

MARCH-APRIL 2013

ARMY SUSTAINMENT

WWW.ALU.ARMY.MIL/ALOG

More Fight, Less Fuel

How the Army Can Lead Change
in the OE Campaign

GCSS-Army:
A Sustainment
Game Changer

Bold Thoughts
on a **Future SOC**

The Planning Process
for Sustainers, Part 1

ARMY SUSTAINMENT

ON THE COVER



U.S. Army Soldiers line up to receive fuel for their mine-resistant ambush-protected vehicles during a convoy break en route to Forward Operating Base Tillman, Paktika province, Afghanistan, Nov. 21, 2012. In “How the Army Needs to Lead Transformation in the Operational Energy Campaign” on page **11**, the author discusses the Army’s operational energy initiatives. For related stories, see “Lengthening the Tether of Fuel in Afghanistan” on page **24**. (Cover photo by Sgt. Kimberly Trumbull)

We welcome your comments on this or any other sustainment related topic. Email usarmy.lee.tradoc.mbx.leeasm@mail.mil. All responses are subject to editing and publication in *Army Sustainment* unless otherwise requested.



TOC

TABLE OF CONTENTS

PB 700-13-02 • VOLUME 45, ISSUE 2 • MARCH-APRIL 2013

PHONE: (804) 765-4755 (DSN 539-4755)

EMAIL: USARMY.LEE.TRADOC.MBX.LEEASM@MAIL.MIL

WEBSITE: WWW.ALU.ARMY.MIL/ALOG/

“GCSS-Army will allow commanders to mass more combat power in the right places on the battlefield at the right time. It does this by increasing commander’s knowledge and allowing them to make better decisions, faster.”

Major General Larry D. Wyche
Commanding General, CASCOM

FOCUS

- 2 Global Combat Support System-Army and Sustainment 2020
Maj. Gen. Larry D. Wyche

COMMENTARY

- 4 Making the Contracting Officer Part of the Logistics Career Path
Lt. Col. (Ret.) Timothy W. Karstrom
- 6 The Operations Officer in the BSB
Lt. Col. Michael McCulley, Maj. Will Arnold, and Maj. Tony Stoeger
- 8 Some Bold Thoughts on a SOC of the Future
Capt. Wendi McBride-Rentschler

SPECTRUM

- 11 How the Army Needs to Lead Transformation in the Operational Energy Campaign
Chief Warrant Officer 4 Ronaldo M. Lachica

OPERATIONS

- 14 Improving Fuel Distribution Effectiveness in Afghanistan
Maj. Jeremiah S. O'Connor
- 18 14th HRSC Operations in Support of the 1st Theater Sustainment Command
Lt. Col. Keith W. Hunt
- 21 Intelligence Support to Sustainment Operations: Lessons Learned from the Iraq Drawdown
Lt. Col. Devon Blake and Chief Warrant Officer 4 Deloye Meacham

- 24 Lengthening the Tether of Fuel in Afghanistan
Chief Warrant Officer 2 Kenneth Hudak
- 27 Last One Out Turns Off the Lights: Closing a Military Base During the Withdrawal of Troops From Iraq
Capt. Mark A. Renteria

TRAINING AND EDUCATION

- 32 Human Resources Personnel Need to Train as They Fight
Chief Warrant Officer 3 Kymila K. Cheese
- 34 Modification of the Planning Process for Sustainers
Part 1: Design
Dr. John M. Menter and Benjamin A. Terrell

TOOLS

- 38 The Case for a Contingency Contracting “ONE PASS”
Maj. Jamie M. Rhone, USAF
- 40 MC4 Challenges at the National Training Center
Sgt. 1st Class Shawn D. Hardiek
- 42 Examining Decisive Action Sustainment Operations at the Task Force Level
Capt. Sean P. Dunstan
- 46 The Next Generation: Cataloging Nonstandard Items
LeQuan M. Hylton

SUBMISSIONS

- 56 *Army Sustainment* Author Guidelines

Army Sustainment (ISSN 2153–5973) is a bimonthly professional bulletin published by the Army Logistics University, 2401 Quarters Road, Fort Lee, Virginia 23801–1705. Periodicals postage is paid at Petersburg, VA 23804–9998, and at additional mailing offices.

Mission: *Army Sustainment* is the Department of the Army’s official professional bulletin on sustainment. Its mission is to publish timely, authoritative information on Army and Defense sustainment plans, programs, policies, operations, procedures, and doctrine for the benefit of all sustainment personnel. Its purpose is to provide a forum for the exchange of information and expression of original, creative, innovative thought on sustainment functions.

Disclaimer: Articles express opinions of

authors, not the Department of Defense or any of its agencies, and do not change or supersede official Army publications. The masculine pronoun may refer to either gender.

Reprints: Articles may be reprinted with credit to *Army Sustainment* and the author(s), except when copyright is indicated.

Distribution: Units may obtain copies through the initial distribution system (DA Form 12 series). Private domestic subscriptions at \$30.00 per year and international subscriptions at \$42.00 per year are available by visiting <http://bookstore.gpo.gov> on the Web. Subscribers should submit address changes directly to *Army Sustainment* (see address below). *Army Sustainment* also is available on the World Wide Web at <http://www.alu.army.mil/alog>.

Postmaster: Send address changes to: EDITOR ARMY SUSTAINMENT/ALU/2401 QUARTERS RD/FT LEE VA 23801–1705.

BOARD OF DIRECTORS

Chairman

Maj. Gen. Larry D. Wyche
Commander
Army Combined Arms Support Command

Members

Lt. Gen. Raymond V. Mason
Deputy Chief of Staff, G-4
Department of the Army

Lt. Gen. William N. Phillips
Principal Military Deputy
to the Assistant Secretary of the Army
Acquisition, Logistics, and Technology

Lt. Gen. Patricia E. McQuiston
Deputy Commanding General
Army Materiel Command

Lt. Gen. Joseph E. Martz
Military Deputy for Budget to the
Assistant Secretary of the Army
Financial Management and Comptroller

Lt. Gen. Patricia D. Horoho
The Surgeon General

Ex Officio

Col. John E. O’Neil IV
The Quartermaster General

Col. Edward M. Daly
Chief of Ordnance

Brig. Gen. Stephen E. Farmen
Chief of Transportation

Brig. Gen. David K. MacEwen
Commander
Army Soldier Support Institute

Brig. Gen. Theodore C. Harrison
Commanding General
Army Expeditionary Contracting Command

BG (P) Joseph Carvalho, Jr.
Commanding General
Army Medical Research and Materiel Command

ARMY LOGISTICS UNIVERSITY

John E. Hall
President

David J. Rohrer
Civilian Deputy

Colonel Robert A. Harney, Jr.
Commandant/Military Deputy

STAFF

Fred W. Baker III, Editor

Kari J. Chenault, Associate Editor

April K. Morgan, Assistant Editor

Julianne E. Cochran, Assistant Editor

Brian L. Johnson, Graphic Artist

Louanne E. Birkner, Administrative Assistant

This medium is approved for the official dissemination of material designed to keep individuals within the Army knowledgeable of current and emerging developments within their areas of expertise for the purpose of enhancing their professional development.

By Order of the Secretary of the Army:

RAYMOND T. ODIERNO
General, United States Army
Chief of Staff

Official:



JOYCE E. MORROW
Administrative Assistant to the Secretary of the Army
1300409

Global Combat Support System–Army and Sustainment 2020

By Major General Larry D. Wyche

The Army's 2020 sustainment concept incorporates numerous changes and enhancements to our current systems and practices. Perhaps none of the changes are more important than those that will affect the systems that manage inventories, equipment maintenance, supply orders, and unit finances. Our Standard Army Management Information Systems (STAMISs) have served us well in this regard for many years, but the Army of 2020 is poised to move to the next level of logistics support.

After seven years of development, testing, and validation, Global Combat Support System–Army (GCSS–Army) is in fielding. Combining myriad automated sustainment systems into a single web-based system, GCSS–Army is ready to revolutionize the way sustainers support the force and enhance readiness. The system provides improved readiness, accountability, and the ability to be financially audited by integrating key capabilities into one common system.

**GCSS–ARMY ENABLES THE
LOGISTICS COMMUNITY TO
RESTORE BALANCE WHILE
SIMULTANEOUSLY SETTING
CONDITIONS FOR THE FUTURE.**

One Consolidated System

GCSS–Army replaces the suite of current tactical logistics information technology programs and integrates field financial management into one system. This system will affect every supply room, motor pool, maintenance repair shop, warehouse, and property book in the Army, both in operational units and fixed-base operations such as directorate of logistics (DOL) warehouses and maintenance organizations. The capabilities within GCSS–Army provide leaders more accurate information more quickly, allowing commanders to better manage critical resources and make informed decisions ensuring maximum readiness and combat power.

Commanders will have near real-time integrated

information, total asset visibility, and property and financial accountability to enable rapid and effective decisionmaking in a fluid environment. GCSS–Army alters mission command by providing staffs and commanders real-time data on the disposition of supplies and equipment. Staffs are able to accurately project when supplies will arrive and when vehicles will be fully mission capable. This information allows commanders to react quickly to changes on the battlefield, seize opportunities to exploit weaknesses, and more deliberately plan operations.

GCSS–Army enables logisticians to have a complete operational picture that includes the location, status, and scheduled distribution of equipment and supplies. Having 360-degree visibility helps us prepare for any requirement. It also prepares us to plan future budgets, determine requirements, and shape readiness.

Soldiers will experience benefits in a number of areas. Warehouses will no longer have time-consuming closeouts and will have improved forecasting and reduced customer wait times. Unit supply rooms will have a virtual picture of customer bins at the supply support activity, which promises to reduce risk to Soldiers by limiting movements around the battlefield.

Maintenance sections will benefit from operator records that are in the system permanently and from improved visibility of parts and readiness across all levels. Catalog records will automatically update as changes occur, and inbound deliveries will be visible throughout the supply chain. Finance will benefit from the management of year-end and previous year-end closeouts, while resource managers will im-



mediately be able to track financial transactions and funding related to logistics.

Finally, GCSS–Army operates in concert with the General Fund Enterprise Business System (GFEBs) to create a financial system of record that integrates logistics and finance capability. This integration of logistics and financial systems will finally produce an auditable system of record for commanders to ensure that they are making maximum use of their resources to improve readiness.

GCSS–Army enables the logistics community to restore balance while simultaneously setting conditions for the future. Logisticians have operated in a single stovepipe environment for decades. However, as we experience advancements in technology, partnership opportunities within the Army, and commonality of equipment and services, our ability to share processes and procedures that extend across the battlefield must advance as well.

Fielding

The 11th Armored Cavalry Regiment has been using GCSS–Army to manage its logistics functions since July 2010, and the 2nd Brigade, 1st Armored Division, was fielded the full suite for initial operational test and evaluation in August 2011. Following its certification, Wave 1 fielding of GCSS–Army began in November 2012. The first units to receive the system were the Virginia Army National Guard headquarters, the 85th and 87th Army Reserve Support Commands; customers of the 335th Theater Signal Command; and the supply support activity at the Fort Lee, Va., Directorate of Logistics.

Wave 1 began in the first quarter of fiscal year 2013 and will extend through the fourth quarter of fiscal year 2014. This includes replacing all levels of the Standard Army Retail Supply System (SARSS) and logistics finance, including the funds control module.

Wave 2 starts in fiscal year 2015 and runs through the fourth quarter of fiscal year 2017. This segment will include the replacement of all levels of the Standard Army Maintenance System–Enhanced and Property Book Unit Supply Enhanced.

Training

The Army introduced institutional training for GCSS–Army in the first quarter of fiscal year 2013 to Warrant Officer Basic Course students who completed an online training prerequisite before reporting to school. GCSS–Army training for the first quarter of fiscal year 2013 also began for automated logistical specialists operating warehouses. SARSS and SAMS–E will be removed from the plan of instruction course map beginning no later than the third quarter of fiscal year 2014 and completely replaced with GCSS–Army training.

Additionally, since the Systems, Applications, Products in Data Processing (SAP) enterprise application is the foundation of GCSS–Army, the Combined Arms Support Command is working now to build a base of SAP-certified professionals. The Army Logistics University is partnering with Virginia State University to offer SAP certification at Fort Lee. The first students will graduate in third quarter of fiscal year 2013.

GCSS–ARMY WILL ALLOW
COMMANDERS TO MASS MORE
COMBAT POWER IN THE RIGHT
PLACES ON THE BATTLEFIELD
AT THE RIGHT TIME. IT
DOES THIS BY INCREASING
COMMANDER’S KNOWLEDGE
AND ALLOWING HIM TO MAKE
BETTER DECISIONS, FASTER.

By implementing GCSS–Army training early in initial-entry training and professional military education and by providing a mechanism for SAP certification, we are ensuring units will have a knowledge base before receiving GCSS–Army.

The Army is fielding its future field-level logistics system now. GCSS–Army will subsume the legacy STAMISs into one system that will be accessible through the Internet. This web-based system has improved equipment management throughout the life cycle, visibility of the supply pipeline, reporting for planning, execution and readiness, and near real-time data. GCSS–Army will allow commanders to mass more combat power in the right places on the battlefield at the right time. It does this by increasing commanders’ knowledge and allowing him to make better decisions, faster.

Major General Larry D. Wyche is the commanding general of the Combined Arms Support Command and Sustainment Center of Excellence at Fort Lee, Virginia.

Editor’s Note: In the next “Focus,” Maj. Gen. Wyche discusses skills-based training and credentialing initiatives—a series of programs designed to ensure Soldiers have the best, most current training in their specialties that better prepares them to serve the Army now and sets them up for continued success after their service is complete.

Making the Contracting Officer Part of the Logistics Career Path

The Commission on Wartime Contracting in Iraq and Afghanistan identified several shortfalls in contracting on the battlefield. To fix those shortfalls, the Army should accept contracting as a core function and elevate the role of the contracting officer.

By Lt. Col. (Ret.) Timothy W. Karstrom

The U.S. and Afghan governments have begun to define their continuing relationship past 2014, when most U.S. combat troops will redeploy. Our contracting operations for U.S. troops will be significantly reduced, but contracting will continue as long as U.S. troops are present and the facilities supporting the Afghan defense force need improvement.

The Commission's Recommendations

The Commission on Wartime Contracting in Iraq and Afghanistan was established by the U.S. government in 2008 to study government contracting related to operations Enduring and Iraqi Freedom. The commission published its findings in a report, which includes 15 recommendations.

Chapter 5 of the commission's report specifically pertains to contracting. Recommendation 6 is to "Elevate the positions and expand the authority of the civilian officials responsible for contingency contracting at [the Department of] Defense, [the Department of] State, and USAID [the U.S. Agency for International Development]."

Recommendation 7 is to "Elevate and expand the authority of military officials responsible for contingency contracting on the Joint Staff, the combatant commanders' staffs, and in the military services."

The commission's report asserts that "agencies must fully accept contracting as a core function if only because of the sheer numbers of contingency contracts, their value, and the adverse financial, political, and operational impacts of failure."

The report calls for a new contracting directorate, the J-10, in order to give the contracting officer (KO) equal footing on staffs from brigade on up. The commission made essentially the same recommendation for the Department of State and USAID. I believe all three agencies are resisting the reorganization of contracting responsibilities.

KOs Today

The KOs in Afghanistan work in conjunction with the Army Materiel Command, Logistics Civil Augmentation

Program (LOGCAP) contractors, North Atlantic Treaty Organization partners with their own logistics operations and contractors, and various other aviation and transportation operators.

KOs can be captains at the battalion level, majors at the brigade level, lieutenant colonels at the division level, or colonels at the corps, Army, or combatant command levels. Depending on their experience, they do not necessarily need a multifunctional logistics course or a two-month Army acquisition basic course before deploying.

The Ideal KO

One way to follow the commission's recommendations is to expand the authority of the KO. He should be the "commander" of the money and all contracting that has direct bearing on the battlefield. The KO should be the boots-on-the-ground officer at every level from the battalion to the combatant command. That individual, with a competent staff of warrant officers, noncommissioned officers (NCOs), and civilians, should both prepare the battlefield and solve immediate problems.

The KO should be an equal partner with the S-4, G-4, J-4, and CJ-4. The money he would be responsible for would be defined by the G-8, J-8, and CJ-8 resource managers. He would work for executive officers at the battalion and brigade levels or the deputy commanding general for support at the division, Army, and combatant command levels.

Whether a newly defined KO at the division level is called "the J-10" or "the KO" is immaterial. This person should be an aggressive officer who understands business law and has a general sense of how the Defense Federal Acquisition Regulations work.

His assignments could be with any Army unit starting at the battalion level. He might also do a KO tour at a U.S. embassy or another forward base. In his career as an Army officer and logistician, he would normally serve no more than three tours as a KO, with each tour no longer than two years. He would be backed by a staff of career contracting specialists and a legal staff as necessary.

As the KO, he would take the lead in finding better, faster, more effective, and less expensive solutions for the commander. He would be a force multiplier, and his relationship with the commander would not be very different from the subordinate unit commanders' relationships with the commander. The KO would also allow the specialists in contracting and acquisition to perform their jobs well without having to make the combat zone decisions that the KO is paid to make.

Training for KOs

The KO's training requires hands-on exercises in creating and funding contracts and an in-depth study of the lessons learned from Iraq and Afghanistan. It does not require weeks of familiarization with the acquisition life cycle.

KOs need basic instruction in contract law and contingency contracting as prescribed by the Defense Contract Management Agency (DCMA). To maintain their independence during their KO tours, they are rated as DCMA officers, and their immediate staffs include DCMA NCOs and civilians or other Department of Defense contracting specialists.

A KO, by regulation, must have a warrant that authorizes him to make contracts up to a certain dollar amount. The KO we are proposing will not have served the years in contracting in order to be awarded a warrant good for \$50 million or more. However, if he ever served as a commander or maintenance officer, he may have signed for equipment worth that much.

Therefore, the training for executive KOs must allow for granting an adequate warrant. At the same time, the contract specialists and civilian KOs on his staff will have their own warrants, presumably ad-

equate for contingency contracting.

The key to implementing the recommendations of the Commission on Wartime Contracting in Iraq and Afghanistan is for the chain of command, from the U.S. Central Command on down, to realize that a capable, experienced logistics officer executing contracts, terminating them, or modifying them as the situation requires is a combat multiplier for counterinsurgency operations.

The KO can mobilize contractors already in theater, or he can reach back to draw on LOGCAP and others. He can save money and terminate failures or duplication of effort. He can also ensure that his contracting operations are coordinated with Department of State and USAID contracting operations.

The Army now has a cadre of KOs in the Active component, the Army Reserve, and the Army National Guard. With the right leadership at the Pentagon level and down, we can create a new KO culture that will effectively and efficiently provide contracting support for each level of command from the start of the next conflict.

Lt. Col. Timothy W. Karstrom, USAR (Ret.), is a medical logistics advisor in the Combined Joint Task Force-1 surgeon cell at Bagram Airfield, Afghanistan. He has been a member of the Retired Reserve since March 2011. He has a B.A. degree from the University of Colorado and an M.S. degree from the University of Nebraska. He is a graduate of the Army Acquisition Basic Course, the Transportation Officer Advanced Course, the 90A Multifunctional Logistics Course, and the Command and General Staff College.

1st Lt. Joel Silver discusses a contract with a local leader in order to hire men from his village to build eight buildings for a high school, a well, and a water tower in Afghanistan. (Photo by Airman 1st Class Robert Hicks)



The Operations Officer in the BSB

By Lt. Col. Michael McCulley, Maj. Will Arnold, and Maj. Tony Stoeger

At the National Training Center, almost every brigade support battalion (BSB) struggles with the specifics of its tactical operations center, including its roles and responsibilities, manning, and common operational picture (COP). Why? Mainly because there are two operations officers: the S-3 and the support operations officer (SPO).

The fiscal year 2013 BSB modified table of organization and equipment (MTOE) changes the authorization for the battalion S-3 from a major to a captain, but the support operations officer remains a major. Although this change may mitigate some of the friction that we typically observe between the S-3 and the SPO, it does not alleviate the primary causes of this friction. Some may see the recommended changes outlined in this article as a paradigm shift; however, it is actually a way to follow the “keep it simple” principle.

The Missions of the Two Operations Officers

As the Army revamps doctrine and undergoes changes in force structure, the sustainment community has the opportunity to make changes that improve unity of effort inside the BSB, specifically within the S-3 and SPO sections.

Field Manual (FM) 4-90, Brigade Support Battalion, states that the S-3 officer—

- Is the operations, security, and training officer.
- Monitors tactical operations, publishes orders, and supervises plans and orders.
- Develops task organization in coordination with the BSB SPO.
- Analyzes operational data and reports for compliance with directives and commander’s intent.

The same manual states that the SPO—

- Is the principal staff officer for coordinating support for all units assigned to the brigade.
- Provides planning, preparation, and mission command of the execution of all BSB sustainment operations.
- Provides centralized, integrated, and automated command, control, planning, preparation, and execution of all support operations within the brigade.

The BSB S-3 section is made up of eight Soldiers and traditionally runs current operations from within the tactical operations center, but it requires augmentation to do so. Radio and telephone operators and battle captains are not authorized and their duties are

typically performed by personnel from subordinate companies or other staff sections.

The SPO section, on the other hand, is made up of 17 Soldiers and operates in a separate area off of the main tactical operations center. It is involved in both future and current operations.

Areas of Friction

The first area of friction experienced between the S-3 and the SPO is the fact that they maintain two separate COPs. At the National Training Center, sustainment trainers often observe two COPs in the tactical operations center. One is maintained by the S-3 on the BSB’s internal missions and overall brigade operations. The other is maintained by the SPO on the brigade’s sustainment posture. Because the two operations officers have different roles and responsibilities, they manage their own COPs for the commander. This requires the commander to visit two different locations within the tactical operations center for a total situational understanding. Occasionally, a unit will attempt to maintain a single COP, but the S-3 and SPO sections are not organized in a way that maintains this single COP effectively.

A second area of friction concerns the 2013 MTOE for the BSB S-3 section. The outlined manning provides no guarantee that the officer assigned as the S-3 will have seniority (experience or date of rank) over the company commanders. In Army of Excellence MTOEs, the forward support battalion S-3 was a Medical Service Corps major. However, the position often was filled by a logistics captain waiting for a company command or a captain who recently came out of command and had not been in the unit very long. Under the new force structure, the S-3 (a captain) would be the rater for two other captains, while all three could potentially be in the same year group.

This awkwardness might be avoided if the current operations and plans officer slots were filled by lieutenants. Another way that this friction can be alleviated is by combining the S-3 and SPO sections and placing one major in charge of the entire section.

A One Section Solution

Given the doctrinal roles and responsibilities outlined in FM 4-90, the SPO is the primary operations officer, while the S-3 provides planning and orders production in support of the mission requirements

developed by the SPO. However, neither section is functionally organized by the new MTOE to accomplish its mission independently; they are required to work together closely.

By combining the two sections into one operations section, the commander could create a one-stop COP and achieve greater synergy in mission command. By reorganizing the BSB operations under one section with one major in charge, as depicted in the chart below, the BSB can achieve this unity of effort.

As part of this reorganization, we recommend the following changes.

Combine the roles and responsibilities. The roles and responsibilities of the S-3 and the SPO, as outlined in FM 4-90 and other related manuals, should be combined to reflect a single operations section.

Call the officer in charge of the S-3 and support operations sections the operations officer. This aligns the BSB staff organization with the rest of the battalions in a brigade combat team. By redefining the roles and responsibilities as the operations section, the friction of two distinct sections will be eliminated. Although the sustainment community has always placed greater emphasis on the title of “SPO,” the title of operations officer has an inherent understanding across all warfighting functions.

Create an operations sergeant major. Converting one of the two master sergeant positions in the MTOE would provide a newly assigned sergeant major with a career enhancing and developmental position. In addition, the sergeant major would pro-

vide additional expertise, management, and experience to the sustainment community inside a brigade combat team.

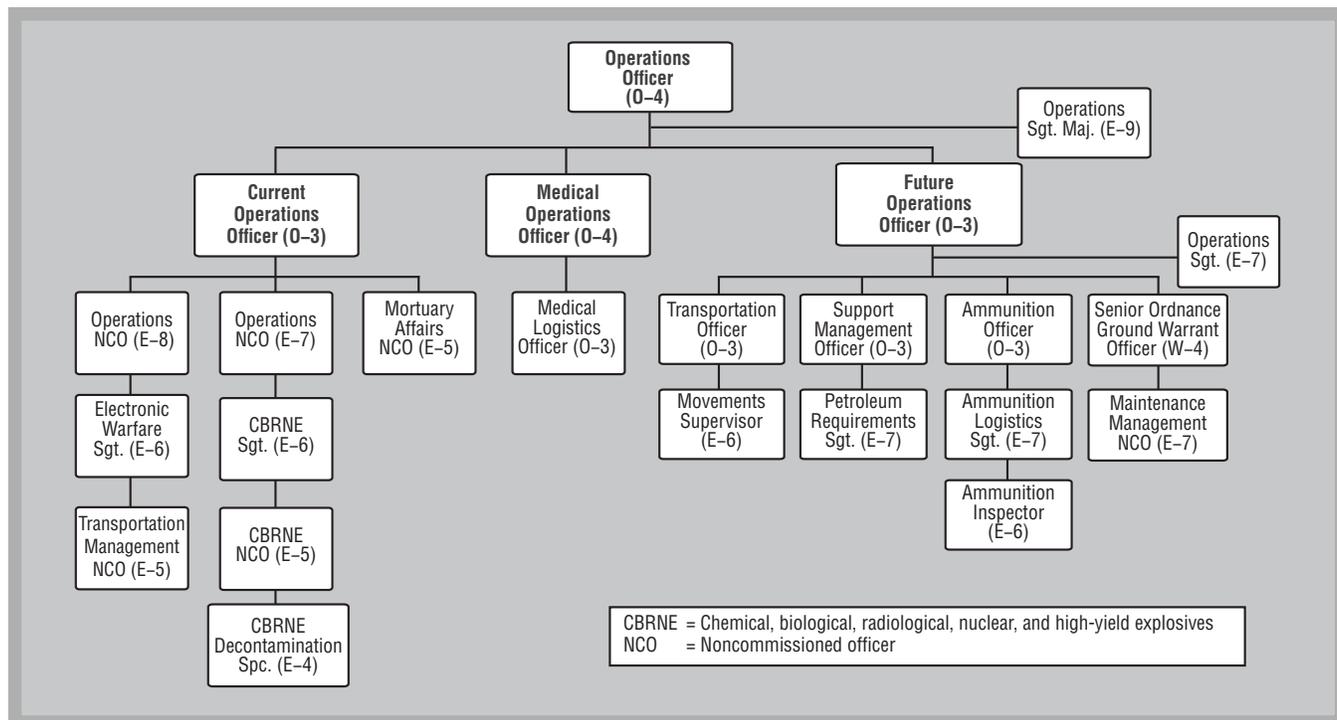
Although this article compares only the S-3 and SPO within a heavy brigade combat team, the concept can be applied to the other BSBs and combat sustainment support battalions. Combining the functions and personnel of the S-3 and the SPO sections would create an overarching COP that would provide the commander with a better understanding of his current and future operating picture.

Lt. Col. Michael McCulley is the senior logistics observer-coach/trainer at the National Training Center at Fort Irwin, Calif. She previously commanded the Regimental Support Squadron, 2nd Cavalry Regiment.

Maj. Will Arnold is the brigade support battalion (BSB) operations observer-coach/trainer at the National Training Center. He previously served as the support operations officer for the 1st Brigade Combat Team, 4th Infantry Division.

Maj. Tony Stoeger is the BSB support operations observer-coach/trainer at the National Training Center. He previously served as the support operations officer for the 2nd Brigade Combat Team, 10th Mountain Division.

This chart depicts the combined brigade support battalion S-3 and support operations section recommended by the authors.



Some Bold Thoughts on a SOC of the Future

In this article, the author takes a look at the mission of the sustainment operations center, questions it should be considered deployable, and makes a case for including resident enduring enablers.

By Capt. Wendi McBride-Rentschler

It has been almost three years since the sustainment operations center (SOC) concept was codified in the Forces Command (FORSCOM) modular force command and control executive order on July 30, 2010. Today, 13 centers exist; some are operational while others are in the planning stage.

The intent of FORSCOM's SOC concept is to use synergy and collaboration to capitalize on lessons learned about sustainment enabler integration, enhanced leader development, collective training, and readiness tracking. FORSCOM's SOC objectives are to—

- Provide centralized materiel management.
- Leverage multiechelon sustainment capabilities.
- Enable logistics decisionmaking for sustainment commanders.
- Replicate operational sustainment during garrison employment.

The SOC concept seeks to achieve both a common operational picture and the synchronization of sustainment activities throughout continental United States (CONUS)-based geographic regions. At Fort Bragg, N.C., where the core of the SOC replicates the way the sustainment brigade does business in an operational setting, limiting the SOC only to home station installation support is too restrictive. Fort Bragg SOC leaders consider a SOC deployable. We consider the SOC a joint capability. And, we believe enablers common across all SOCs should be formalized in policy.

The SOC Experience at Fort Bragg

The SOC at Fort Bragg began partial operations soon after the announcement of FORSCOM's SOC initiative. Initial manning for the center came from the merger of the 82nd Sustainment Brigade's S-3 and support operations sections. Soon thereafter, the installation defined and included the SOC in initial drafts of the installation support plan where existing coordinating relationships with potential future members were defined.

Since then, the center has taken significant strides to

become the activity that synchronizes all sustainment functions throughout the region assigned to Fort Bragg. The SOC has become a focal point for addressing sustainment issues at the tactical, installation, and strategic levels by managing the distribution network and marshaling strategic and regional enablers, including the Army field support battalion and the Defense Logistics Agency (DLA). It bridges the gap left in the absence of the legacy materiel management centers and leverages the logistics information systems resident in the sustainment brigade support operations section as well as those of outside enablers.

During expeditionary operations, the brigade operates a sustainment mission command center in the deployed, joint environment. The Fort Bragg SOC receives augmentation from the Army field support battalion, contracting command, and DLA during high operating tempo periods.

Fort Bragg Considers Its SOC Deployable

The Fort Bragg SOC manages a problem set that delves into operational and tactical logistics as the brigade fulfills both defined and implied roles in support of the global response force. This translates into an increased focus on expeditionary sustainment in support of joint forces establishing lodgments or conducting noncombatant evacuation operations or defense chemical, biological, radiological, nuclear, and high-yield explosive response force operations.

As a result of these missions, the Fort Bragg SOC has leaned toward being the same while deployed and in garrison. The Fort Bragg SOC has made strides in replicating operational sustainment in garrison and seeks to manage with the same template while deployed.

Emerging SOC theory has yet to consider the SOC a deployable entity. If an objective of the SOC is to “replicate operational sustainment during garrison employment,” should we not consider the SOC deployable? Aren't deployable sustainment brigades applying

considerable effort toward synchronizing strategic and operational lines of support? An analysis of a deployed sustainment brigade's battle rhythm will typically yield many missions involving the Army field support brigade.

Aren't deployed sustainment brigades expending time and energy synchronizing contracted installation support at forward operating bases? A review of contracted sustainment functions in the deployed environment will prove this to be true. Indeed, an analysis of the SOC mission in garrison yields many similarities in mission, purpose, and perhaps even challenges.

Interestingly, one could argue that implementing a SOC stands a greater chance of success in a deployed setting since expeditionary operations tend to provide the crisis moments needed to unify strategic enablers and thereby gain benefit from proximity. No CONUS-based SOC has benefited yet from working in the proximity of enduring resident enablers, such as an Army field support battalion, DLA, or a contracting command, because none of these SOCs have enduring enablers physically resident within them.

THE DEPLOYED ENVIRONMENT
MIGHT ONE DAY BE THE
VERY FIRST EXAMPLE
WHERE THE SUSTAINMENT
COMMUNITY CAN TRULY
SAY A SUCCESSFUL SOC
OPERATION HAS OCCURRED.
OF COURSE SUCCESS DURING
TIMES OF CRISES IS THE KIND
OF SYNCHRONIZATION THAT
OCCURS MOST OFTEN FROM
PROXIMITY OF ENABLERS AND
NOT JUST A "COORDINATING
AND SUPPORTING"
RELATIONSHIP.

The Fort Bragg SOC is no different and has found that only crisis moments and high operating tempo periods result in a willingness by most enablers to provide an enduring presence in the SOC. The deployed environment might one day be the very first example where the sustainment community can truly say a successful SOC operation has occurred. Of course success during times of crises is the kind of synchronization that occurs most often from proximity of enablers and not just a "coordinating and supporting" relationship.

Building Joint Relationships

A SOC must be prepared to leverage sustainment capabilities resident in joint and coalition organizations because both disaster and expeditionary operations are joint responses. Therefore, it must continue to build joint relationships and seek out joint, interoperable training opportunities while in garrison. Such training opportunities often involve joint organizations training throughout a SOC's geographically assigned region and therefore require sustainment support.

The mission to provide logistics support to a global response force joint task force that is prepared to both seize nonpermissive terrain and conduct civil response operations has given the Fort Bragg SOC a joint mindset. This SOC cannot successfully sustain its assigned region or joint task force without joint and interagency enablers, including the 43rd Airlift Group (U.S. Air Force), DLA, the Federal Emergency Management Agency, the 2nd Marine Logistics Group, expeditionary strike groups of the U.S. Navy, and the Department of State.

The Fort Bragg SOC has realized the benefits gained from enduring relationships with other Army SOCs. It is now beginning to seek out efficiencies from enduring joint and interagency relationships.

The Importance of Proximity

Articles written about SOCs from around CONUS have advertised them as one-stop synchronizers of sustainment activities. Leaders in the sustainment community have added that if a SOC does not have someone on site to help, it will act as a liaison in contacting the needed enabler. However, according to emerging SOC theory, contacting the right agency should be made easier by proximity. The agencies the SOC routinely contacts to manage the needs of supported units are potentially the best candidates for enduring membership in the SOC.

The Fort Bragg SOC has no enduring enablers resident in its ranks. It maintains solid working relationships with "potential" enablers, including DLA, an Army field support brigade, a contracting command, the directorate of logistics, a mission support element and corps G-4, G-7, and G-8, division-level general staffs, regional Army National Guard and Army Reserve sustainment units, and the 43rd Airlift Group (U.S. Air Force). The Fort Bragg SOC resides in a state-of-the-art facility with modern office space and room for enablers, yet there are none.

Very few SOCs throughout CONUS have colocated enablers like a regionally supporting Army field support battalion. If other SOCs are like the one at Fort Bragg, four dynamics are likely in play:

- The SOC maintains a good rapport with potential enablers and seeks the least disruptive way of achieving a physical presence in the SOC.
- Potential enablers are not structured or manned in a

way that fosters their ability to be enduring enablers in the SOC.

- Some enablers consider their proper place to be within the expeditionary sustainment command rather than in the SOC. (We should consider the validity of this argument.)
- Agency autonomy and turf continue to weigh as a factor.

The members of the Fort Bragg SOC believe that proximity means something. Therefore, the Fort Bragg SOC will continue to maintain, build, and establish relationships leading to enduring enablers.

It is not enough to settle for “coordinating and supporting” relationships that do not yield benefits that could be gained from proximity. A SOC must be bold and consider what structure will best support its assigned region and then seek out enablers and build relationships with them. The greater sustainment community can help gather enablers by identifying the common enablers needed across all SOCs and then documenting relationships with these organizations in emerging SOC policy.

Bold thinking makes us better. The SOC concept seeks to reform doctrine by considering lessons we have learned from deployments. Success of the concept depends on the

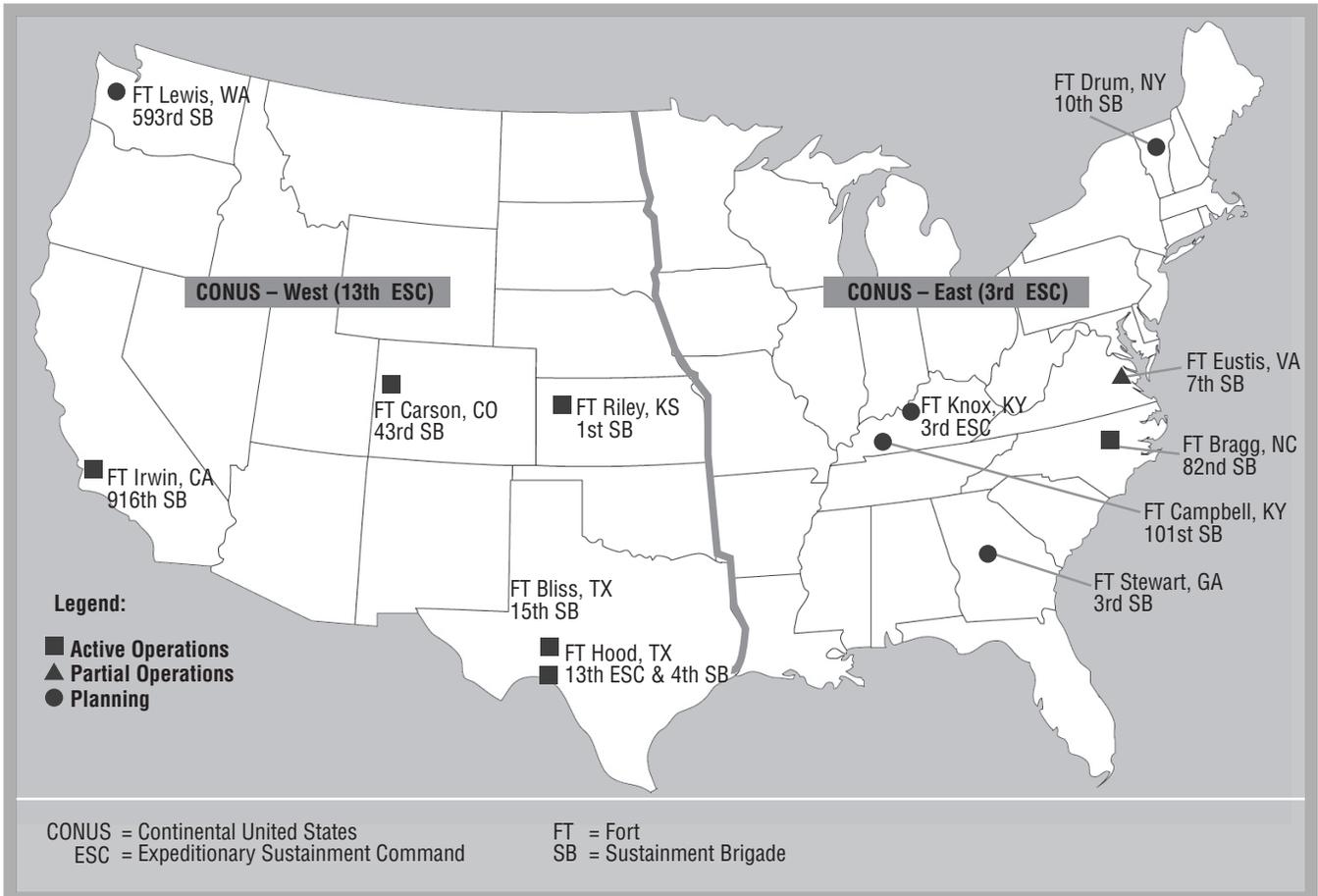
ability of SOCs to coordinate laterally among each other. This is best achieved by thinking hard about what agencies should be enablers, including joint and interagency enablers, and achieving synchronization through proximity.

As the Army enters a time of constrained resources, sustainers are exploring ways to be more efficient while retaining joint sustainment capabilities in an expeditionary environment. The sustainment community owes the combatant commander a manned and equipped force, but it should be one that is prepared to employ its full sustainment capabilities in the joint environment.

Thinking of the SOC as a deployable and joint entity, while also capturing SOC membership in policy and practice, will help us achieve these effects.

Capt. Wendi McBride-Rentschler is a support operations planner with the Headquarters and Headquarters Company, Special Troops Battalion, 82nd Sustainment Brigade, at Fort Bragg, N.C. She holds a B.S. degree from Austin Peay State University and is a graduate of the Quartermaster Officer Basic Course, the Combined Logistics Captains Career Course, the Army Airborne School, and the Aerial Delivery Materials Officer Course.

This chart depicts the location of the sustainment operations centers throughout the United States.



How the Army Needs to Lead Transformation in the Operational Energy Campaign

By Chief Warrant Officer 4 Ronaldo M. Lachica

The Army defines operational energy (OE) as “the energy and associated systems, information and processes required to train, move, and sustain forces and systems for military operations.”¹ OE includes electricity required by Army installations for daily activities, the fuel required to operate vehicles and generators for training and contingency operations, and even the batteries Soldiers carry in their rucksacks to operate various electrical devices.

The average fuel demand per Soldier has increased from about one gallon a day during World War II, to 20 gallons a day during operations Enduring and Iraqi Freedom (OEF and OIF).²

As the military has become more reliant on energy resources, the Army faces an urgent need to formulate an effective and viable path for its tactical fuel and energy future. Because our national energy requirement is increasing, developing a strategy that incorporates alternative energy sources has become a priority for the Department of Defense (DOD) and the Army.³

The Army realizes it must focus more on increasing its energy efficiency and reducing its logistics footprint without degrading effectiveness. Achieving the Army’s OE goals will not only reduce its massive energy dependence, it will also save lives and money. For example, reduced energy requirements means fewer fuel supply convoys for enemies to target in combat operations.

“This [fuel] dependency translates to a vulnerability, as a significant proportion of U.S. combat casualties in OIF and OEF may be attributed to resupply operations,” according to a 2010 white paper by the Army Capabilities Integration Center.⁴

In addition, fewer dollars spent on fuel and other energy costs will mean more funds available for other priorities as the Army moves into much leaner fiscal times.

In 2010, the DOD consumed nearly 5 billion gallons of petroleum in military operations, costing \$13.2 billion—a 255-percent increase over 1997 costs.⁵

According to a Defense Science Board Study, operations suffer from an unnecessarily high, and growing, battlespace fuel demand that compromises operational capability and mission success, requires an excessive support force structure at the expense of operational forces, creates more risk for support operations than necessary, and increases life-cycle operations and support costs.⁶

To successfully accomplish its OE goals and reduce the organization’s energy consumption and needs, the Army will need to fundamentally transform its internal perspective on energy consumption and infuse a new vision at all levels of the service.

Leading Change

There are many approaches to organizational change, but for the Army to implement a successful OE campaign, I believe it must adapt the eight-step transformation process described by John P. Kotter in his *Harvard Business Review* article, “Leading Change: Why Transformation Efforts Fail.”

Kotter did not create this process but derived it from his observations from the past decade of watching more than 100 companies try to remake themselves. The companies varied in demographics—large and small, in the United States and overseas, profitable and failing.⁷

Their efforts at transformation had mixed results—huge successes and failures and some that fell somewhere in the middle. I feel that the Army can glean some direction in implementing its OE initiatives from Kotter’s lessons learned.

Kotter’s process is ideally suited for the Army be-

¹ “Army Operational Energy,” <<http://www.arcic.army.mil/operational-energy.html>>, accessed Dec. 12, 2012.

² “Power and Energy Strategy White Paper,” Training and Doctrine Command, Army Capabilities Integration Center, Fort Monroe, Va., April 1, 2010, p. 2.

³ “Final Draft Tactical Fuel and Energy Strategy for the Future Modular Force,” DRS Technical Services, Richmond, Va. May 18, 2009, p. vii.

⁴ “Power and Energy Strategy White Paper,” p. 2.

⁵ “Energy for the Warfighter: Operational Energy Strategy,” Department of Defense, Washington, D.C., May 2011, p. 4.

⁶ “More Fight—Less Fuel,” Defense Science Board Task Force on DOD Energy Strategy, Department of Defense, Washington, D.C., February 2008, p. 3.

⁷ John P. Kotter, “Leading Change: Why Transformation Efforts Fail,” *Harvard Business Review*, March–April 1995, p. 59.

cause of its traditional top-down approach to transformation. The Army already has the Joint Capabilities Integration Development System process that considers doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) in the planning and problem-solving process. The idea behind applying the DOTMLPF consideration is to identify and fix known capability gaps. This process synchronizes easily with Kotter's change approach when applied to the OE campaign.

According to Kotter, a successful change process requires a series of eight distinct steps that should progress in sequence without a critical mistake in any of the steps.

"The most general lesson to be learned from the more successful cases is that the change process goes through a series of phases that, in total, usually require a considerable length of time. Skipping steps creates only the illusion of speed and never produces a satisfying result," Kotter writes. "A second very general lesson is that critical mistakes in any of the phases can have a devastating impact, slowing momentum and negating hard-won gains."⁸

Establish a Sense of Urgency

The first step of Kotter's suggested framework for transforming an organization is to establish a sense of urgency. Kotter argued that the urgency rate is high enough when 75 percent of senior leaders are honestly convinced that change must occur because the current system is not working or needs to improve.

An effective way for the Army to establish a sense of urgency is to publish or revise doctrine. Doctrine is the first consideration of DOTMLPF. Top levels of the Army develop doctrine, which then flows down all the way to the Soldier level through Army doctrine publications.

Doctrine is specific and elicits more of the required cooperation to move the campaign forward. The Army has yet to publish overarching doctrine addressing the implementation of OE and therefore has yet to establish a sense of urgency at all levels. Army leaders must address this critical requirement lest the lack of action in this first step doom the OE campaign from the start. Integrating OE into Army doctrine would establish a sense of urgency.

Form a Powerful Guiding Coalition

Kotter identifies the second step to transforming an organization as forming a powerful guiding coalition. This ties directly to the organization in DOTMLPF. The Army almost has this step right. The Army des-

igned its G-4 as the lead agent for OE, and several other organizations have initiated programs in support of the campaign. What the Army lacks is a proponent whose primary function is to integrate OE considerations into day-to-day activities. This organization should have enough power to lead the change effort.

For example, the Army established the Army Safety Center in 1978 and charged it with the responsibilities of implementing the Army Safety Program and serving as the Army's primary advisor on accident prevention. On Jan. 31, 2005, the Army redesignated the Army Safety Center as the Army Combat Readiness/Safety Center with an expanded mission to become the center of gravity for all loss-related areas.⁹ Likewise, the Army must establish a proponent for OE in order for the campaign to be successful.

Create a Vision

Kotter's third step in leading transformation is to create a vision to help direct change efforts and develop strategies for achieving that vision. This step coincides with the leadership aspect of DOTMLPF. Several Army and DOD studies manage to lay out the overarching goals of an OE campaign and the strategies for accomplishing OE goals, but they do not provide a singular, adequately presented, sound OE vision.

To start, the Chief of Staff of the Army needs to issue a sound and sensible vision statement on OE. Commanders down to at least the brigade level would then need to issue their vision statements in support of the OE goals. Commanders draft policy statements to communicate their vision regarding safety and equal opportunity. Commanders must do the same for OE.

Communicate the Vision

The fourth step of Kotter's approach is to communicate the organization's vision. The training and personnel components of DOTMLPF address this step. Soldiers and leaders should undergo mandatory training on OE. This training should happen down to the unit level in order to disseminate the vision and its accompanying strategies to the lowest level.

The Army also needs to develop an OE program that communicates its initiatives from the DA level down to company level, just as it does with the Army Safety Program and the Equal Opportunity Program. This would require training for Soldiers and civilians on OE initiatives. The Army could then train and assign OE officers and noncommissioned officers.

⁸ Ibid., pp. 59–60.

⁹ "U.S. Army Combat Readiness/Safety Center History," <<https://safety.army.mil/usasc/ABOUTUSACRSAFETYCENTER/tabid/278/Default.aspx>>, accessed Dec. 12, 2012.

Empower Others

The fifth step is to empower others to act on the vision. To their credit, leaders across the Army are initiating several efforts in support of finding OE solutions with respect to the materiel and facilities components of DOTMLPF.

The Army needs to continue the strategy of requiring installations eventually to produce as much energy as they consume. The design of new facilities must continue to factor in energy efficiency. Army vehicles in the future need to require less fuel.

Senior leaders should encourage creative thinking and risk taking that produces efficient and effective results. Those who produce results in support of the OE vision should be recognized and rewarded.

Create Short-Term Wins

The sixth step in transforming an organization is to plan for and create short-term wins. The Army has already detailed near-term milestones at the strategic level.¹⁰ These objectives span the DOTMLPF considerations.

The Army has objectives it hopes to achieve by 2014 in the areas of infrastructure and expeditionary power, ground vehicles, aerial vehicles, and Soldier power. The milestones for 2024 build on the objectives of 2014. Milestones achieved by 2024 lead to gains in 2030 and beyond.

Kotter suggests applying pressure in this step to assist with the change effort. The Army needs to employ some type of forcing function to pressure agencies responsible for achieving these short-term goals. In addition, the OE program at each level needs to establish achievable short-term goals.

Consolidate Improvements

The seventh step of Kotter's change approach is to consolidate improvements and produce still more change.

The Army has a long history of incorporating lessons learned and best practices into its operations. This would apply equally to its OE efforts. However, a formal methodology should be in place to gather this data. The Army needs to capture data from all areas of DOTMLPF and ensure it is reflected in new doctrine, organizational change, Soldier and leader training, and materiel and facilities development and management.

Some of the doctrinal and organizational changes could take years to develop. In the interim, lessons learned and best practices could be captured and distributed using the many electronic methods of delivery that have been created since the beginning of

OEF and OIF. The Army could establish a knowledge center similar to the networks now in place for many Army organizations.

Institutionalize New Approaches

The final step is to institutionalize the new approaches. To be successful at this step would be to have OE integrated in all areas of DOTMLPF across the Army.

We have seen this emphasis placed on many other major Army initiatives such as safety, suicide prevention, and sexual harassment prevention. This cultural integration also needs to happen with OE.

The Army needs to adapt Kotter's eight-step approach to achieve its OE goals. It must first establish a sense of urgency by developing an overarching doctrine addressing OE. It should then form of a powerful guiding coalition by establishing a single proponent for OE.

Next, senior Army leaders must create a sound and sensible vision, communicate that vision, and empower others to act on the vision. The Army then should plan for and create short-term wins. The next step is to consolidate all of these short-term wins in order to produce even more changes. Gradually, OE will become institutionalized and an integral part of Army culture, enabling the Army to achieve energy efficiency in support of the real goal of operational effectiveness through energy conscious operations.

Each step of the organizational change approach described by Kotter contains elements of DOTMLPF, so the Army already has the framework to transform its OE culture. Achieving the goals of the OE initiatives will result in Soldiers that are more capable and a better Army for the 21st century.

Chief Warrant Officer 4 Ronaldo M. Lachica is a graduate of the Theater Logistics Studies Program at Army Logistics University, Fort Lee, Va. He wrote this article as part of the requirements for graduation from the program. He holds a master's degree in Logistics from Florida Institute of Technology, and a B.S. degree in business management from Fayetteville State University. Lachica plans to retire in March 2013 after 27 years of service.

Comments? We welcome your comments on this or any other sustainment related topic. Email usarmy.lee.tradoc.mbx.leeasm@mail.mil. All responses are subject to editing and publication in Army Sustainment unless otherwise requested.

¹⁰ "Power and Energy Strategy White Paper," pp. 12, 16, 19–20, 23–24.

Improving Fuel Distribution Effectiveness in Afghanistan

Balancing fuel consumption, capacity, and distribution velocity was essential to meeting the fuel needs of units in Regional Command Capital in Afghanistan.

By Maj. Jeremiah S. O'Connor

In November 2010, the 17th Combat Sustainment Support Battalion (CSSB), 101st Sustainment Brigade, from Fort Richardson, Alaska, assumed responsibility for providing sustainment support to the nine bases in Regional Command (RC) Capital in Kabul, Afghanistan. The battalion placed a forward logistics element (FLE) at Camp Phoenix to facilitate this mission. After assuming the mission, the battalion quickly discovered variance in fuel consumption, capacity, and distribution velocity, which made class III management for Kabul difficult and inefficient.

Camp Phoenix, the logistics hub for the Kabul base cluster (KBC), had neither the capacity nor the throughput capabilities to serve as the fuel distribution hub for the cluster. This shortfall caused the CSSB to use Bagram Airfield as the KBC distribution hub. This delivery required the upload and download of hundreds of trucks per month at Bagram, adding stress to an already choked node.

The capacity of the bases in Kabul demanded just-in-time logistics, which is not the preferred solution for bulk commodity distribution. Additionally, unescorted host-nation trucks (HNTs) are not capable of meeting the distribution velocity required for just-in-time logistics. By contract, Afghan HNTs have seven days to deliver fuel, and it takes an average of three days from the contracting of the empty truck to get it onto Bagram Airfield and uploaded and ready for departure. These carriers also have a less than perfect record for successfully completing missions. (Mission success is defined as delivery of the fuel to the destination within seven days of upload with 90 percent of the fuel.) HNTs often arrived with less than 90 percent of the uploaded quantity, arrived late, or did not arrive at all.

The last challenge was maintaining visibility of fuel in the distribution pipeline. Although some trucks would deliver in less than seven days, it was impossible to predict when they would arrive.

Alternate Distribution Methods

The velocity of fuel distribution from Bagram Airfield

coupled with uncertain delivery times and quantities required alternate distribution methods to achieve the necessary logistics effects.

Provide a military escort. The first method used to increase the distribution velocity was to provide military escort for HNTs. Although this method reduced fuel delivery time and eliminated pilferage, it used critical convoy security crews and other resources to deliver a bulk commodity. Providing unscheduled military escort affected deliveries to the logistics hubs in RC East by delaying planned movements or bumping scheduled cargo.

Divert unescorted HNTs. The second distribution method was to divert unescorted HNTs bound for one base to another base that was critically short of fuel. Unfortunately, the delivery timeline requirement for a fuel truck started over as soon as its destination was changed, reducing overall throughput. Fuel diversions also placed the losing base at risk of dropping into critical status because the replacement fuel truck was more than a week away. Few bases in Kabul had the capacity to donate fuel. Diverting an HNT also added to the days that a driver had to deliver the fuel, reducing the overall distribution volume.

Order excess fuel. The third method of distribution was to order more fuel than the installation needed. This forced trucks to wait at a base until the base had consumed enough fuel to allow the trucks to completely download their fuel. This method was expensive because of demurrage charges for not downloading a truck as soon as it arrived. It put significant pressure on the Bagram Airfield fuel distribution node. Having a backup of trucks waiting to download fuel significantly reduced flexibility in determining which trucks to bring onto the base. It also caused fuel priorities for RC Capital to come in frequent conflict with those of RC East.

Use military fuel tankers. The fourth distribution method was to use military fuel tankers to deliver fuel. This course of action eliminated delivery time and volume uncertainties but used a tremendous amount of military resources and exposed crews to unacceptable risk. This

course of action was only acceptable under extreme circumstances and only for short-haul missions.

Because of its expediency, having the capability to distribute fuel in this fashion also allowed leaders to delay using the other four nonstandard techniques. For example, if an HNT fuel truck was expected to arrive at a base the following day and the base would run out of fuel in 48 hours, an emergency military-escorted HNT fuel delivery from Bagram was not needed because military tankers could be sent from Camp Phoenix with no notice. If the HNT arrived on schedule, the nonstandard delivery method was not needed. However, if the HNT did not arrive, then the assets were readily available to conduct the emergency push.

Disruptive Risk

Although these methods addressed recurrent risk associated with delivery delays and pilferage, they could not mitigate disruptive risk. Disruptive risk is an extended period without deliveries, which could be caused by an HNT driver strike, closure of the Pakistan ground lines of communication, religious holidays, or hazards related to the environment or politics. Increasing capacity in close proximity to the supported bases is the only way to effectively mitigate the risk of a long-term disruption.

To improve the existing system, the FLE had to use the Defense Logistics Agency–Energy (DLA–E) strategic reserve in Kabul to increase capacity; the FLE also had to

increase the throughput capabilities. To accomplish these changes, the FLE had to generate a sense of urgency in the stakeholders and make the initiative advantageous to each partner responsible for generating momentum.

DLA–E

DLA–E’s policy was to deliver to sites that had a fuel capacity of more than 1 million gallons. This requirement is driven by customer service limitations and the long leadtimes for distribution from sources outside of the theater. DLA–E orders fuel for the next 30 to 60 days, unlike sites in Kabul that order fuel for the following week.

Camp Phoenix’s fuel capacity was considerably less than 1 million gallons. Although the delivery time of the DLA–E distribution network was reduced by the presence of the strategic reserve in Kabul, DLA–E still had significant concerns about the supportability of including a low volume site in its network and becoming involved in tactical fuel distribution.

When the 101st Sustainment Brigade approached DLA–E about direct delivery, it mitigated the agency’s concerns by seeking direct delivery to only one site in Kabul and providing a legitimate capacity expansion plan. These two critical elements facilitated rapid approval of this request, and the brigade immediately realized improvements. Half of all fuel consumption in Kabul occurs at Camp Phoenix, so direct delivery reduced the throughput requirement at Bagram Airfield by 100 trucks

Host-nation trucks (HNTs) carrying fuel are escorted for forward operating bases in Afghanistan during a resupply mission. Unescorted HNTs often arrive with less fuel than they were given, arrive late, or do not arrive at all. One solution to this problem is to provide military escorts for the trucks. This, however, uses critical convoy assets.



Wood framing holds the 210,000-gallon fuel storage area foundation in place while the cement sets.



per month, just in time for the winter season.

While the direct delivery request was being staffed, the FLE received a number of phone calls and site visits during which DLA communicated its two biggest concerns: Did Camp Phoenix have a legitimate expansion plan in place, and would the camp have the throughput capacity to receive all of the trucks sent there? This introduced the second key stakeholder, Task Force (TF) Rushmore, RC Capital's Installation Management Command equivalent.

Task Force Rushmore

TF Rushmore operated the garrison facilities utilization board (GFUB) where projects for KBC were approved and forwarded to the joint facilities utilization board for ultimate approval and funding. The GFUB included key stakeholders and enablers from the garrison staff, including the engineers, the force protection officer, Camp Phoenix's garrison commander, and the contracting of-

ficer. In preparation for the GFUB, the FLE conducted a series of meetings with these stakeholders to identify and mitigate their concerns.

Convincing the Camp Phoenix garrison commander to allocate more space (the most valuable resource in Kabul) to logistics functions was a significant challenge. The shortage of space was one of the root causes of storage problems throughout the KBC.

Initially, a course of action was explored to transition the existing fuel storage footprint from a space-inefficient system using 20,000-gallon bags to a less modular system using 210,000-gallon bags. Unfortunately this type of project would reduce the near-term capacity at the very time a capacity increase was needed for the winter season.

The only other option was to reduce the overall footprint of the FLE, making the expansion require no additional space at Camp Phoenix. The previous unit



had left approximately half a football field's worth of retrograde materiel in the proposed expansion location. By rapidly moving this materiel off the base, the 17th CSSB convinced the Camp Phoenix garrison commander that the CSSB was sincere about the project. The brigade also reevaluated its tactical vehicle needs and rightsized its fleet to reduce the overall space requirement and, with 101st Sustainment Brigade approval, provided a few of those vehicles to TF Rushmore.

Another concern the garrison commander had about expanding the fuel storage footprint was the impact on force protection and force protection manning requirements. These concerns, along with the throughput requirement, drove the redesign of the fuel upload/download facility.

The new facility needed to reduce Soldier exposure, improve the protection of the base perimeter, increase throughput, and not use significant space. As TF Rushmore transitioned to TF Yankee, the construction of the

new facility became one of the highest priorities because of the force protection enhancements within it. The new facility gave Camp Phoenix the throughput capability and fuel capacity to easily support the entire KBC.

Benefits of DLA-E Distribution

One of the unexpected efficiencies that came from working with DLA-E was that it used superior trucks. These trucks were better equipped than HNTs ordered from Bagram and had two download nozzles. This reduced download time by half, resulting in an immediate reduction in force protection requirements and an increase in throughput capacity.

Another unexpected benefit of direct delivery was the significant reduction of delivery time in the city. When distributing fuel from Camp Phoenix to one of the KBC sites, we found that the order-to-delivery time was cut in half compared to delivery times from Bagram. This significantly reduced recurrent risk and the time needed to increase the stockage level at any site.

These enhancements set the conditions needed for the key stakeholders in Kabul to dedicate staff and other resources to push the project through the local and regional boards that dedicate space and funding to projects quickly. This significantly mitigated DLA-E's reservations about delivering fuel to such a small site.

With increased fuel storage in place, it was possible to restructure the original fuel bag footprint and replace it with a more space efficient footprint. This transition would double the overall capacity using a very limited amount of additional space.

This project reduced distribution times from 10 days to four days, the throughput requirement at Bagram by hundreds of trucks per month, and the number of force protection personnel required for downloads at Camp Phoenix. The project also doubled Camp Phoenix's fuel capacity, decreased delivery costs by approximately one-third by reducing double handling, and nearly eliminated the need for the nonstandard delivery techniques that consumed so many resources. This project minimized Kabul's exposure to recurrent and disruptive fuel risks and facilitated more responsive support by TF Lifeline (the 101st Sustainment Brigade) to other RCs through increased asset availability.

Maj. Jeremiah S. O'Connor is the support operations officer for the 101st Sustainment Brigade at Fort Campbell, Ky. He holds a B.S. degree in civil engineering from Michigan Technological University and an M.S. degree in managerial logistics from North Dakota State University. He is a graduate of the Infantry Officer Basic Course, Army Ranger School, and the Combined Logistics Officers Advanced Course.

14th HRSC Operations in Support of the 1st Theater Sustainment Command

While deployed to Kuwait, the 14th Human Resources Sustainment Center embraced human resources core competencies, including manning the force, providing services, coordinating personnel support, and conducting planning.

By Lt. Col. Keith W. Hunt

Human resources sustainment centers (HRSCs) are unique to the Army inventory. With only five units Army wide—three Active and two Reserve component—HRSCs bring specialized skills to the fight. As its name suggests, the HRSC is a key part of the sustainment community. It is regionally oriented, with one per theater sustainment command (TSC). The HRSC focuses on theater-level human resources (HR) operations synchronization, planning, technical guidance, and training in support of a TSC's operational sustainment mission.

According to FM 1-0, Human Resources Support, an HRSC is specifically designed to deploy to a theater of operations and provide HR operational expertise. It is a multifunctional, flexible, and modular Standard Requirement Code 12 staff element made up mostly of senior officers and noncommissioned officers (NCOs).

The HRSC coordinates, integrates, and synchronizes personnel accountability and strength reporting, casualty reporting, Army postal operations, and reception, staging, and onward movement tracking and analysis throughout the theater as prescribed by Army service component command guidelines.

Execution missions include maintaining the Deployed Theater Accountability System database, theater casualty assistance center operations, and theater postal supply and finance operations. The HRSC conducts its missions without the benefit of down range command and control; rather, it creates and uses mutually supporting relationships with units and staffs in and out of theater to provide customer service.

The 14th HRSC

Developed as part of the Army's modular transformation, the 14th HRSC is known as the "Desert Phoenix" to symbolize the unit rising from the previous theater-

level HR structure. In its new design, this unit provides a greater scope of subject matter expertise, training support, and technical guidance.

The 14th HRSC is authorized 83 personnel and comprises an office of the director and five divisions that are each part of the modular team but with separate, distinct, and unique functions. These five divisions are Plans and Operations (PLOPS), Personnel Accounting/Personnel Readiness Management/Personnel Information Management (PA/PRM/PIM), Casualty Operations, Postal Operations, and Reception/Staging/Onward Movement (RSO).

Each division is authorized a lieutenant colonel, a senior warrant officer, and a senior NCO, plus a contingent of other field-grade officers and NCOs specifically aligned with each division's mission focus.

Deployment to Kuwait

In April 2012, the 14th HRSC redeployed from the Third Army/U.S. Army Central (ARCENT) area of operations to its headquarters at Fort Bragg, N.C. While deployed, it was aligned with the 1st TSC's forward command post at Camp Arifjan, Kuwait, and main command post at Fort Bragg.

In Kuwait, the 14th HRSC offered tailored support to a host of HR elements, ranging from the Third Army/ARCENT G-1 and military mail terminals, to the theater gateway operation, to casualty liaison teams and human resources operations branches, which support expeditionary sustainment commands and sustainment brigades.

Aside from technical and training support, the 14th HRSC produced many frequent assessments, analyses, reports, and briefings for 1st TSC and ARCENT senior leaders and worked with the U.S. Central Command (CENTCOM) and Department of the Army (DA) on

a daily basis. The 14th HRSC's major support efforts included planning and providing subject matter expertise for Silver Scimitar, the annual HR culminating training event; tracking the recently completed drawdown of forces from Iraq; coordinating the Afghanistan surge recovery; and scaling HR assets in theater for future deployment rotations as an enduring mission analysis.

Plans and Operations

While deployed, the PLOPS division coordinated current operations requirements, developed HR training plans, monitored HR force management issues, and managed contingency operation planning.

The division tracked force management across the theater for more than 1,000 HR personnel, spearheaded enduring mission analysis for HR support in Iraq and Afghanistan, and provided subject matter experts in support of Silver Scimitar training and planning.

PLOPS also helped conduct two sustainment command post exercises for ESCs. It was central in developing and synchronizing the HRSC's master scenario event list for Silver Scimitar. PLOPS served as the HRSC's primary planner for force management and provided

representatives at sourcing and requirements planning seminars. PLOPS monitored the pulse of HR operations throughout the theater and was the HRSC's ambassador to supported commanders.

PA/PRM/PIM

In Kuwait, the PA/PRM/PIM division provided the augmentation package directly linked to the ARCENT G-1. Its primary function was name, unit, and location accountability for Department of Defense forces across the theater as well as for contractors attached to Army units.

This task was accomplished by synchronizing command and HR system databases and facilitating the implementation and oversight of the web-based Deployed Theater Accountability System. The PA/PRM/PIM division analyzed combat capability and readiness status and leveraged several HR systems to provide the commander with situational awareness, which in turn supported sustainment preparation of the battlefield.

The PA/PRM/PIM division provided systems training to units in theater, maintained real-time information with which to build detailed plans and analyses, and worked

During Silver Scimitar 2012, a two-week, multicomponent, human resources training exercise, Chief Warrant Officer 4 Stacy Malloy, a Casualty Operations Division human resources technician with the 14th Human Resources Sustainment Center, provides Soldiers with an overview of casualty operations. (Photo by Sgt. David Turner)



with CENTCOM and DA headquarters levels daily.

The PA/PRM/PIM division tracked and monitored personnel across the ARCENT area of responsibility daily. This accountability encompassed Soldiers, Sailors, Airmen, Marines, Coast Guardsmen, Department of Defense civilians, and contractors in 20 countries from Egypt to Kazakhstan, including personnel serving on vessels in adjacent territorial waters.

Casualty Operations

The Casualty Operations Division (COD) established and operated the theater casualty assistance center, which was responsible for receiving and processing all casualty reports. The COD was the casualty and mortuary affairs operations center's single point of contact for casualty reporting in theater, a liaison between the DA level and operational units. The COD was augmented with casualty liaison teams from the Air Force and Army National Guard.

The COD streamlined the reporting process by revising standard operating procedures and providing clear policy guidance to reporting elements in Iraq, Afghanistan, Qatar, Saudi Arabia, and Kuwait. The COD's strong presence in theater was enhanced by its continual focus on training and support, having provided multiple augmentation and training packages to units across the area of operations. Furthermore, the COD assisted the casualty and mortuary affairs operations center in monitoring formal line-of-duty investigations and reduced the backlog of investigations in theater by 90 percent.

Postal Operations

Essentially functioning as the Army's postmaster, the Postal Operations Division (POD) provided technical guidance and oversight to ensure Army post offices were compliant with applicable policies and regulations. The POD coordinated directly with the Military Postal Service Agency and the Joint Military Postal Agency and ensured Army post offices received staff assistance visits and were within Army and joint standards. In eight months' time, the POD facilitated the opening of three post offices in Afghanistan and was key in overseeing the closure of 13 post offices in Iraq as part of the responsible drawdown of forces.

The POD published a host of standard operating procedures and policies, responded to hundreds of requests for information, and saved the Army more than \$50,000 by reducing unauthorized mail. The POD also crafted the annual holiday mail surge plan and coordinated the redistribution of postal equipment from Iraq to units in Afghanistan and the continental United States.

Additionally, the POD coordinated and managed the delivery of more than 70 million pounds of mail. If that amount of mail flowed through a tube one foot in

diameter, the pipeline would stretch more than 3,800 miles, from Pittsburgh, Pa., to Anchorage, Alaska.

RSO

The RSO division provided technical guidance for and maintained visibility of all personnel transiting the theater through the aerial port of embarkation or aerial port of debarkation (APOD). The RSO division supported planning for deployment and redeployment operations, assessed rest and recuperation operations, and analyzed predicted passenger flow rates for various transit categories to ensure assets were properly resourced and used.

These functions required close and frequent coordination with the PA/PRM/PIM division for accountability with Air Force and continental United States APOD planners, the 1st TSC, and personnel assistance teams within theater. The RSO division conducted several site visits to human resources operations branches and APODs and coordinated for the installation of three new common access card machines.

The RSO division was instrumental in the addition of a second major travel hub in theater and was a significant proponent for the use of available alternate flight options to and from theater, saving the Army hundreds of thousands of dollars.

Like the POD, the RSO division developed a holiday surge plan to accommodate service members during the peak travel period and was a major part of planning the drawdown of U.S. forces from Iraq. Over the course of eight months, the RSO division coordinated the movement of more than 600,000 deploying, redeploying, temporary duty, and rest and recuperation travelers—roughly equal to relocating the entire city of Boston.

The mission of any HR element is to coordinate timely and effective support to enhance readiness and operational capabilities. The 14th HRSC embraced all HR core competencies: manning the force, providing HR services, coordinating personnel support, and conducting HR planning.

The 14th HRSC fully demonstrated its capabilities in supporting 1st TSC missions at Camp Arifjan and Fort Bragg. In line with Field Manual 1-0, it contributed to operational effectiveness and helped to sustain optimal readiness. The 14th HRSC's accomplishments can be seen in its accurate accountability, realistic HR training, and the high level of morale among troops in its subordinate units. The 14th HRSC is proof that leadership and doctrine enable prompt personnel actions on the battlefield and in garrison.

Lt. Col. Keith W. Hunt is the chief of the Mission Command Battle Lab Experimentation Branch at Fort Leavenworth, Kan. He has a master's degree in education from Louisiana State University-Shreveport.

Intelligence Support to Sustainment Operations: Lessons Learned from the Iraq Drawdown

The 1st Theater Sustainment Command relied on daily intelligence sharing across the joint operating area to conduct safe and secure retrograde operations during Operation New Dawn.

By Lt. Col. Devon Blake and Chief Warrant Officer 4 Deloye Meacham

From an intelligence perspective, the Iraq drawdown offers many important lessons learned and critical points to capture. This article specifically focuses on intelligence support to sustainment operations during the final push of personnel and equipment out of Iraq from Oct. 21 to Dec. 18, 2011.

The 1st TSC's Retrograde Mission

The 1st Theater Sustainment Command (TSC) was activated on April 18, 2006, as one of three active duty TSCs in the Army. This two-star command consists of approximately 22,000 personnel whose mission is to provide logistics support to the U.S. Central Command (CENTCOM) theater of operations. The 1st TSC operates two command posts: the main command post at Fort Bragg, N.C., and the forward command post at Camp Arifjan, Kuwait.

In March 2012, the unit was assigned the retrograde mission for U.S. Forces Afghanistan and directed to establish a third command post in Afghanistan. The 1st TSC's primary mission is sustainment operations for the CENTCOM area of responsibility. However, its primary focus became retrograde operations for Operation New Dawn in Iraq on Oct. 21, 2011, the day that President Barack Obama announced that all U.S. troops and trainers would be out of Iraq and home for the December holidays.

At the time of the president's speech, 24 major operational bases and more than 86,000 personnel were still in Iraq. The 1st TSC had only 58 days to complete the retrograde mission. In order to meet the president's deadline, the commanding general rallied his staff to develop a plan for this seemingly insurmountable task, which was comparable to the Red Ball Express in World War II or the Cold War's Berlin Airlift.

At the time of the president's announcement, the

second and third order effects on sustainment seemed astronomical, yet ensuring the safe return home of our brothers and sisters in arms was viewed as a challenge worthy of devoting time, energy, and resources.

Threats to Transportation

The 1st TSC G-2 conducts split-based operations at command posts in North Carolina, Kuwait, and Afghanistan and has a mission to provide timely, accurate, and predictive logistics-based intelligence to the 1st TSC's commanding general, his staff, subordinate units, Soldiers, and civilian agencies across the globe. Several threats affect the transportation carriers that provide crucial resupply along the ground, sea, and air lines of communication that sustain our forces throughout Iraq, Afghanistan, the Northern Distribution Network, the Horn of Africa, and Yemen.

The G-2's theater sustainment intelligence center produces and distributes daily, weekly, and monthly intelligence to a comprehensive audience. In addition to a talented team of analysts that develop the products, the G-2 also has organic counterintelligence agents who investigate and report potential threats to the 1st TSC mission.

In order to meet the commanding general's intelligence demands for retrograde operations and the drawdown, the G-2 deployed additional personnel from the main command post at Fort Bragg to the forward command post in Kuwait.

The 1st TSC and its subordinate sustainment brigades do not conduct lethal targeting, nor do they own any organic intelligence, surveillance, and reconnaissance (ISR) assets. The 1st TSC relies on area of operations (AO) owners and national-level assets for ISR support. However, subordinate logistics units often provide critical intelligence through convoy debrief-

ings. The drivers of these missions understand that they are intelligence sensors who are familiar with their AOs as a result of driving the routes daily and are able to recognize changes in the environment.

Two of the 1st TSC subordinate unit intelligence sections (the S-2 from the Minnesota National Guard's 1st Brigade Combat Team, 34th Infantry Division [1/34th BCT], and the S-2 from the Tennessee National Guard's 230th Sustainment Brigade) conducted convoy commander debriefings to collect pertinent information on criminal and insurgent activity, including attack trends, local atmospherics, and tactics, techniques, and procedures (TTP). From this information, the best course of action could be assessed.

For example, logistics drivers could provide information on common methods and locations for explosively formed penetrator (EFP) and improvised explosive device (IED) emplacement. To further assist with the debriefings, the counterintelligence agents from the TSC developed and implemented a list of open-ended questions to bolster discussion and trigger the drivers' memories. As a result of these driver debriefings, AO owners discussed and shared intelligence daily across the joint operating area. Also, TTP were developed to help drivers avoid EFPs and IEDs.

Typically, sustainment convoys in Iraq drove close to the center of two- and three-lane roads to avoid the EFPs and IEDs typically planted along the shoulder. They also drove at high rates of speed to pass quickly through known elevated threat zones. Insurgents observed these TTP and soon adjusted their practices accordingly. They began to angle their EFPs precisely to target drivers, gunners, and known soft spots in armor.

To reduce the risks to the logistics convoys, the unit S-2s compiled data such as time of day, IED and EFP emplacement statistics, areas of increased activity, and types of initiators employed. The S-2s then provided briefings to truck and convoy commanders to raise awareness of the elevated threat zones and recommended which lane to drive in for a particular length of the road.

For example, if EFPs were generally set up along a three-lane road in an elevated threat zone to target a vehicle in the center lane, then the unit S-2 would recommend the convoy vehicles drive either along the far side of the road (farthest away from known EFP sites) or close to the shoulder of the road (near known EFP sites). By driving on the far side of the road, the majority of shrapnel from an EFP will overshoot a designated target vehicle and prevent injuries to the vehicle's occupants. Vehicles driving close to the shoulder will be hit by shrapnel, but the aim will be off and affect only the lower areas such as the tires and wheel wells.

To prevent insurgents from adapting to 1st TSC convoy lane changes, S-2s routinely changed the driving lane TTP. The S-2s in the 1/34th BCT effectively used

computer-aided design software to rebuild attack models of recent IED and EFP detonations, giving drivers a visual reference of the insurgents' techniques.

Rock Throwing Incidents

The 1st TSC's sustainment drivers were also critical in providing local atmospherics. A noted trend that caused concern for sustainment convoys, as well as for combat units, was rock throwing. The incidents occurred primarily in the vicinity of military forward operating bases. Iraqis with anti-U.S. sentiments recruited Iraqi children, young adults, and occasionally local security forces to throw rocks at convoys waiting to enter military bases. On several occasions, significant damage was caused to personnel and equipment.

Intelligence indicated that insurgents paid the children and some adults to throw rocks at U.S. convoys in order to push Soldiers into a defensive posture. From the G-2 perspective, one of the principal concerns was that a coalition force member might shoot a rock thrower in self-defense. Another concern was that insurgents might merge with volatile local crowds outside military installations, initiate an attack, and then blend back in with the local populace as coalition forces returned fire in self-defense.

A third scenario of concern was that a rock thrower might toss a homemade explosive in lieu of a rock, causing damage similar to that of a hand grenade. Any of these scenarios would lead to an information operations nightmare with insurgents undoubtedly and defiantly claiming that coalition forces egregiously fired at innocent protestors. The end result likely would have been an increase in attacks and further opposition toward U.S. forces.

At the time of the incidents, primarily during the summer months of 2011, senior leaders were debating about the use of lethal and nonlethal force in rock throwing incidents. It was decided that a lethal posture would cause undue media attention and launch a negative information operations campaign. Using nonlethal means, such as rubberized bullets, would be misconstrued by the media as a lethal posture and also cause damage to U.S. Soldiers' reputations.

To deter convoy Soldiers' growing anxiety, the 1st TSC's convoys were typically notified prior to arrival of crowds gathering outside bases. Despite the occasional damage to equipment and injuries to personnel, convoy members understood the importance of their actions.

Another effective countermeasure was the involvement of the AO owners in engaging local leaders through a proactive information operations campaign. After coalition leaders spoke to heads of schools, city council members and shura leaders, the children were soon discouraged from throwing rocks and the activity in those areas ceased for several months. This took a

large effort on the part of the AO owners, but it was extremely helpful for the convoys.

Sharing Intelligence

Daily intelligence sharing among the 1st TSC, U.S. Army Central, U.S. Forces Iraq, the 364th Expeditionary Sustainment Command, the 1/34th BCT, the 230th Sustainment Brigade, the 595th Transportation Brigade, and the Military Surface Deployment and Distribution Command proved to be essential to successful retrograde operations. The intelligence professionals within these units took measures to ensure that all source intelligence was briefed down to the lowest level—the users on the ground who were driving the roads.

As often as permissible, the G–2s and S–2s had face-to-face visits, conducted secure phone calls, or shared intelligence, analyses, and assessments through a secure Internet connection. Additionally, it was paramount for intelligence officers and analysts to occasionally ride in convoys with the drivers. It was a key to truly understanding the threat, terrain, and environment firsthand.

Using Adobe Connect and a secure Internet connection, the 1st TSC G–2 hosted a weekly joint intelligence synchronization meeting with theater intelligence subject matter experts from Iraq, Kuwait, Afghanistan, and Fort Bragg. Including representatives from Afghanistan was essential in order to discuss the potential migration of insurgent activities or TTP across borders.

Also key for information sharing, the 230th Sustainment Brigade hosted a bimonthly convoy commander's conference attended by the 1st TSC G–2, in-theater logistics unit staff, convoy commanders, and truck commanders. It was not uncommon for a general officer from a higher headquarters to attend the conference to see the tactical logistics picture and to hear from the Soldiers on the road.

Although the conference had an established agenda, it consisted of informal briefings and open discussions were highly encouraged. Included as part of the conference were statistics from the latest criminal and insurgent TTP. Potential methods to defeat these threats were discussed, and convoy and truck commanders could provide immediate feedback regarding their thoughts, experiences, and assessments.

ISR for Retrograde

The use of ISR assets during retrograde operations was essential. Again, the 1st TSC does not have organic ISR assets or an assigned collections manager to facilitate and track ISR requirements. Since the 1st TSC was based in Kuwait during the Iraq drawdown, many people believed that the TSC was not involved in combat operations, making it difficult to compete

for ISR with AO owners in the combined joint operations area, which was already suffering from a deficit of available resources.

The 1st TSC G–2 team campaigned heavily with the U.S. Forces Iraq J–2, explaining the mission of the TSC and the extent that the convoys traveled. Daily distances averaged 360 miles along Iraqi roadways that were targeted by insurgent networks. Different from combat patrols whose mission was to target and kill the insurgents, logistics and retrograde convoys preferred not to engage the fighters but, rather, outrun them. Nonetheless, they were still targeted while often carrying critical resources such as ammunition, fuel, equipment, and food for combat Soldiers.

The overall success of using ISR assets relied on relationship building and establishing trust among units. Sustainment brigades were granted direct liaison authority with AO owners as they traversed the routes. The TSC worked with U.S. Army Central to include national and theater requirements into the Planning Tool for Resource Integration, Synchronization, and Management database and advocated for their inclusion in the planned intelligence deck. This database is used within the intelligence community specifically for ISR requests and prioritization. National and theater requirements were satisfied, and information of interest was passed directly to units using Blue Force Tracker.

The combined efforts of the entire logistics community resulted in a fast 58-day retrograde. During this time, the 1st TSC safely conducted 481 convoy missions using 3,600 trucks and retrograded 16,032 truckloads of equipment, all while driving a combined total of 11 million miles. Notably, the sustainment drivers suffered no serious injuries or loss of life. The 1st TSC G–2 believes that the talented team of intelligence professionals had something to do with the outcome.

Lt. Col. Devon Blake is the commander of the 334th Military Intelligence Battalion. She was the 1st Theater Sustainment Command G–2 while deployed to Kuwait in support of the drawdown in Iraq. She has a bachelor's degree in engineering from the United States Military Academy, a master's degree in engineering from Missouri University of Science and Technology, and a master's degree in education from the University of Virginia.

Chief Warrant Officer 4 Deloye Meacham is the senior intelligence warrant officer in the 25th Infantry Division Analyst Control Element. He was previously stationed with the 1st Theater Sustainment Command G–2 and deployed to Kuwait to support the Iraq drawdown.

Lengthening the Tether of Fuel in Afghanistan

During its deployment to Afghanistan, the 633rd Quartermaster Group implemented measures to increase efficiencies in fuel tracking.

By Chief Warrant Officer 2 Kenneth Hudak



A key vulnerability of modern warfare is its reliance on petroleum, as evidenced when Gen. George Patton's Third Army ran out of fuel just outside of Metz, France, on Aug. 31, 1944. Nearly 70 years later, our petroleum dependence remains a vulnerability. After his experiences in Operation Iraqi Freedom, Marine Corps Lt. Gen. James N. Mattis noted the need to "unleash us from the tether of fuel."

This tether restrains our mobility. The war in Afghanistan demonstrates the complications stemming from a reliance on fossil fuels. The poor conditions of Afghanistan's highways make the movement of fuel slow, tedious, and dangerous. Insurgent attack is a constant risk for supply convoys. The country's regions are separated by deserts in the west and south and the rugged Hindu Kush mountains that cut through the center of the country.

Each year the North Atlantic Treaty Organization (NATO) forces consume about 600 million gallons of JP8 fuel, according to the current daily consumption rates of the International Security Assistance Force Joint Command. This presents a

challenge in Afghanistan. The capacities of this land-locked nation's six border crossing points are often stretched to handle the staggering quantities of fuel imports and other classes of supply required by the U.S.-led NATO mission.

Fuel Consumption Issues

The U.S. military's three major consumers of fuel are ground vehicles, prime power generators, and aircraft. Almost half of the fuel at major forward operating bases is consumed by individual power generation units, according to reports generated by the Tactical Fuels Manager Defense system.

To reduce fuel consumed by prime power, centralized power plants, such as those found at Camp Marmal at Mazar-e-Sharif and Kandahar Airfield have been constructed to replace individual generators. Based on historical data and lessons learned from Operation Iraqi Freedom, leaders expect this measure to reduce the fuel demand. This is significant because gains made by centralizing power will offset some of the additional fuel demand produced by the heavily armored mine-resistant ambush-protected vehicles present in theater,



A M978 heavy expanded-mobility tactical truck tanker waits to cold-fuel a CH-47F Chinook helicopter.

which require almost 200 percent more fuel than their unarmored counterparts.

Other Complications

A mission command tether also arises with distribution and tracking of fuel in Afghanistan because of outsourcing to contractors for fuel delivery within the Combined Joint Area of Operations–Afghanistan. Without the support of military escorts or movement control specialists, visibility of a subcontracted fuel truck is sometimes lost once the truck leaves the refinery and only returns once the truck arrives at its destination. This loss of visibility complicates delivery forecasting and reduces accuracy.

Another complication is the provision of fuel by two major organizations: Defense Logistics Agency–Energy (DLA–E) Middle East and NATO, as authorized by the basic ordering agreement. This two-tiered system requires precise coordination among coalition logisticians to ensure all fuel needs are met. Furthermore, both organizations compete for the same fuel, face the same border crossing constraints, and rely on the

fixed number of available tanker trucks in Afghanistan and neighboring countries.

Improving Situational Awareness

In order to address the “fuel tethers,” the 633rd Quartermaster Group developed two new methods of managing information in order to integrate reporting and improve situational awareness for senior logisticians. First, the group developed a web-based subarea petroleum office (SAPO) portal, accessible on the 1st Theater Sustainment Command’s Secret Internet Protocol Router Network. This portal provides the status of requests made by subordinate commands, copies of approved requests, copies of requests for information, and pictures and other information regarding individual forward operating bases. The SAPO portal will preserve valuable institutional knowledge that is ordinarily lost every 12 months when units redeploy.

The second method is a monthly fuels/border-crossing report. This report, created by 633rd Quartermaster Group, NATO, and DLA–E representatives, lists the amount of fuel

crossing the border each month. The report proved invaluable when devising mitigation strategies in anticipation of a specific gate closure.

For example, the quantity of each fuel type was instantly known when the fuel had to be rerouted through the Northern Distribution Network in northern Afghanistan because of the closure of the Pakistan border crossing points: the Torkham and Chaman gates. Knowing these fuel quantities allowed planners to alert contractors of how much fuel to anticipate arriving through the Northern Distribution Network.

Fuels NCO Liaison

The 633rd Quartermaster Group's SAPO in Afghanistan decided to embed a U.S. Forces–Afghanistan fuels noncommissioned officer (NCO) with the 801st Quartermaster Detachment as a liaison officer. This NCO moved to Bagram Airfield and participated in U.S. Forces–Afghanistan site assistance visits across Afghanistan.

The embedded NCO benefited both organizations and helped to further integrate the 801st Quartermaster Detachment into the fuels community within Afghanistan. Sharing site assistance visit findings with forward operating bases across the Combined Joint Area of Operations–Afghanistan

helped the bases improve efficiency in storage, download of product, and reporting procedures.

Working closely with the Joint Petroleum Office, DLA–E, and NATO, the 633rd Quartermaster Group made recommendations and decisions regarding supply chain management and distribution directives in order to integrate the multiple parties in the combined joint fuels community. By evaluating force structure and providing liaison services among multiple commands, the SAPO facilitated increased efficiencies and essentially lengthened that tether of fuel, allowing ground commanders to worry less about their fuel stock and focus more on battlefield operations.

Chief Warrant Officer 2 Kenneth Hudak, USAR, is a petroleum systems technician for the 633rd Quartermaster Group. He holds a bachelor's degree in environmental policy from Bowling Green State University and a master's degree in public administration from Central Michigan University. He is a graduate of the Petroleum Warrant Officer Basic Course, the Multinational Logistics Course, and the J–20 Petroleum Quality Assurance Course.

Spc. Lishan Watson rotates her arm to signal Sgt. Rodney Frazier to begin pumping fuel as they cold-fuel a CH–47F Chinook helicopter. (Photo by Sgt. Richard Wrigley)



Last One Out Turns Off the Lights: Closing a Military Base During the Withdrawal of Troops From Iraq

By Capt. Mark A. Renteria

During Operation Iraqi Freedom, the Army spent millions of dollars building up operating bases all over the country. Although not all bases were created equal, they all were constantly being improved during the almost nine-year war. Toward the end of the war, many sites boasted Green Beans or Starbucks coffee shops, fast food joints common in the United States, million-dollar dining facilities, laundry services, and morale, welfare, and recreation (MWR) facilities that improved as time went on. As a Soldier, I was happy to see these establishments added to my base, but removing everything at the end of mission was a logistics challenge.

Setting the Scene

In 2003, my unit at the time, the 974th Quartermaster Company (Field Service), began a 16-month deployment to Iraq in support of Operation Iraqi Freedom. None of the Soldiers in my unit had ever experienced war firsthand, and we drew our expectations from what we had seen in the media. However, we quickly realized that the war we were in was vastly different from the war we watched from the comfort of our living rooms.

We arrived at Al Taqaddum Airbase, known as Forward Operating Base Ridgway at the time, and began to set up our shower and laundry services. Soldiers and Marines who had been part of the initial invasion had been eagerly awaiting our arrival because they wanted to take showers and clean their uniforms. On par with getting precious phone time to talk to family and loved ones, laundry was a key service that made these Soldiers and Marines smile and raised their morale.

We were served breakfast and dinner daily from a mobile kitchen trailer. For one month, a meal ready-to-eat (MRE), a plate of turkey, and a shotglass of Koolaid was our daily menu. These meager rations were commonplace at most bases in Iraq in 2003.

Looking around the base, I saw destroyed airplane hangars, bombed-out runways, displaced mortar rounds, and hollowed-out buildings. After the basic life support system was in place, the realization that we would be in Iraq for a while instigated contract after contract to improve the bases.

Months of base improvements resulted in the establish-

ment of a dining facility, an MWR center, a gym, a phone and Internet center, and other small pleasantries like air conditioning, windows, and doors. Recognizing that war is hell, the U.S. government used these upgrades to ensure that the morale of Soldiers was kept at the highest level possible. It was the start of our presence in Iraq, and our country made sure that Soldiers were taken care of by improving and building an infrastructure that could maintain units for many years.

Enjoying Established Bases

By 2009, it was rare for a large military installation in Iraq not to have either a Green Beans coffee shop or a Starbucks within its perimeter. Markets run by local nationals sold rugs, flags, and other trinkets. Essentially, if a Soldier wanted something within the limits of General Order 1A, he could easily find it on the base.

Throughout Iraq, the U.S. military built an infrastructure in order to sustain Soldiers' morale and make them as comfortable as possible during year-long deployments in a country where mortars and improvised explosive devices were the daily enemies.

Arriving at a base in Iraq after 2005 was a lot like moving to a desert base such as Fort Bliss, Texas, or Fort Irwin, Calif., except that you lived in a containerized housing unit (CHU), passed sandbags and bunkers on your way to work, carried a weapon on you at all times, and occasionally sought cover because of indirect fire hitting the base.

Closing COS Kalsu

In October 2011, President Barack Obama announced that all U.S. forces would leave the country by the end of the year. At that point, my unit, the 115th Brigade Support Battalion (BSB), received the mission to close down the contingency operating station (COS) for which I was mayor, COS Kalsu. The task was logistically challenging because the COS had expanded its infrastructure tremendously since 2003 and was home to more than 4,000 service members, contractors, and civilians. The difficulty was compounded by the fact that we were required to close the COS within three months.

COS Kalsu was located in Iskandariya, Iraq, about 20

miles south of Baghdad. More than 3,000 CHUs were spread throughout the base, and the heart of the base consisted of a large dining facility, Green Beans coffee shop, Pizza Hut trailer, AT&T call center, barber shop, beauty salon, rug shop, gym, MWR facility, local-national market, and small post exchange (PX). After eight years of base improvements, my battalion was charged with playing a major role in closing down COS Kalsu by handing over equipment and preparing the base for final turn over to the Government of Iraq (GOI).

The Convoy Support Center Mission

When President Obama announced the end of the mission in Iraq, many units stationed north of COS Kalsu immediately began executing redeployment operations. These units needed to transport all of their equipment to Kuwait, and COS Kalsu was in a prime location to serve as a convoy support center (CSC) for these convoys. It was located along the primary route used for the draw-down and still had all vital assets on hand to support units moving south.

Running the CSC became one of the priorities for the 115th BSB during the last 60 days of Operation New Dawn. On a typical day, 180 transient personnel were at COS Kalsu, and on days when battalion-sized units arrived, this number easily spiked to more than 600. To accommodate this many people, we expanded our transient living areas by rearranging some of our permanent party residents and blocking off a large section of CHUs. These actions effectively tripled the size of the transient living space.

We also had transient tents that could be used as overflow spaces at times when our resources were strained beyond capacity. These additional living spaces proved crucial when we received a 660-Soldier convoy in November. The pledge that the 115th BSB made to transient units was for every Soldier to have a cot, a shower, and a hot meal before getting back on the road. Our battalion also provided fuel, maintenance, and medical services to every convoy.

The 115th BSB established a flow for incoming convoys to ensure that the CSC was efficient and beneficial to the transient personnel. When a convoy entered the Ironhorse Brigade's area of operations, the 115th BSB would send out a platoon to secure the highway and ensure that the entrance was clear and safe. As the convoys came onto the base, they were escorted to the weapons clearing barrels and then through two fuel points. They were then led to the staging area for accountability of equipment and personnel.

The 115th BSB ensured this area was stocked with cold water, and MREs were available for those passing through just for fuel. Units that stayed at Kalsu were given a short safety and orientation briefing to provide basic information about COS Kalsu, including hours of operation and locations for the base's amenities. After

the briefing, they were escorted to their quarters and then released to eat, sleep, shower, and relax.

The 115th BSB kept in communication with the convoy leaders and checked on them throughout the night to ensure they had everything they needed. The next morning, the battalion S-2 section gave a detailed intelligence brief to convoys about the current hot spots and historic trends on routes south of COS Kalsu as they prepared for their final push. Within two months, the CSC successfully facilitated the movement of more than 15,000 personnel to Kuwait.

All Services Must Go

The immediate questions we had when we first arrived at COS Kalsu were, "What needs to go?" and "When does it need to be gone?" The unit in control of COS Kalsu before us had conducted some of the preplanning. They had established a useful glide path that provided a realistic timeframe of base closure activities.

The contracting officer for 115th BSB was responsible for generating the memorandums required to close services at the COS. She quickly became well-versed in how to articulate whether we wanted to downgrade, eliminate, or transition a service to maintain basic life support.

Base Operating Support-Integrator (BOS-I) also played a key role in the closure of COS Kalsu. BOS-I assisted us in our monthly population counts, which played a vital role in preparing our exit flights and convoys during the final month of operations. These accurate counts helped us to identify groups of tenants who lived on the base but had no real purpose. As we began scrubbing this list, we were able to start removing these tenants, expediting the closure of the COS, and ensuring that there were enough flights and ground convoys to transport all personnel off the COS.

Dude, Where's Your NTV?

In addition to maintaining accurate population counts, one of BOS-I's biggest tasks was to transfer equipment and property to the GOI. The main goal for BOS-I was accounting for all of the nontactical vehicles (NTVs) at the COS and either turning them over to the GOI or removing them from COS Kalsu. The deadline for this task was mid-November, before the joint inventory between the base closure team and the receiving unit from the GOI. Some NTVs were sent to Kuwait for redistribution throughout the theater, while others were shipped back to the United States by their contracting company. Most, however, were kept at COS Kalsu to be transferred to the GOI as part of the base turnover.

Since arriving at COS Kalsu, the mayor cell's clerk had accounted for more than 400 NTVs at the COS. To ensure that every NTV was accounted for, I required that all NTVs be registered with the mayor cell. Vehicles that were not registered were not allowed to draw fuel from



Sgt. 1st Class Leon Johnson briefs the concept of operations for the convoy support center (CSC) mission to Command Sgt. Maj. Earl Rice. The CSC mission was one of the most important missions the 115th Brigade Support Battalion ran in support of the theater-wide drawdown.

the COS fuel point and were eventually towed away to a secure NTV parking lot. Although this requirement frustrated some tenants, it was a critical step toward preparing equipment for turn-in or transfer to the GOI.

Goodbye Green Beans

The Green Beans coffee shop at COS Kalsu offered Soldiers an oasis in which to escape from their daily routine. Closing down such an important part of the community was difficult for Soldiers. They traded their cups of freshly brewed house blend coffee for the less popular dining facility version. The closure of Green Beans and accompanying shops marked a milestone in the downsizing and turnover of the base.

Fortunately, the logistics behind closing these shops was not difficult because the Army and Air Force Exchange Service (AAFES) executed the closure internally. However, the 115th BSB had the task of removing the trailers that housed these businesses after they closed. AAFES identified a local buyer for the trailers, so the tasks were removing the barriers, coordinating lift support, and cordoning off the area around the trailers within a short window of time. After the trailers were removed, all that remained were a few wooden picnic tables and trash cans.

The small PX at the COS posed another challenge for Soldiers as the drawdown of services continued. The PX was a wooden building connected to the COS post office and finance office, and although it was not very large, the shelves were constantly stocked with all the necessities.

But as the deadline for its closure drew nearer, AAFES

stopped ordering merchandise and eventually started to run out of the more popular items. Then, to expedite selling leftover merchandise, the entire store became a discount bin. Everything from video games to potato chips to shirts was on sale. It was truly an “everything must go” event that lasted for about two weeks.

Finally, with the cessation of services came the closing of the MWR center and gym. At the MWR, Soldiers could play pool, ping pong, board games, and video games 24 hours a day. During football season, it was common to see the couches and chairs completely packed in the middle of the night as tenants got together to watch their favorite teams play on one of two big-screen TVs.

The gym was also a highly visited area at COS Kalsu. Many Soldiers used the deployment as an opportunity to focus on physical fitness, and they quickly became regulars at the gym. Closing those facilities was not easy on the Soldiers.

Leave It Better Than You Found It

Two of the mayor cell’s final duties were ensuring that all of the buildings were clear of any sensitive information and military equipment and documenting the structural condition of each building. We photographed every square inch of the base as it stood before we departed. This mitigated the risk of U.S. forces being accused of leaving the base in an unfavorable condition.

Taking pictures of every building was a team effort, and our entire mayor cell took part in it. Walking through



Lt. Col. Jason A. Carrico and Command Sgt. Maj. Natividad Lopez, Jr., lower and fold the 115th Brigade Support Battalion colors for the last time before the unit's final convoy leaves Contingency Operating Station Kalsu.

buildings to clear and certify them was a long process. We even went to the point of spray painting over anything that was marked on the walls and barriers. As I was spray painting over several paintings that displayed units' crests and their dates on Kalsu, I felt like I was erasing history, but it was important to turn over the base clear of any markings or unit insignias.

One thing that was never fully closed out at the COS was the civilian Internet services. Internet services were a huge moneymaker at the COS. Even though we had Internet in our offices to send emails to our families and could use the Internet café for free, most Soldiers were willing to pay \$90 a month to have service in the privacy of their CHUs.

Internet services were provided by two contractors: Tigrisnet and GNC. The main provider, Tigrisnet, was responsible for more than 70 percent of the Internet at the COS. Tigrisnet was contracted through AAFES and was the more reliable of the two services. Tigrisnet outlets were installed in every CHU, and the speed was consistent and fast.

When Tigrisnet shut down services 45 days before the closure of the COS, GNC was the only provider available. GNC started to sell their wireless cards to tenants as they acquired the Internet monopoly on base and quadrupled their customers. However, GNC could not

keep enough Internet cards on hand to meet the demand and also could not provide the advertised speed because of the spike in customers.

Almost immediately, Soldier after Soldier walked into the mayor cell to complain about the GNC Internet services. It got to the point that I had to have a mayor cell representative located at the Internet office nightly to help prevent any major issues from arising. Eventually, the Internet service provider was tired of the customer complaints so he opened up the service to the entire COS for free until our departure. Despite the trouble, his service was the sole reason that Soldiers were able to communicate online with their families up until base closure.

Can You Keep a Secret?

One of the hardest things to do during the transition was keep the official base closure date secret. Because the COS would be at its most vulnerable on its closure date, we could not reveal the date to anyone. Even KBR contractors could not be in the room when the date was mentioned. Although the date changed several times, we knew roughly when we would be saying goodbye to COS Kalsu for good.

Finally, it was decided that COS Kalsu's closure date would be Dec. 12, 2011. With a confirmed date, we were able to implement an aggressive deception plan to cloud

any chance of someone piecing together information to discover the closure date. We advertised that an awards ceremony would be held on Dec. 15 and a soccer tournament would be held on Dec. 19. Soccer uniforms and a trophy were even purchased for the soccer tournament from a vendor at the local-national market.

The deception plan appeared to have worked because no significant enemy activities occurred at COS Kalsu before we left. Other bases nearing their known closure dates were attacked and suffered U.S. and Iraqi casualties. The safeguarding of our final date may have been one of the most vital successes of the base closure.

Final Departure

In the end, a base that had been continually improved and upgraded for more than eight years was gone within three months. What was once a base populated with more than 4,000 Soldiers and contractors had dwindled to a population of nearly 500 Soldiers, with more and more leaving every day.

Maj. William Navarro and a member of the GOI signed

the transfer paperwork just before the last members of 2nd Battalion, 5th Cavalry Regiment, 1st Brigade Combat Team, 1st Cavalry Division, closed COS Kalsu on Dec. 12. It was the fourth-to-last base closed in Iraq. Four days later, Contingency Operating Base Adder closed and the mission in Iraq came to an official end.

The events that took place at COS Kalsu are just one story of many that came out of the responsible drawdown of U.S. forces in Iraq. In the words of T.S. Eliot, it ended “not with a bang but a whimper,” and everyone on Kalsu could not have asked for anything more.

Capt. Mark A. Renteria is assigned to the Combined Arms Support Command G-3 at Fort Lee, Va. He is a graduate of the Infantry Officer Basic Course, the Bradley Leaders Course, Airborne School, the Aerial Delivery Management Officer Course, and the Combined Logistics Captains Career Course.

Soldiers from the 2nd Battalion, 5th Cavalry Regiment, 1st Brigade, 1st Cavalry Division, stop for a short halt to stretch their legs after hours of driving on their way to Kuwait from Contingency Operating Station Kalsu, Iraq. (Photo by 2nd Lt. Thomas Morin)



Human Resources Personnel Need to Train as They Fight

With the planned withdrawal from Afghanistan, HR personnel must find a way to ensure that they maintain an expeditionary mindset.

By Chief Warrant Officer 3 Kymila K. Cheese

The last combat troops leaving Iraq in December 2011 marked the end of a long fought war in Iraq. Since the proclamation of ending the war in Afghanistan in 2014, the Army has been going through a major drawdown to return to its prewar operational strength. The question is how the drawdown will affect our human resources (HR) Standard Requirement Code 12 (SRC 12) force structure.

SRC 12 Force Structure

Field Manual (FM) 1–0, Human Resources Support, says that the SRC 12 force structure must consist of the following elements: a human resources sustainment center (HRSC), a military mail terminal team, a theater gateway personnel accountability team, a human resources company headquarters, and subordinate postal and HR platoons.

When discussing the SRC 12 force structure, personnel services delivery redesign must be added as a point of reference. Many would argue that the personnel services delivery redesign in the SRC 12 force structure was designed for the operating tempo of the Global War on Terrorism. This is not completely accurate. Personnel services delivery redesign was a result of the Army mandating modularity along with the directive that the HR community would deactivate all commands above the company level.

Personnel services delivery redesign is the Army's HR strategic vision. During Army transformation and modularity, HR went from a legacy stovepipe force structure to an SRC 12 force structure that incorporated personnel services delivery redesign. Many people believe that this was a helpful and necessary new direction for the brigade-centric Army.

HRSC Establishment and Structure

An HRSC is the largest unit with an SRC 12 force structure in the Army. During the modular transformation, personnel commands (PERSCOMs) were redesignated as HRSCs. For example, the 8th PERSCOM in

Korea was deactivated in 2005 and redesignated as the 8th HRSC in Hawaii in 2006. FM 1–0, paragraph 2–56, states, “The HRSC is a multifunctional, modular SRC 12 organization (staff element), and theater-level center assigned to a TSC [theater sustainment command] that integrates and executes PA [personnel accountability], casualty, and postal functions throughout the theater and as defined by the policies and priorities established by the ASCC [Army service component command] G–1/AG [Adjutant General].”

The force structure of an HRSC is similar to a PERSCOM but without the command staff. The main similarity is that both force structures were designed to provide theater-level support. The now rescinded FM 12–6, Personnel Doctrine, said that “the theater PERSCOM mission is to sustain personnel readiness and exercise command and control over assigned theater-level personnel units. The theater PERSCOM manages critical personnel systems and synchronizes personnel network operations throughout the theater.” [FM 12–6 was replaced by FM 1–0.]

Changes in HR Roles

The brigade and battalion S–1s are essential in providing internal HR services and support. Many of the essential personnel services performed by the personnel services battalions (PSBs) have shifted to the brigade S–1s. FM 1–0, paragraph 1–33, states “the role of the G–1/AG and S–1 section remains constant and they continue to be responsible for performing all HR core competencies and key functions. G–1/AGs and S–1s focus their support on providing internal HR support to their unit.”

The roles and functions of the S–1s and G–1s will not change during the drawdown. The functions that S–1s perform at home station are the same as when deployed—just with a different priority based on the mission. For example, essential personnel services, such as awards, promotions, and evaluations, are peacetime and wartime functions. But while deployed, the priority

for the S-1 is personnel accountability and casualty operations.

HR Company Headquarters Functions

Both the PSB and HR company headquarters have SRC 12 force structures. PSBs were deactivated after the Army decided that HR units would be company level and lower. PSBs had both theater-level and customer service functions. The PSB mission was to operate the personnel information and casualty management systems and provide commanders, Soldiers, and Army civilians with essential personnel services. The HR company headquarters mission is to provide theater-level functions, including casualty operations, postal operations, and personnel accountability.

The slight difference in the functions of the PSB and the HR company headquarters is that PSBs were designed to support divisions and provide essential personnel services such as identification cards, promotions and reductions, awards, and evaluations. As mentioned earlier, these critical tasks and functions shifted to brigade and battalion S-1s.

**THE SOLDIER SUPPORT
INSTITUTE HAS COMBINED
ARMS TRAINING STRATEGIES
FOR ALL SRC 12 FORCE
STRUCTURE UNITS TO
SUPPORT HR LEADERS IN
DEVELOPING REALISTIC AND
RELEVANT TRAINING.**

Train as You Fight

HRSCs and HR company headquarters have no garrison customer service mission. The question remains: What do these units do when they are not deployed? Many would argue that the HR community should increase the force structure of the brigade and battalion S-1s and decrease the size of the HRSCs and HR operations branches while the units are at home station.

I believe the answer is that we should do what we were doing before the Global War on Terrorism: train as we fight. HR leaders must take their rightful seats at the conference table to be included in planning and executing home station training plans.

When I was assigned to 8th PERSCOM in 1997, the major training exercise covered reception, staging, onward movement, and integration. The 8th PERSCOM conducted a full spectrum of HR training with its subordinate units and the 8th Army G-1. I believe that the HR community needs to return to this practice. HR leaders across the Army need to develop home station training

plans that focus on the full spectrum of HR operations from peacekeeping, enforcement, and stabilization to high-intensity conflict.

The Soldier Support Institute has combined arms training strategies for all SRC 12 force structure units to support HR leaders in developing realistic and relevant training. In addition to the combined arms training strategies, the Soldier Support Institute has an HR Plans and Operations Course at the Adjutant General School. This course is excellent for HR leaders who are currently assigned or will be assigned to an HRSC or HR operations branch.

HR professionals must maintain an expeditionary mindset. The location of the war does not matter because the basic doctrine and core functions of HR will not change.

Recommended HR Training

HR professionals are already training at Silver Scimitar before they deploy. [Silver Scimitar is the annual HR full-spectrum training event for HR professionals who are scheduled to deploy.] I recommend that the HR community implement a full spectrum of HR training integrated at the National Training Center at Fort Irwin, Calif., or the Joint Readiness Training Center at Fort Polk, La.

FM 1-0, paragraph 1-0, says that “the objective of HR support is to maximize operational effectiveness of the total force by anticipating, manning and sustaining military operations across a full spectrum of conflict.” In other words, HR professionals support the rest of the Soldiers. Therefore, the HR professionals should conduct a full spectrum of training, including HR planning and operations, with the rest of the Soldiers just as any other unit would conduct training when not deployed.

HRSCs can train and inspect the HR companies as they go through training at their home stations. For example, the 90th HR Company could conduct its mission-essential task list and quarterly training plan at a field training exercise while the 14th HRSC inspects and assesses it and ensures that the company is meeting the requirements set forth in FM 7-15, The Army Universal Task List, and FM 1-0.

As the Army downsizes, HR professionals should remain steadfast with the HR mission concept and provide quality HR services and support to all assigned Soldiers. Continuing to train as we fight will ensure success in these roles on the battlefields of tomorrow.

Chief Warrant Officer 3 Kymila K. Cheese is an officer strength manager for the Intelligence and Security Command G-1. She holds a B.S. degree in criminal justice from Georgia State University and an M.P.A. degree from Troy University. She is working on her Ph.D. degree in organizational management from Capella University.

Modification of the Planning Process for Sustainers Part 1: Design

By Dr. John M. Menter and Benjamin A. Terrell

During an Operation Enduring Freedom deployment, a planner with the J-5 shop of an expeditionary sustainment command heard a commander say, “I’m tired of hearing what doctrine says; I want something that works.” This attitude is exhibited by many commanders and staffs. They will try the latest fad or creative method to create doctrine-like tactics, techniques, and procedures. Then when all else fails, they try the doctrinal method and find that doctrine worked best. In fact, maybe the conflict in Afghanistan should be labeled “The Post-Modern War Experiment.” Doctrine is the foundation from which the Army conducts its operations. Yet, doctrine is just a generic template to modify the current situation.

The planning process, as found in Army Doctrine Publication (ADP) 5-0, The Operations Process, and Army Tactics, Techniques, and Procedures 5-0.1, Commander and Staff Guide, is doctrine. Each warfighting functional area modifies the format of the products that make up the plan to fit its unique requirements. The sustainment warfighting function is no different.

This is the first of a series of three articles that reviews the planning process, from Army design methodology through assessment, and discusses the modifications and distinctive variations sustainment planners can apply.

Since its introduction in May 2010, the Army design methodology has received more than its share of attention. For the most part, Army design methodology is misunderstood by many and overcomplicated in application. Some believe that design should replace the military decisionmaking process (MDMP) in certain situations or that design applies in only certain situations. Hard-liners on the far right just turn their backs and return to the seven MDMP steps. In some cases, sustainers use neither Army design methodology nor the MDMP; they just put their main logistics hub and satellite hubs where they are told and then focus on consolidating requests and distributing supplies and services as rapidly as possible. For sustainers who say, “Why should I plan? There is really only one course of action,” Army design methodology is for you.

What Is Army Design Methodology?

The purpose of Army design methodology is to help the commander (or planner) define the “what” of planning, understand the problem, anticipate change, create opportunities, and recognize and manage transitions. Army design methodology has four “frames” (or steps): understand the current operational environment, define the desired operational environment, define the problem, and develop the operational approach. The process results in four major products: the problem statement, the commander’s initial intent, the commander’s initial planning guidance, and the mission narrative.

Understanding the current operational environment is basically the same thing as a good intelligence prepara-

tion of the battlefield. It focuses on tactical and operational variables to answer the following questions:

- What is occurring in the area of operations?
- Who are the main actors?
- Where are actions that could affect the success of the mission (both positively and negatively) occurring?
- Why are those actions occurring where they are occurring under the supervision of particular leaders?

Understanding the operational environment attempts to dig deeper than the surface layer of leaders, locations, events, and causes in order to discover the centers of gravity that actually drive the people and events in the area of operations.

It is the commander’s responsibility to define the desired operational environment, or end state. This begins with a thorough understanding of the commander’s intent two levels higher, which requires an in-depth understanding of the next higher level commander’s intent. It also requires the flexibility of the next level higher commander to allow his subordinates to modify assigned tasks in lieu of following detailed instructions. Recognizing the difference between the current operational environment and the desired operational environment leads to identifying the problem and developing the operational approach.

Defining the problem is the method the commander uses to focus the efforts of the staff. The operational approach provides the staff with the lines of effort and major tasks required to shape the desired operational environment. With the problem statement as a foundation and the operational approach as an outline, the

Operational Environment Matrix					
Variables	Distribution	Supply	Services	Maintenance	Medical
Political					
Military					
Economic					
Social					
Information					
Infrastructure	<i>Sewage</i>				
	<i>Water</i>				
	<i>Electricity</i>				
	<i>Academic</i>				
	<i>Trash</i>				
	<i>Medical</i>				
	<i>Security</i>				
Physical (Terrain)					
Time					

Figure 1. Matrix of Operational Variables and Functions

commander develops his intent and guidance.

The mission narrative is a variation of the commander's intent that forms the foundation for themes. It is the commander's vision of the operation as he would like to present it publicly. It is what he wants those observing his actions to understand and expect from the operation.

Design in the Hands of Sustainers

Many writers emphasize that Army design methodology is for complex and ill-structured problems. Sustainers live in a complex, ill-structured environment. Trying to follow orders from both the higher headquarters and supported headquarters does not always leave the sustainment commander with many options. Army design methodology provides the sustainment planner with both an opportunity to analyze the mission from unique angles and an operational approach that focuses on addressing sustainment task effectiveness and efficiency.

Army design methodology allows the sustainment planner to analyze the mission from the perspective

of a sustainer's operational environment. It allows the planner to ask, "What is my world like relative to the operational variables?" and "How do I want my world to look?"

Too often, the sustainer focuses solely on the enemy while developing the intelligence preparation of the battlefield. Yet of all the operational variables, the enemy often has the least significant impact on the sustainer's mission. Time is the sustainer's greatest enemy. Terrain, economy, and infrastructure have huge impacts on how quickly the sustainer performs his mission effectively and efficiently.

Planning Matrices

Planners can use matrices to assist them in their decisionmaking. Matrices can address a number of subjects, including the operational variables and functions, operational variables and locations, a comparison of functional areas with the current situation and the desired situation, and lines of effort details.

Customer or Location:			
Functional Area (lines of effort)	What is the current sustainment situation?	What is the desired environment?	What is the real issue(s)?
Distribution			
Supply			
Services			
Maintenance			
Medical			

Figure 2. This matrix compares functional areas with current and desired situations.

Figure 1 on page 35 illustrates a matrix that addresses the operational variables and functions. In this chart, functional areas are used as the header; the commander or support operations officer chooses which functional areas to focus on. Rather than using functional areas, the sustainment planner may opt to focus on locations or customers. Although the chart would look the same, the header would reflect the commander's emphasis: functions, locations, or customers.

Army design methodology also allows the sustainment planner to define the end state relative to the unit's functions or operational locations. The sustainment planner may weigh the critical functions against the operational variables to understand the current operational environment and define the desired end state.

Figure 2 on page 35 provides an example of a matrix the sustainment planner can use to detail this information. This allows the planner to easily compare the current situation with the desired environment. From this analysis, the planner identifies the problems associated with each functional area, location, or customer.

The planner must look past the surface issues and identify the deeper problems that hamper effective and efficient sustainment in the area of operations. Identifying these key issues or problems will indicate the lines of effort that the command must address to accomplish the commander's intent. With lines of effort, the sustainment planner articulates a desired intent (why), key tasks (what, when, and where), assessment criteria (measure of effectiveness), tactical risk (and corresponding mitigation), and the commander's critical information requirements. See figure 3 below. This action is very similar to developing a course of action. By focusing thought on one problem or line of effort at a time, it is much easier for the sustainer to detail assessment criteria, risk, and critical information requirements.

When applying time to the combined list of lines of effort, the sustainment planner can easily identify where resources need to be and when they need to be there in order to most effectively address all issues. This matrix also aids in the development of a logistics synchronization matrix. Figure 4 on page 37 illustrates lines of effort based on functional areas with tasks concentrating on locations or customers. One can easily change the lines

of effort to locations with tasks addressing functional requirements.

Although the timeline in the chart illustrates nine months, a good operational approach extends from preparation for operations through consolidation and reorganization to the follow-on operation, phase, or sequel. If it extends beyond the unit's deployment cycle, it forms the basis of mission analysis for the follow-on unit by illustrating the preceding commander's intent, actions accomplished, and an assessment of progress.

Measuring Effectiveness

The focus of the operational approach allows the sustainment planner to identify measures of effectiveness and measures of performance for each critical task identified in the plan. This facilitates assessment throughout the execution and provides the chief of operations with an effective means of determining when he should initiate a sequel or branch or call a planning meeting to re-address the method required to accomplish the task.

Measures of effectiveness and performance provide indicators. Indicators lead to decision points. Decision points require a commander's critical information requirement. Once the intelligence and operations officers identify a method to monitor a decision point that answers the commander's critical information requirement, the unit has a reconnaissance and surveillance plan and an assessment plan. The sustainment planner should incorporate the decision points into the lines of effort matrix.

Reframing

Army design methodology uses a technique called "reframing" to describe set points in which the staff conducts an assessment and decides if the problem they are addressing is the actual problem and if they are using the correct methods. Reframing may occur at set intervals (for example, the battle update assessment every Saturday) or just prior to or following a particular event or action (during the transition between phases).

Reframing helps keep the unit's actions focused on the true problem. Without that focus, tasks become monotonous and attitudes lackadaisical. Reframing asks, "Are we doing the right things?" and "Are we doing the right things correctly?"

Line of Effort 1:					[Title]
Intent and Effects (why)	Mission Command (who)	Tasks (what, when, where)	Assessment (MOE/MOP)	Risk and Mitigation	CCIR

CCIR: Commander's critical information requirements MOE = Measure of effectiveness MOP = Measure of performance

Figure 3. Line of Effort Details Matrix

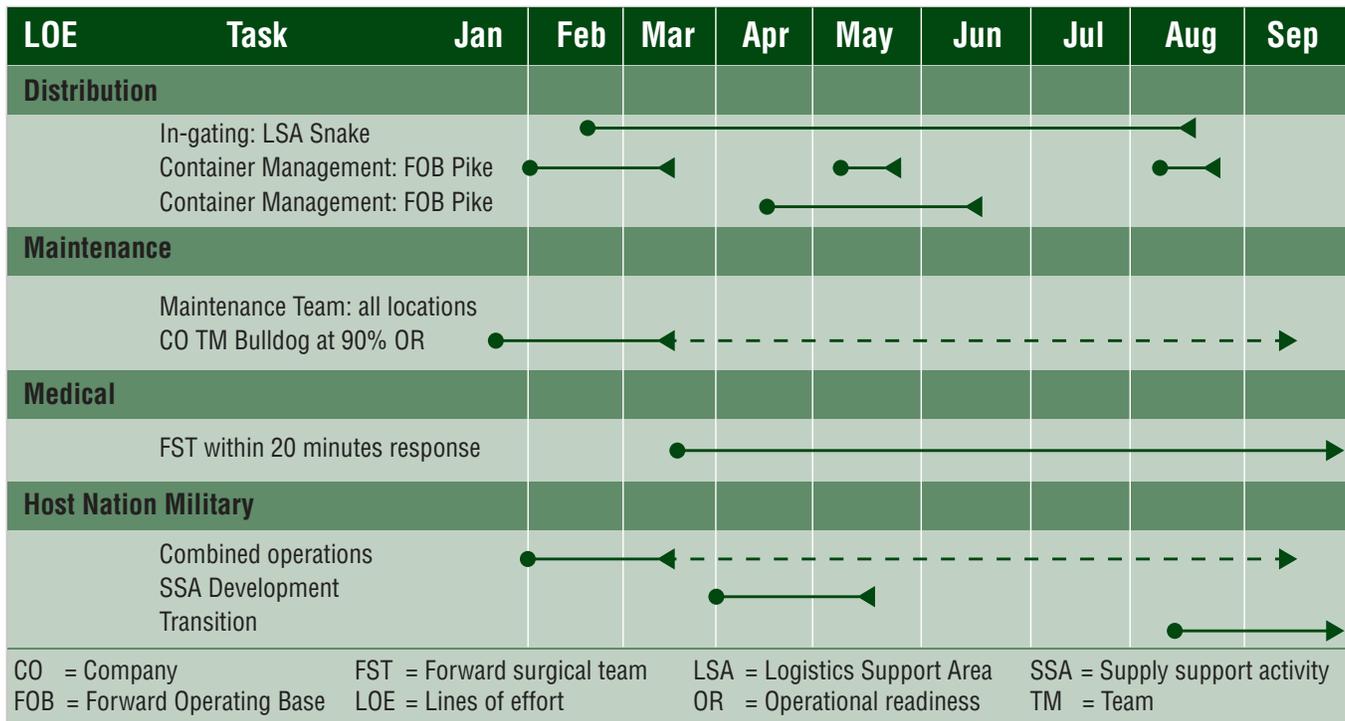


Figure 4. Lines of Effort Plotted Against Time

Like all aspects of Army design methodology, the commander does not accept the surface answer but digs into the second and third order of effects. The sustainment brigade commander does not settle for the answer from the combat sustainment support battalion commander or even the quartermaster company commander. He asks the supply support activity manager if he believes his activity is running in its most effective and efficient manner. The combat sustainment support battalion commander solicits input from the supply support activity's workers, contractors, and customers.

Army design methodology is a critical component of the Army operations process. It is a tool designed to help commanders accurately understand the operational environment, visualize the desired end state, describe their intent, direct the focus of the operations to key tasks and concerns, and assess progress for branches and variances. Therefore, it is a key component in achieving mission command. It is also a tool sustainers can use to approach mission analysis from a more refined degree of inspection.

Army design methodology does not replace the MDMP, although it does mirror mission analysis and course of action development. The MDMP is the keystone of the Army operations process and requires the sustainer to approach it from a unique perspective to provide the best products for the sustainment commander and the supported commanders.

Dr. John M. Menter is a retired Army colonel and a doctrinal training team lead for Doctrine Training Team #11 based out of the Mission Training Complex at Fort Indiantown Gap, Pa., as part of the Mission Command Training Support Program, Team Northrop-Grumman/CACI, Inc. Over the past 10 years, he has conducted hundreds of military decisionmaking process training seminars. He holds a doctoral degree in history and an M.B.A. degree from the University of La Verne. He is a Certified Professional Logistician and is the author of *The Sustainment Battle Staff & Military Decision Making Process (MDMP) Guide: For Brigade Support Battalions, Sustainment Brigades, and Combat Sustainment Support Battalions (Version 2.0)*.

Benjamin A. Terrell is a lieutenant colonel in the Alabama Army National Guard and serves as the intelligence and sustainment subject matter expert on Doctrine Training Team #11 based out of the Mission Training Complex at Fort Indiantown Gap, Pa., as part of the Mission Command Training Support Program, Team Northrop-Grumman/CACI, Inc. He holds a bachelor's degree in social studies from Southeastern Louisiana University and a master of divinity degree from New Orleans Baptist Theological Seminary. He is a graduate of the Military Police Officer Basic Course, the Engineer Officer Advanced Course, the Combined Arms and Services Staff School, the Senior Transportation Officer Qualification Course, and the Support Operations Officer Course.

The Case for a Contingency Contracting “ONE PASS”

By Maj. Jamie M. Rhone, USAF

The Department of Defense obligated more than \$27 billion in fiscal year 2010 contracts to support military engagements in Iraq and Afghanistan, according to “Department of Defense Contractors in Afghanistan and Iraq: Background and Analysis,” a 2011 Congressional Research Service report by Moshe Schwartz and Joyprada Swain. While political and military leaders focus on the drawdown in Afghanistan, many Soldiers, Sailors, Airmen, and Marines will continue to rely on the contingency contracting process to accomplish their difficult missions.

As a contingency contracting officer who has led contracting teams in both Iraq and Afghanistan, I am often asked, “Why does the contracting process take so long?” To adequately answer this question, one must understand that the contingency acquisition process has three primary stakeholders: requirement generators, resource managers, and the contracting office. Each of these stakeholders must continue to work hard to streamline the acquisition process. This article will focus on the requirement generators and introduce a model that will help streamline and standardize requirement packages.

Requirement Generator Responsibilities

The requirement generator is responsible for assembling a complete package that includes a detailed description of the required work or supply item, market research, and pricing information. If the package is incomplete, the contracting office often will return the package to the generator with specified corrections. Incomplete requirement packages delay the acquisition process and often result in a failure to deliver requirements to the right place at the right time. This scenario increases the frustrations of both the requirement generators and the contracting office. Most importantly, it hurts the mission.

One way to decrease acquisition lead time is a simple tool called the “ONE PASS” model, which can be used by requirement generators to expedite and standardize requirement package preparation. This tool can, in some cases, enable requirement package approval by the contracting office on the first look.

The ONE PASS Model

Deployed Soldiers are trained on the execution of a 9-line medevac request. This life-saving tool provides data in a standardized format that enables users to clearly and quickly articulate critical information to supporting units. Effective use of the 9-line has proven to expedite supporting unit response and, in doing so, has saved countless lives.

Similarly, the ONE PASS model aides requirement generators in organizing and standardizing their requirement packages. The model directs the requirement generator to consider the ownership, needs, existing resources, prices, approvals, schedules, and security elements of their requirements. (For details, see the chart below.)

Expediting the contingency contracting process requires concerted efforts of the requirement generators, resource managers, and the contracting office. The ONE PASS model is introduced here as a simple tool to help requiring activities to better prepare acquisition packages in the deployed environment.

Admittedly, the ONE PASS model is not designed to answer every conceivable question the contingency contracting officer may have. The ONE PASS model will, however, help both the requirement generators and the contracting office to expedite requirement package approval by streamlining and standardizing how information is provided to the contracting office. Use of this model can enhance the probability of getting the required work or item delivered to the right place at the right time.

Maj. Jamie M. Rhone is an Air Force contracting officer who has led contingency contracting teams in both Iraq and Afghanistan. Feedback relating to this article (to include enhancements to the ONE PASS model) can be sent to jamie.rhone@pentagon.af.mil or to *Army Sustainment* at usarmy.lee.tradoc.mbx.leeasm@mail.mil.

The author thanks the many contingency contracting officers who have contributed to the development of the ONE PASS model.

The ONE PASS Model

O	Owner	<ol style="list-style-type: none"> 1. Name the requiring activity (organization). 2. Name the specific point of contact (individual), including a phone number or email address. <ol style="list-style-type: none"> a) Will this person be available (not redeployed or transferred) for the duration of this requirement? b) What plans are in place to ensure a proper transfer of authority in the event of redeployment or transfer of the point of contact before contract is complete? 3. Has the unit established a system to ensure proper accountability of contracted items and facilities?
N	Need	<ol style="list-style-type: none"> 5. Describe the need: Provide performance work statement for services requirements, statement of work for construction requirements, or a complete item description (with pictures) for supply requirements. 6. Does the requirement package include at least three sources of supply, service, or construction to execute the requirement?
E	Existing Resources	<ol style="list-style-type: none"> 7. Is the requirement available via the supply system? <ol style="list-style-type: none"> a) If yes, is item available in time to meet the need date and time? b) If no, has the requiring activity secured supporting documentation from the G-4/S-4?
P	Price	<ol style="list-style-type: none"> 8. What is the amount of certified funding available? 9. What was the basis of the funding estimate (independent government estimate, contractor quote, or other)? 10. Can the requirement be procured through unit field ordering officers or a project purchasing officer (for Commander's Emergency Response Program projects)? 11. Does the funding estimate consider elements such as local conditions, security, shipping, and expediting costs?
A	Approvals	<ol style="list-style-type: none"> 12. Has the requirement been approved by unit leaders? 13. What requirement validation board is required?
S	Schedule	<ol style="list-style-type: none"> 14. When is the requirement needed (date and time)? 15. Are the needed date and time realistic, and do they consider procurement processing, and delivery, construction, and shipping times in austere environments?
S	Security	<ol style="list-style-type: none"> 16. What is the security situation— <ol style="list-style-type: none"> a) Along transportation route? b) At the service or construction site? 17. Are processes and procedures, such as for biometric scanners and facility access, available for the employment of local nationals? 18. What are the existing host nation contractor restrictions at the performance location?

MC4 Challenges at the National Training Center

Soldiers have been using the Medical Communications for Combat Casualty Care system to manage medical information for more than a decade, but training on the system is still being provided by field support representatives.

By Sgt. 1st Class Shawn D. Hardiek

The Medical Communications for Combat Casualty Care (MC4) system has served as the premier comprehensive medical information management system on the battlefield for more than 10 years. However, MC4 continues to require significant focus, direction, and training by medical observer-coach/trainers and MC4 field service representatives (FSRs) at the National Training Center (NTC) at Fort Irwin, Calif.

During my 13 rotations as a brigade surgeon section trainer and brigade support medical company treatment platoon trainer, it has become clear that many brigade combat teams (BCTs) lack the skill sets within their formations to establish MC4 systems at the role I and role II medical treatment facilities. This task has been completed primarily through significant FSR support.

If this trend continues as we move into decisive action operations, the use of MC4 systems on our battlefields will be significantly degraded. This could result in the loss of the single comprehensive electronic health record and the ability to automate the maintenance and ordering of medical supplies.

Overreliance on FSRs

MC4 use was always highly encouraged at the NTC, but it was mandated in August 2010 that the rotational training units (RTUs) use MC4 throughout the continuum of care. Thanks to the support of MC4 FSRs, great strides have been made in the use of MC4 at every level of care at the NTC.

However, units continue to lack the skill sets needed to set up and configure MC4 systems without significant FSR support. When issues arise with MC4 systems, the BCTs often return to the comfort of paper-based systems like Standard Form 600, Chronological Record of Medical Care, for patient documentation or Department of the Army Form 3161, Request for Issue or Turn-in, to order class VIII (medical materiel).

The FSRs are more than willing to help the unit get to the usage phase of its training at the NTC, but they often

spend much of their time fixing issues that should have been addressed before the BCT arrived. This is especially true if the unit has not used MC4 in garrison. The FSRs often go above and beyond to ensure the RTU can use the Armed Forces Health Longitudinal Technology Application–Theater (AHLTA–T), which is an MC4 application that enables the RTU to electronically document medical care provided to a Soldier anytime and anywhere.

In addition, the FSRs provide detailed support on the Defense Medical Logistics Standard Support Customer Assistance Module (DCAM), which automates maintenance requests and medical supply ordering. Furthermore, FSRs continue to be the only subject matter experts in the medical or sustainment automation support management office (SASMO) sections of the BCTs. An FSR’s time is often limited at the NTC, and it takes an average of five training days to get the BCT within 75 to 85 percent of MC4 proficiency, which can result in training gaps.

The BCTs’ lack of proficiency in using MC4 has been easily masked by the current forward operating base (FOB)-centric fight. FSRs have been for the most part unhindered in their movements across the battlefields of Operations Iraqi Freedom, Enduring Freedom, and New Dawn. Their efforts have taken medical regulating to levels never before seen during conflict.

But the concern still remains that if the unit cannot establish its MC4 systems without complete or significant reliance on MC4 FSRs, it has completely missed the mark on “train as you fight.” If MC4 is truly a “foxhole-to-treatment-facility” comprehensive medical information system, then the BCTs must be able to use this system by relying on their own skill sets within their organizations.

The Problem

The reliance on FSRs to support MC4 systems has created a gap in knowledge and expertise that has yet to be filled by anyone in uniform. One solution was to fix

the problem by officially placing a military occupational specialty (MOS) 68G (patient administration specialist) in the SASMO to be the MC4 subject matter expert.

However, in my experience, that MC4 subject matter expert has never had the training required, such as the SASMO Course. After a Soldier completes that course, additional skill identifier (ASI) N8 is awarded, indicating that the Soldier has many of the skills needed to support medical communication systems.

Also, MC4 provides unit-level administrator (ULA) training, known as tier 1 training, but often either no one in the BCT has had the training or the unit has only one ULA-trained individual and that person does not participate in training at the NTC.

Furthermore, tier 1 ULAs are not trained to deal with connectivity issues related to the Combat Service Support Automated Information Systems Interface (CAISI), very small aperture terminals (VSATs), or joint network node/command post nodes. Often the S-6 or SASMO is busy with competing requirements throughout the BCT, leaving connectivity issues related to role I and II medical treatment facilities on the back burner.

This gap in support is partly due to the lack of command emphasis on MC4. Often MC4, unlike the Standard Army Retail Supply System (SARSS) and the Standard Army Maintenance System (SAMS), is not viewed as an integral part of the Standard Army Management Information System (STAMIS) suite.

Without technical expertise and designated support within the BCT, the progress made in medical communication and class VIII management will be all but lost if BCT treatment facilities revert to an inefficient paper-based system.

Solutions

Many issues helped to create the problem, and there are just as many potential solutions. Some RTUs have already benefitted from a few of the following methods.

STAMIS gunnery. MC4 gunnery at the NTC has been very helpful to units. This gunnery now includes all MC4 systems within the BCT. This is usually a joint effort between the S-6 or SASMO and medical leaders. The key is to require the RTU to set up each MC4 using its assigned CAISI and VSAT. This will reveal issues with faulty or missing equipment or connectivity problems. The concept is that each system should be plug and play once it reaches its area of operations.

The ULA, or someone who is identified as the ULA during the rotation, is required to attend the gunnery. The ULA is given limited administrative privileges to set up accounts and reset passwords. The FSRs are usually present and can help identify problems with systems. The FSRs will also identify systems that will be used for AHLTA-T and DCAM. Units that have taken full advantage of this were much better prepared to use their systems once training began. This helps the FSRs focus

their support as the RTUs move into the training area.

Garrison use. BCTs that have used MC4 in garrison arrive at the NTC much better prepared. Although this does not solve their connectivity issues when they arrive, they are able to quickly implement their systems once connectivity is established. However, if the units would place MC4 on their tactical network at home station, this would be a true train-as-you-fight implementation of MC4, much like SARSS and SAMS.

MC4 training. BCTs that have taken full advantage of tier I training for medics and tier II training for the SASMO are well ahead of other units in many areas concerning MC4. These BCTs, although few and far between, have clear command emphasis from the BCT commander, understand the system and its relevance, and are able to quickly implement it. This enables the FSRs to move to a technical support role instead of a full system implementation role.

Committed technical support. The Army should develop a dedicated MOS to be the subject matter expert for medical communications throughout the BCT. This would not be an additional duty but an actual MOS. Individuals with this MOS would have the skill sets needed to deal with not only the use of the MC4 suite but also connectivity issues related to CAISIs and VSATs.

Currently, the ASI N8 is available only to MOS 68G Soldiers. This ASI should be open to other medical MOSs, such as 68W (health care specialist) and 68A (biomedical equipment specialist). This would greatly increase the BCT's internal support of medical communications systems.

BCTs rely heavily on FSR support in order to set up and use their MC4 systems effectively. BCTs currently do not take ownership of the system, nor do they have the skill sets within their formations to accomplish the mission on their own. This issue has not surfaced to a point of great concern because of the overwhelming support that FSRs have provided in OEF and OIF.

However, as we transition away from the FOB-centric fight, FSRs could be limited in their support of the BCT. Units must be self-sufficient in setting up and using MC4, or they will continue to struggle with timely implementation of what is meant to be a foxhole-to-treatment-facility comprehensive medical information system.

Sgt. 1st Class Shawn D. Hardiek is the assistant class adviser/instructor/writer for the Basic Officer Leader Course at the Army Medical Department Center and School at Fort Sam Houston, Texas. He is a graduate of the Battle Staff Noncommissioned Officer Course, Field Management of Chemical and Biological Casualties Course, and Instructor Training Course.

Examining Decisive Action Sustainment Operations at the Task Force Level

The change from counterinsurgency operations to decisive action operations will require some changes in the way sustainers do business.

By Capt. Sean P. Dunstan

With the conflict in Iraq having ended in 2011 and the rapid responsible drawdown of forces in Afghanistan underway, Army sustainers accustomed to the support requirements inherent in stability operations must be prepared to transition logistics assets from counterinsurgency (COIN) to decisive action operations. This article, which centers on the logistics of a combined arms battalion in an armored brigade combat team, explores the viability of existing doctrine and recommends ways to mitigate logistics friction and shortfalls. These recommendations are based on lessons learned during the first decisive action mission rehearsal exercise at the National Training Center at Fort Irwin, Calif.

Command Post Operations

In contrast to its method of operations during the COIN fight, the forward support company (FSC) must remain mobile during decisive action operations. During COIN operations, an FSC can expect to operate from a single location—often a forward operating base. In decisive action operations, however, success hinges on the ability of the FSC to provide mission command and maintenance support while on the move.

Effective command post operations can be performed using the two command vehicles currently authorized. Having portable shop supplies enables maintainers to repair combat platforms as close to the fight as possible. The FSC should requisition and install parts-bin kits for shop-van trucks and trailers to facilitate mobilization of nearly all of the battalion's shop supply.

Communications Systems

Effective communication across the battlefield is of particular importance because sustainment assets are dispersed throughout the battlefield during decisive action operations. Maintaining contact among logistics nodes is challenging because of the absence of compensatory luxuries, such as

telephone and Internet access, which are typically associated with COIN operations. So, with long-range communications limited to a few Blue Force Trackers, FSC leaders are forced to rely on line-of-sight communications that prove inadequate when task-force trains are stretched 30 or more kilometers.

The FSC's communications infrastructure needs to be reexamined. An initial issue of high-frequency radios and the fielding of additional Army Battle Command Systems would increase the FSC's ability to plan and synchronize operations from multiple locations over long distances. Suites such as Blue Force Tracker and Force XXI Battle Command Brigade and Below compensate for line-of-sight platform blackouts stemming from lengthy lines of communication but are somewhat unreliable, particularly if free text-message server queues become jammed. Until an initiative is implemented to enhance the company's existing signal architecture, FSC leaders must ensure that every vehicle is outfitted with, at a minimum, a single-channel radio system.

Recovery Systems

FSCs need heavy equipment transporter (HET) personnel and equipment in order to expand the service and recovery section's ability to conduct far-forward recovery and retrograde of downed equipment. Tracked recovery vehicles such as the M88A2 are predisposed to maintenance issues, especially when they are used to tow disabled vehicles over long distances. Leaders should expect to encounter these maintenance issues in high-intensity conflicts during decisive action as the recovery section is sent out on multiple turns (often continuing operations well after the battle is over) to recover destroyed or broken-down equipment and vehicles.

Incorporating HETs into the FSC modified table of organization and equipment would also enable the FSC to expeditiously retrieve and transport not-mission-capable equipment when battlefield conditions force the unit maintenance collection point to move. Having merely two HET systems

and trained personnel at the FSC's disposal can alleviate the strain on existing recovery operators and equipment, expedite vehicle recovery over greater distances, decrease not-mission-capable time, and mitigate the frustration associated with prioritizing HET assets controlled outside of the battalion.

CBRNE

The risk of encountering a chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE) threat greatly increases in decisive action. Unfortunately, the latest modified table of organization and equipment stripped the FSC of a CBRNE operations specialist. Until this position is restored, FSCs must train personnel in CBRNE as an additional duty in order to enhance the formation's ability to successfully react to a CBRNE attack.

Critical Individual and Collective Training

Training management for logistics commanders is already exceedingly difficult, given the myriad sustainment tasks associated with supporting combined arms gunneries and field maneuvers in the task force. Nevertheless, logisticians in a decisive action environment must strive to fit the objectives outlined below into their training plans.

Field trains command post. By doctrine, the FSC headquarters section has limited administrative and mission

command capabilities outside of the command group despite being responsible for establishing and maintaining the field trains command post. The success of this critical logistics node hinges on how well the FSC headquarters interfaces with the battalion staff. The logistics fusion cell created with proper interface allows the FSC commander time to participate in sustainment planning during the task force military decisionmaking process while staying abreast of sustainment execution in support of the maneuver battalion.

Unlike COIN-driven mission sets, which do not require a field trains command post, FSCs will likely employ a field trains command post during decisive action operations. Senior company leaders must immediately establish a rapport with the maneuver battalion staff—the S-1 and S-4 in particular. FSC headquarters personnel should participate in staff training activities such as mission analysis to foster this relationship.

Moreover, field trains command post personnel need charts, matrices, and graphics to track company personnel actions (internal and battalion) and maintenance and supply statuses. A battalion-wide initiative such as command maintenance operations can be used to validate the ability of the field trains command post to monitor and accurately report the condition of downed equipment.

Gunnery. The crews of vehicles capable of carrying a major weapons system should be qualified on table six (un-

A convoy of Army Reserve Soldiers in mine-resistant ambush-protected vehicles avoids a simulated IED explosion during training conducted by the 479th Field Artillery Brigade at Fort Hood, Texas. Logistics Soldiers in a decisive action will have to be prepared to conduct convoys safely with or without the aid of an Army Battle Command System. (Photo by Sgt. 1st Class Gail Braymen, First Army Division West Public Affairs)





Soldiers from the 1452nd Transportation Company, North Carolina Army National Guard, prepare to convoy with heavy equipment transporters (HETs) to Camp Buehring, Kuwait. In a decisive action, the forward support company will need at least two HETs to assist with recovery. (Photo by Maj. Matthew Devivo)

stabilized platform gunnery) using the heavy brigade combat team gunnery manual as a guide. Those vehicles include the medium tactical vehicle and heavy expanded-mobility tactical truck. The principal implied task is the careful management of personnel to avoid having undermanned vehicles. This is a significant departure from COIN operations, but in a decisive action environment, every vehicle regardless of purpose must alternatively be a combat platform.

Night vision devices. In addition to training the entire force on mounted gunnery skills, Soldiers must also be exceptionally confident and competent in employing night vision devices during hours of limited visibility. Regardless of an enemy's capabilities, the safest time to maneuver sustainment assets is at night. However, performing such actions without exhaustive, tough, realistic training on optics is dangerous.

Logistics convoys. Ultimately, the ability to safely execute and participate in tactical convoy operations rests with every potential vehicle operator and vehicle commander in the FSC. This includes the ability to successfully navigate from a mounted position with or without the aid of an Army Battle Command System. Leaders take this for granted because traditionally under COIN only select personnel conducted logistics convoys. However, in decisive action, Soldiers at

any given logistics node may be called on to displace to either elude enemy forces or enhance responsiveness to the supported maneuver battalion.

Defense. Performing logistics operations at sustainment nodes often becomes the singular priority in the COIN environment. However, during decisive action operations, failing to adequately plan for and prepare a defense can have catastrophic results. Being set roughly five to seven kilometers from the front lines means that Soldiers must be familiar with the fundamentals of defense in order to be able to defend an area such as the unit maintenance collection point, which is a high payoff target for the enemy.

Key tasks include drafting range cards for each mounted and dismounted major weapon system, developing a comprehensive sector sketch, enhancing fighting positions as time permits, and if available, integrating indirect fire support. Personnel positioned at these nodes must have a ready knowledge of defensive operations in addition to performing their occupational skill sets. Much like nighttime tactical convoy operations, leaders must enforce absolute noise and light discipline within the perimeters of forward areas to stave off enemy surveillance.

To enhance efficiency in establishing a robust defense of a position, develop and implement company tactical standard

operating procedures, specifically pertaining to priorities of work in an assembly area. A company-level handbook highlighting key actions is especially useful when indoctrinating personnel. Additionally, appoint an officer-in-charge or noncommissioned officer-in-charge of the defense of the forward logistics area and liken the responsibilities to those of any garrison additional duty.

STAMIS operations. Understanding how to perform Standard Army Management Information System (STAMIS) operations manually is also vital, particularly given the inherent austerity of a decisive action environment. In decisive action, expect to lose STAMIS connectivity to either equipment malfunction or battle loss. Develop contingencies in the absence of digital capabilities to avoid prolonged interruption in critical fleet reporting and parts ordering. Rehearse these actions in garrison by prohibiting supply clerks from digitally transmitting data, thereby forcing them to generate data disks and hard copy registries or reports for physical delivery to higher headquarters.

Unit Maintenance Collection Point

Plan to establish and operate the combat trains command post and unit maintenance collection point as sovereign, independent entities on the battlefield. The combat trains command post, which will move continuously during decisive action to remain within approximately three to five kilometers of the front lines, can lose momentum if tied to a unit maintenance collection point mired in not-mission-capable equipment.

However, the unit maintenance collection point should remain in a relatively stand-alone and stable location—positioned close enough to the brigade support area to ensure responsive parts flow but within operational reach of the company trains. The productivity of mechanics is directly tied to the stability of the unit maintenance collection point. Repair operations will grind to a halt if the unit maintenance collection point is consistently forced to move. Still, the unit maintenance collection point must be able to mobilize rapidly, so consider echeloning mechanics and maintenance assets between the unit maintenance collection point and the brigade support area.

The success of a task force internally tiered maintenance system hinges on aggressive enforcement of the projected repair times prescribed in the unit's maintenance standard operating procedures. To keep the node from transforming into a cannibalization point, the anticipated repair time at the unit maintenance collection point should not exceed 24 hours. Regardless of the established repair time, strive to retrograde equipment with long leadtimes to the brigade support area.

Avoid attaching maintainers outright to supported line companies. The FSC commander must have uncontested mission command of mechanics. The commander and the senior maintenance control section leaders understand how best to employ the field maintenance teams to achieve unity of effort in battalion maintenance. When mechanics remain

under the mission command of the FSC, they can be used more effectively to repair equipment.

Distribution Assets

Use caution when basing resupply assets in the field trains—particularly when they are colocated with the brigade support area. Account for the duration of the maneuver operation and the distance and type of terrain covered before pinning distribution assets to the field trains. Also take into consideration the ability of the brigade support battalion to effectively resupply the FSCs.

Typically, the brigade support area during decisive action will be at least 30 kilometers from the forward line of troops. Thirty kilometers seems a relatively short distance to travel. However, moving logistics vehicles over rough terrain or unimproved surfaces or conducting convoy operations in hours of limited visibility using night vision devices can make the average resupply mission run between six and eight hours.

Synchronizing replenishment operations over that time and distance is incredibly challenging even without factoring in operational interference stemming from maintenance issues or enemy activity. However, FSC commanders can change sustainment risk into tactical risk by staging some distribution assets forward in the combat trains.

Instead of housing ammunition, bulk water, or bulk petroleum resources in the brigade support area, dispersing assets based on the supported task force maneuver operation can assuage sustainment risk. For example, during a task force movement to contact, position refueling assets in the combat trains to sustain the supported battalion's momentum. Similarly, when the battalion is set in a hasty defense, preposition ammunition stocks forward to avoid friction associated with poor ammunition management and reporting.

The recommendations in this article are based on only one exercise. Precisely how decisive action will affect comprehensive logistics operations remains uncertain. However, baseline analysis of modified table of organization and equipment resourcing shortfalls, identified training priorities, and the expansive application of sustainment doctrine certainly establishes a foundation for senior leaders throughout the divisional support community to shape planning considerations for upcoming decisive action training and operations.

Capt. Sean P. Dunstan is the aide to the commanding general of the 2nd Infantry Division in Korea. He was the commander of E Company, 3rd Armored Brigade Combat Team, 3rd Infantry Division (Mechanized), at Fort Benning, Georgia, when he wrote this article. He is a graduate of the Combined Logistics Captains Career Course and the Support Operations Course.

The Next Generation: Cataloging Nonstandard Items

As the Army converts logistics functions to Global Combat Support System–Army, Soldiers must understand the strategies for data cleansing, migration, conversion, and fielding.

By LeQuan M. Hylton

The next generation of cataloging nonstandard items is here. Since late 2002, the central catalog management of nonstandard, noncataloged items has been achieved through the Standard Study Number–Line Item Number Automated Management and Integrating System (SLAMIS). Transforming to enterprise resource planning (ERP) using SAP [Systems, Applications, and Products in Data Processing] software requires the existing SLAMIS process to undergo adjustments to facilitate the cataloging of nonstandard items in the ERP environment. This process offers enhanced visibility with reporting and property accountability to support the Army’s logistics systems and policies.

This article chronicles the next-generation systems processes for cataloging nonstandard items, imminent data cleansing, migration, and conversion as it relates to nonstandard, noncataloged items during the fielding of Global Combat Support System–Army (GCSS–Army).

It is important to note that GCSS–Army fielding and related actions are delivered in waves. Wave I will replace the Standard Army Retail Supply System–1 (SARSS–1) and associated tactical logistics finance systems. Wave II will replace the Standard Army Maintenance System–Enhanced and Property Book Unit Supply Enhanced.

The GCSS–Army Nonstandard Process

In the Army’s ERP environment, a nonstandard, noncataloged item is defined as an item not found in the Army Enterprise System Integration Program (AESIP) material master catalog or in the GCSS–Army catalog. For GCSS–Army, the authoritative data source for cataloging materiel is AESIP. Presently, the Logistics Support Activity (LOGSA) Material Master Research Cell (MMRC) is the authoritative data source for cataloging materiel in AESIP.

At the unit level, handling nonstandard, noncata-

loged materiel in GCSS–Army requires using the GCSS–Army transaction code “ZNONSTD.” Through this process, GCSS–Army allows users (based on roles and permissions) to manage nonstandard, noncataloged materiel at the tactical level and communicate the catalog request to the national level and other appropriate trading partners as part of the ZNONSTD process.

Specifically, the nonstandard materiel process allows users to create nonstandard materiel records and complete system processes such as ordering, receiving, and issuing items. The ZNONSTD process also allows users to capture items purchased with credit cards or ordered through the local contracting office and facilitate turn-ins.

The ZNONSTD process has eight mandatory fields: part number, cage code, force element (previously known as the unit identification code), description of item requested, federal supply classification (FSC), supply categories of materiel code (SCMC), measurement quantity, and measurement unit and price. These fields should be completed to the user’s best knowledge to ensure the MMRC can locate the remaining data elements.

Data Cleansing for GCSS–Army Fielding

The data cleansing process extends beyond uncovering nonstandard, noncataloged items to other areas of data cleansing. For the purposes of this article, the process will be limited to unit conversion and fielding of GCSS–Army as it relates to cataloging nonstandard items.

An initial formal analysis is conducted 120 days (or later) from the unit’s go-live date to discover problems with the Standard Army Management Information System (STAMIS) data used to create GCSS–Army load files. To further cleanse the unit data, subsequent analyses are performed 90 days, 60 days, 30 days, and 15 days before the go-live date.

InfoSphere and the GCSS–Army Data Staging Utility (DSU) are the two tools used to evaluate the content and quality of unit data and to prepare content for GCSS–Army conversion and fielding. InfoSphere is the LOGSA tool used by the Enterprise Data Management Office (EDMO) to compare unit data to business rules established by LOGSA, the Combined Arms Support Command, Program Management Office AESIP, and others. The results of these inputs produce error reports and suggest remedies for the errors.

DSU is an automated tool designed to validate and stage STAMIS data based on business rules and create load files for GCSS–Army conversion and migration. It can also be used to help data owners to identify and clean up data errors in their source systems before loading data into GCSS–Army. The systems work together to thoroughly prepare bridging system data for migration and conversion to GCSS–Army.

One hundred and twenty days before bridging system use is terminated, the GCSS–Army team will provide the unit with procedures to discover, validate, and correct data in bridging systems. Units can use the SLAMIS procedure for any items not in the enterprise catalog before the EDMO or GCSS–Army teams arrive for fielding. The Army Enterprise Materiel Master Portal is another process that will be available in the near future. This process, currently under development by AESIP, will allow users to communicate directly with AESIP for nonstandard, noncataloged items and is most advantageous for logistics system users that are not GCSS–Army users. Eventually, the SLAMIS process will be subsumed by the AESIP portal.

Although units are responsible for correcting erroneous data, both the EDMO and the GCSS–Army fielding team will assist them in the correction process. Completing these actions before the GCSS–Army team arrives and begins producing unit STAMIS exception reports will greatly reduce the data cleansing work a unit has to do before being migrated into GCSS–Army.

Conversions of these bridging systems are divided between the fielding waves of GCSS–Army. For Wave I fielding, the EDMO and the GCSS–Army fielding team will obtain SARSS–1 data for all open orders and corresponding financial data from accounting systems, including the Standard Operations Maintenance and Research Development System (SOMARDS), the Standard Finance System (STANFINS), and the General Fund Enterprise Business System (GFEBs).

Specifically, a validation of “due-in from referral transaction” and “due-in from referral reconciliation of orders” in SARSS will be used to determine if an item is valid and open. Using InfoSphere, the process will begin with the EDMO obtaining the fielding unit’s SARSS–1 backup files and identifying nonstandard, noncataloged items on SARSS–1 open orders or in inventory.

InfoSphere will compile a list of materiel records that violate business rules and corresponding ways to potentially correct the violations. Business rules are definitions that regulate the contents of a data field and help detect potential errors. Materiel currently not found in GCSS–Army will be reported through the GCSS–Army DSU exception reports documents as “NIIN not found in GCSS–Army Materials Check

This screenshot shows the Army Enterprise System Integration Program portal.

The screenshot displays the 'Non-Standard Material - Create' form within the Army Enterprise System Integration Program portal. The interface includes a left-hand navigation pane with options like 'Change', 'Create', 'Delete', and 'View Only' under 'Non-Standard Material'. The main content area is titled 'Non-Standard Material - Create' and contains the following fields and controls:

- Requestor Approver ID:** lequan.hyton
- Request Number:** A text input field with 'Get' and 'Reset' buttons.
- NSLIN Required? (If no, a stand-alone Non-Standard Material will be created):** A section with two checkboxes: 'Existing Non-Standard Line Item Number (NSLIN):' and 'Request new Non-Standard Line Item Number (NSLIN):'.
- Material Requestor Required Data Elements:** A section with multiple input fields:
 - Reason Request Code (RRC): A dropdown menu.
 - Major Command Point of Contact (MACOM POC): A dropdown menu.
 - First Alternate Point of Contact: A text input field.
 - Second Alternate Point of Contact: A text input field.
 - Federal Supply Class (FSC): A text input field with 'Get', 'Reset', and 'Search' buttons.
 - Federal Supply Group (FSG): A text input field.
 - NSLIN: A text input field.
 - Detailed Description: A large text area.
 - Nomenclature: A text input field.
 - Manufacturer: A text input field.
 - Manufacturer Part Number: A text input field.
 - Unit Price: A text input field.
 - Unit of Issue: A dropdown menu.
 - Unit of Measure: A dropdown menu.

Table.” These reports will be supplied to the unit by the deployment team for action by the team or unit.

The information for items to be cataloged will be sent to the GCSS–Army data team for cataloging. AESIP will receive the information from a GCSS–Army interface and will pass it to the MMRC for analysis, adjudication, and disposition. To ensure data integrity, once the MMRC decides which items need to be cataloged, those items will be sent to AESIP, which will syndicate changes to GCSS–Army, the corps theater automatic data processing center service center, and other trading partners. GCSS–Army will receive catalog updates and amend the original material master template with the new information. In addition, submissions not cataloged will be rejected and notifications will be sent to users.

**AS GCSS–ARMY IS FIELDDED
TO UNITS, IT IS IMPERATIVE
THAT SOLDIERS UNDERSTAND
THE STRATEGIES FOR DATA
CLEANSING, MIGRATION,
CONVERSION, AND FIELDING.**

GCSS–Army Migration and Conversion

The final preparation for bridging systems data will take place during a six-day period called brown-out. During this timeframe, use of bridging systems will be suspended. High-priority requests will be completed using an offline manual process. Units will also be required to clear the management review file. The unit’s SARSS backup files and associated SOMARDS, STANFINS, and GFEBS data will be collected by the GCSS–Army fielding team and processed through the DSU to produce load files for GCSS–Army conversion. “Drop out” reports are also produced to account for data items that could not be migrated because of business rules in SAP.

After the six-day brownout, blackout will begin. During the six-day blackout period, the load files for GCSS–Army will be reviewed and validated by the GCSS–Army fielding team and all open orders with a valid catalog record will be loaded into GCSS–Army for customer validation.

During blackout, no new orders can be entered in the system and open orders will be loaded into the GCSS–Army ZPARK process. The financials will be validated by the GCSS–Army fielding team by comparing the legacy system open orders and the orders loaded into ZPARK, which is a process similar to a shopping cart on a merchant’s website; it allows a user to review and manage requests by validating the

financial status and supply requests.

Final customer data validation will take place before the unit signs the letter of acceptance. After the customer data validation and the signing of the letter of acceptance, the unit will begin using GCSS–Army to process transactions.

After the GCSS–Army Migration

Despite the intense data cleansing procedures in place, the possibility exists that some records will fail to migrate because of a nonstandard, noncataloged record from the SARSS–1 backup file and its associated accounting records having no GCSS–Army master file match. Two options have been built to overcome this situation.

The first option is that a record can be built using the GCSS–Army nonstandard process through the ZNONSTD transaction code. The second option is that the onsite GCSS–Army deployment team can generate a help desk ticket requesting that GCSS–Army build the material master template based on the recorded data. Either option requires part number, cage code, force element, description of item requested, FSC, SCMC, measuring quantity, and measurement unit and price.

As the Army converts logistics functions to GCSS–Army, the existing SLAMIS process must also transform to accommodate the ERP environment of GCSS–Army. As GCSS–Army is fielded to units, it is imperative that Soldiers understand the strategies for data cleansing, migration, conversion, and fielding. This is especially the case in the nonstandard, noncataloged items.

To better assist the fielding of GCSS–Army, it is important for units, and especially unit supply and property book officers, to properly catalog any nonstandard items using the existing SLAMIS process now, before the EDMO and the GCSS–Army deployment team arrive. This will be a major enabler for the success of data cleansing, migration, and conversion for GCSS–Army fielding.

LeQuan M. Hylton is a logistics management specialist and the assistant data team leader for the Global Combat Support System–Army functional integrated concept team at the Combined Arms Support Command. He holds a B.S. degree in business management with a concentration in human resources from Virginia State University and an M.B.A. degree from Averett University, and he is a Ph.D. student in public policy and administration at Virginia Commonwealth University. He is also a captain in the Medical Service Corps in the Army Reserve.

Army Sustainment Author Guidelines

We are always looking for quality articles to share with the Army sustainment community. If you are interested in submitting an article to *Army Sustainment*, please follow these guidelines:

- Ensure your article is appropriate to the magazine's subjects, which include Army logistics, human resources, and financial management.
- Ensure that the article's information is technically accurate.
- Do not assume that those reading your article are Soldiers or that they have background knowledge of your subject; *Army Sustainment*'s readership is broad.
- Write your article specifically for *Army Sustainment*; we do not publish articles that have already been published elsewhere.
- Keep your writing simple and straightforward.
- Attribute all quotes to their correct sources.
- Identify all acronyms, technical terms, and publications (for example, Field Manual [FM] 4-0, Sustainment).
- Review a past issue of the magazine; it will be your best guide as you develop your article.

Departments

Your submission should be geared toward one of *Army Sustainment*'s six departments, which are described in detail below. If you have an article that does not fit into one of our departments but you think it is appropriate for our audience, feel free to contact us.

- **Spectrum** is a department of *Army Sustainment* intended to present well-researched, referenced articles typical of a scholarly journal. Spectrum articles most often contain footnotes that include bibliographical information or tangential thoughts. In cooperation with the Army Logistics University, *Army Sustainment* has implemented the a double-blind peer review for all articles appearing in its Spectrum section. Peer review is an objective process at the heart of good scholarly publishing and is carried out by most reputable academic journals. Spectrum articles typically are 2,500–5,000 words.
- **Commentary** articles contain opinions and informed criticisms. Commentaries are intended to promote independent thoughts and new ideas. Commentary articles typically are 800–1,600 words.
- **Operations** includes articles that describe units' recent deployments or operations. These articles should include lessons learned and offer suggestions for other units that will be taking on similar missions. These articles require an official clearance for open publication from the author's unit. Photo submissions are highly encouraged in this section. Please try to include 5–10 high-resolution photos of varying subject matter. Operations articles typically are 1,200–2,400 words.
- **Training and Education** is dedicated to sharing new ideas and lessons learned about how Army sustainers are being taught, both on the field and in the classroom. Training and Education articles typically are 600–1,100 words.
- **History** includes articles that discuss sustainment aspects of past wars, battles, and operations. History articles should include graphics such as maps, charts, old photographs, etc., that support the content of the article. History articles typically are 1,200–3,000 words.
- **Tools** articles contain information that other units can apply directly or modify to use in their current operations. These articles typically contain charts and graphs and include detailed information regarding unit formations, systems applications, and current regulations. Tools articles typically are 600–1,800 words.

Instructions for Submitting an Article

- Submit your article by email to usarmy.lee.tradoc.mbx.leeasm@mail.mil.
- Submit the article as a simple Microsoft Word document—not in layout format. We will determine the layout for publication.
- Send photos and charts as separate documents.
- Send photos as .jpg or .tif files at the highest resolution possible. Photos embedded in Word or PowerPoint cannot be used.
- Include a description of each photo in your Word document.
- For articles intended for the Operations department, obtain an official clearance for public release, unlimited distribution, from your public affairs office before submitting your article. Include the clearance statement with your submission.

If you have questions about these requirements, please contact us at usarmy.lee.tradoc.mbx.leeasm@mail.mil or (804) 765-4761 or DSN 539-4761. We look forward to hearing from you.

ISSN 2153-5973
DEPARTMENT OF THE ARMY
ARMY SUSTAINMENT
US ARMY LOGISTICS UNIVERSITY
2401 QUARTERS ROAD
FORT LEE VIRGINIA 23801-1705

Official Business

PERIODICALS POSTAGE
AND FEES PAID
AT PETERSBURG VIRGINIA
AND ADDITIONAL CITIES

Sustainers in Actions

Spc. Augustus Maiyo, with the U.S. Army team, was the first runner to cross the finish line during the 37th Marine Corps Marathon, Oct. 28, 2012, with a time of 2 hours, 20 minutes, 20 seconds. Maiyo is a food service specialist assigned to the U.S. Army World Class Athlete Program at Fort Carson, Colo. This is first marathon in which Maiyo has competed. He also finished second in the Army Ten Miler, Oct. 21, 2012. (Photo by Marine Cpl. Jacob D. Osborne)

