners to attain greater visibility on the amount of material to be shipped out of Iraq, identify corresponding transportation requirements and synchronize support efforts across agencies and entities in a timely and controlled manner. The overarching tasks for the drawdown—falling primarily to the mixed active-component/reserve-component (70 percent Army National Guard and Army Reserve plus sister services) 1st Theater Support Command and enabling units—included:

- synchronizing movement of resources out of theater and providing force protection for exiting forces;
- expanding the capability to close a base of operations, terminate contracts and transfer surplus equipment to the host nation; and
- synchronizing last-minute property disposition changes and completing a property reallocation plan to minimize unit property burden.

Controlling and accounting for the significant amount of material crossing the battlefield required detailed oversight and preparation. Mobile property teams, movement control, 24-hour
continuous download operations for departing units, forward-stationed customs clearance procedures and item inspection at theater distribution warehouses formed the core of activities that drove the orderly withdrawal.

A key enabler for operations was the robust communications infrastructure. During Operation Iraqi Freedom, Third Army was responsible for building a massive network of technical control facilities, microwave towers, satellite terminals and fiber optic networks in Iraq. At the peak of operations, more than 300,000 people—military and civilian support—had ready and available access to secure and non-secure Internet services. This communications backbone linked forces and enablers throughout the theater. When USF-I transitioned from Operation Iraqi Freedom to Operation New Dawn, Third Army was able to reconfigure and streamline the network to support retrograde operations and facilitate the significant amount of voice and video coordination, mission data and records generation required.

As part of the transition from Operation Iraqi Freedom to Operation New Dawn and the drawdown of U.S. forces, the Government Accountability Office released a report in April 2010 that questioned the organization and preparedness of DoD to execute the drawdown. In particular, there were concerns about the chain of command and coordination requirements that spanned so many different entities within DoD. In response, the Drawdown Fusion Center was created to provide a strategic picture of drawdown operations, identify potential obstacles, address strategic issues and assist in the development of policy and guidance related to the drawdown. Third Army contributed the ARCENT Support Element–Iraq (ASE-I), which functioned as the theater command’s “storefront” in Iraq to help coordinate efforts among Headquarters, Department of the Army, Army Materiel Command, Third Army/ARCENT and USF-I. This support element, based in Iraq, also generated theater and Department of the Army disposition guidance for all forces and materiel redeploying and retrograding out of Iraq.

Partnering with the Fusion Center were materiel owner representatives from the 1st Theater Sustainment Command, the Defense Logistics Agency, the Assistant Secretary of the Army for Acquisition, Logistics and Technology and Department of the Army Financial Management, along with transportation mode owner representatives from U.S. Transportation Command (USTRANSCOM), U.S. Central Command and U.S. Air Forces Central. Supporting these higher command elements were several Army units: the 402d Army Field Support Brigade and the 541st Combat Sustainment Support Battalion, which operated eight Redistribution Property Assistance Teams (RPATs) throughout Iraq and Kuwait; the 230th Sustainment Brigade from the Tennessee Army National Guard, which provided line-haul capability and coordination for the constant flow of transports from Iraq as well as watercraft missions in southern Iraq; and the 1st Brigade, 34th Infantry Division from the Minnesota Army National Guard, which provided the route security force for the incoming and outgoing convoys. Joint Logistics Task Force-6 operated heavy lift transports while providing the operational templates to close every major forward operating base in Iraq; and the Navy Expeditionary Logistics Support Group processed all outgoing personnel, conducted baggage customs procedures in Kuwait and supported terminal and ship operations at Kuwait Naval Base.

**Drawdown by the Numbers**

Fundamentally, there were two options for dealing with vehicles and property in Iraq: leave them in Iraq or redeploy them elsewhere. Items remaining in Iraq fell under either the Foreign Excess Personal Property (FEPP) disposition category or the U.S. Equipment Transfer to Iraq (USETTI) program. The FEPP category was the principal mechanism for transferring property to Iraq. More than four million pieces of nonstandard and nontactical pieces of equipment—for example, furniture, containerized housing units, civilian model generators and sport utility vehicles—were transferred from more than 80 bases and outposts. Many of the items transferred had reached their service lifespan after eight years of duty. Alternatively, the cost to ship the items back to the United States or other theaters for disposition was cost-prohibitive. The value of the approximately 4.2 million items was $585 million, but the shipping costs on those items would have exceeded $1.7
It was more cost effective to give the items to Iraq than to try to reclaim them for reuse or resale. Additionally, in the final six weeks of operations Third Army’s ASE-I used FEPP to transfer control of 38 coalition bases valued at over $6.6 billion.

USETTI, the other stay-behind mechanism, was a specific Foreign Military Sales program that sold vehicles and other combat equipment to Iraq to provide its security forces with at least the minimum essential capability. In total, USETTI transferred more than 37,000 pieces of equipment to the government of Iraq; this represented about 3 percent of all Foreign Military Sales to that country.

Redeploying organizational and theater-provided equipment (TPE) and property from Iraq was a more complicated and labor-intensive process. The primary goals during the final phases of drawdown were to identify the appropriate destinations for non-mission essential equipment and to reduce the logistical burden on redeploying units and at the ports of departure due to the high volume of equipment throughput. To the first point, USF-I and ARCENT repurposed more than 2.4 million items of theater-provided, organizational and contractor-managed/government-owned equipment for reuse. These items were collected and moved to Army depots, prepositioned stocks and war reserves or filled other CENTCOM requirements; more than 68,000 items—including more than 5,000 MRAP vehicles—went to Afghanistan. Furthermore, the National Association of State Agencies for Surplus Properties was able to obtain, at DoD transportation cost, more than 1,100 pieces of serviceable equipment from Iraq for use by federal, state and local governments, and an equipment disposal program was able to sell over 153 million pounds of unserviceable scrap metal.

To reduce property turn-in bottlenecks during unit redeployments, the Army relied on RPATs—joint-service property teams and facilities provided by the 402d Army Field Support Brigade—to streamline the TPE turn-in process. The RPATs functioned to eliminate all non-mission essential property from unit accounts and facilitate the distribution of that property to fill operational needs within theater or induct it into the reset system. The teams operated both mobile units and fixed installations around Iraq and Kuwait to assist units in reducing their equipment footprint. As units submitted lists of on-hand equipment, the RPATs screened those lists for any items tagged for future use by other units, for other missions or for the refill of prepositioned stocks. The centrally managed and streamlined process employed by the RPATs enabled the Army, ARCENT, USF-I and Army Materiel Command not only to meet combatant theater requirements but also to improve control over the significant amounts of equipment accumulated in theater—to include “found-on-installation” property and amnesty turn-ins—and translate that control into cost savings through reuse and redistribution. At the close of operations, the RPATs received, processed and shipped more than 15,000 vehicles and 300,000 pieces of TPE non-rolling stock in less than 90 days.

In the last year of Iraq operations, the U.S Army transferred, sold, redeployed, repurposed or reclaimed more than six million
pieces of military and mission-related equipment; a third of
those items and more than 20,000 truckloads of equipment left
Iraq in the final 45 days of the mission. The success of the
retrograde and redeployment operations reflects the absolute
necessity of proper sustainment force structure, leadership and
planning in the American military.

Lessons Learned

There are a number of lessons from the operational and
logistical successes at the end of Operation New Dawn. First,
the commitment and involvement of senior leaders in the
drawdown process was critical. From the strategic level to the
operational level, commanders had a vested interest in seeing
the drawdown process through in a controlled and complete
manner—any unintended delays or missteps had operational
and political costs that were simply unacceptable. The buy-in
and active participation from senior leaders ensured that the
drawdown was properly planned and resourced to avoid any
shortfalls. Underpinning leadership was the concept of time as
a resource. Planning for the drawdown began more than two
years before the deadline, which highlights the need for ade-
quately time to properly control and execute complex global
operations. The outcome of the operation is directly related to
the length of time given to prepare. Moreover, the concept of
logistics is not front-end or back-end only; the disposition of
equipment and supplies must be a continual process that in-
volves units at every step of operations to avoid lags, bottle-
necks and delays at any time or phase.

One factor that cannot be overstated is the benefit of a ma-
ture operational theater and a theater army to provide a hub
that connects and integrates the wide array of joint capabilities
required to execute large-scale operational maneuver. Thanks
to the deepwater ports, logistics facilities and transportation
infrastructure along with two decades of working relationships
in Kuwait, the United States was able to execute a large-scale,
enduring operational maneuver in a prompt and controlled
manner. Naturally, such a mature theater is impossible to de-
velop without the willing assistance of host nations—in this
case Kuwait and, to a lesser extent, Bahrain, Qatar, United
Arab Emirates and Iraq.

Finally, a mature theater is a concept that hinges on stra-
tegic mobility. Without robust inter- and intra-theater air- and
sealift, the United States could not physically move the people
or equipment in the quantities and at the speed required to jus-
tify or sustain such an expansive and enduring forward pres-
ence. The theater army routinely interfaces with components
of USTRANSCOM to synchronize strategic mobility plans;
collocated within the ARCENT operational command post,
these elements in most cases become part of the robust, mature
organizational structure. Access is a function of mobility; stay-
ing power is a function of logistical sustainment and buildup.
The United States has unmatched ability to access the globe
and conduct long-term, sustained operations; retaining that ca-
pability is crucial to providing the nation’s political leaders the
range of options required for national security and fulfillment
of international responsibilities.

Future Challenges

The next challenge will be drawing down forces from
Afghanistan. None of the physical positives of a mature op-
erational theater apply there. It is landlocked, surrounded by
hostile or politically uncooperative nations, has little to no
transportation infrastructure capable of handling a high vol-
ume of cargo and is ringed by severe terrain. Either the with-
drawal of forces will have to begin sooner or significant stra-
tegic mobility resources and existing innovative distribution
networks will have to bring out higher residual levels of forces
and equipment; materiel cannot just be driven out of the coun-
try and put on ships at the end of mission as in Iraq. This will
be a significant and costly effort even with the comparatively
spartan conditions and lower force levels in Afghanistan.

The Defense Guidance of January 2012 stresses a force
that is flexible and agile and that utilizes rotational forces with
a small footprint—the opposite of the U.S. logistics hub in
Kuwait. The Army will have to examine how it supplies its
forces in remote locations over time; stockpiling, then selling
at a loss or donating large amounts of equipment that are too
expensive to retrieve from operational areas may not be a sus-
tainable or prudent use of strained funding. Further, the terms
“agile” and “flexible” bring to mind rapid changes in location
or mission—changes that require similarly flexible and agile
logistics systems that can move with the forces and are not tied
to any one country or set of facilities. That said, it will be im-
portant to the Army to keep the tooth–tail ratio balanced as it
changes its force structure. The Army’s global mission is pos-
sible only because of its robust and experienced theater-level
operational command, control and sustainment force structure,
not in spite of it. The Army must preserve adequate operational
and logistical enablers within the force and improve the mobi-
licity/agility and integration of those enablers.

Also related to both the National Security Strategy\(^2\) and the new Defense Guidance is the concept of partner building. Too many nations rely on the United States for logistics sustainment during multinational operations. Recent NATO operations in Libya and the sustainment challenges in both the Iraqi and Afghan armies highlight U.S. dominance in the logistics field and how much its allies need to invest in logistics force structure and proficiency. By focusing on building allied sustainment capability—possibly by including logistics enablers in rotational training cadres similar to their maneuver counterparts—the Army can improve the expeditionary capability of its allies. Lowering the barriers to deployment for partner nations is critical to sustaining multinational operations. **The expertise and experience of Third Army could very well be the model not only for the other service component commands but for U.S. allies as well.** The challenge will be developing and maintaining that expertise.

As the Army looks to its future operations and global role, it must address the modernization and improvement of its sustainment capabilities. This takes several forms: procurement, joint/interagency integration and operational contract support. The Army’s procurement focus at the moment is on the network and land combat vehicles. Attention must be given to how these new purchases will fit into emerging logistical schemes and operational patterns with an eye toward simplifying, integrating and standardizing logistics systems and business processes across the joint force.

An essential enabler to this critical effort is the Global Combat Service Support–Army, an enterprise-wide tactical unit and installation logistics system that will improve accountability and financial auditability through the integration of 40,000 supply and logistics databases and fielding to 160,000 users beginning in Fiscal Year 2013. Reducing the complexity and friction of supplying joint and interagency operations—in which the Army may not always be the lead—provides more flexibility to mission commanders. The Army must provide research and development funds to improve or replace existing systems to meet new operational circumstances. The Army needs to think just as much about what it deploys as how it deploys. Organic unit load-outs must be better able to sustain that unit over time; retrograding, replacing or upgrading equipment during operations must be done so that, at the close of operations, there are not millions of items left that do not belong to units and require disposal. Further, if future missions are to place more emphasis on “whole-of-government” approaches, the entire DoD must make the effort to reach out to agency partners and develop standards for sustainment that will enable seamless attachment and operational control of any element to any other element.

Finally, the Army must also acknowledge its increased reliance on operational contracted support not only in contingency operations but in day-to-day operations. Over 60 percent of Army Operation and Maintenance funds are spent on service contracts and more than 50 percent of total military manpower in contingency operations is contracted across all the warfighting functions. Culturally and organizationally, the Army must become more disciplined in developing contractor requirements while properly emphasizing and resourcing oversight operations. The Army must optimize its internal versus contracted capabilities balance to remain a wise steward of its resources.

Third Army, USF-I and the joint team—concentrated within the U.S. Army—conducted a remarkable operation to successfully retrograde and repurpose a significant amount of forces and immense stocks of equipment from Iraq. The scope, scale and timing of the drawdown presented many challenges, all of which were met by the Army’s senior leadership. The drawdown is a great example of the expertise and experience developed over a decade at war. Third Army—as an Army Service Component Command—has been and will remain vital to the U.S. Army’s ability to conduct its Title 10 responsibilities. However, the Army as a whole must prepare for a post-Iraq future—with fewer favorable circumstances of terrain, facilities and time—and for how it will deliver the logistical force multipliers that make the Army America’s force of decisive action. Applying, maturing and translating the lessons learned from the past decade will be a vital effort as the Army prepares for its role as part of Joint Force 2020 in an increasingly uncertain and complex strategic environment.