







# **Stryker Transportability**

PB 700-03-2 Headquarters, Department of the Army

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### COVER

The Stryker wheeled armored vehicle met expectations for transportability while deploying to and participating in the Army Transfor-mation Experiment 2002 at the National Train-ing Center. In the cover photos, Strykers and their infantry squads from the 5–20th Infantry Battalion, 3d Brigade, 2d Infantry Division, are shown aboard a C–17 transport and de-barking in California. For more information on the Stryker's performance, see the news story on páge 1.

This medium is approved for the official dissemi-nation 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:

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## DISTRIBUTION MANAGEMENT PICKS UP WHERE VELOCITY MANAGEMENT LEAVES OFF

The Army's Velocity Management Program transformed to the Army Distribution Management Program (ADM) on 1 January. After a long history of success in logistics process reengineering, the program now will alter direction and work hand-in-hand with emerging Logistics Transformation Working Group initiatives.

Led by Major General Terry E. Juskowiak, the Commander of the Army Combined Arms Support Command at Fort Lee, Virginia, the ADM program will implement the best business practices of Army logistics to maximize end-to-end logistics support from the national level through the last tactical mile. Like Office of the Secretary of Defense and Joint Staff distribution management efforts, ADM will expand its focus across various classes of supply. Initial efforts are underway in classes V (ammunition) and VIII (medical materiel). The ADM program will continue to refine logistics process improvements found in initiatives such as dollar cost banding and the equipment downtime analyzer.

The two main process improvement teams (PITs) the Distribution PIT and Repair Cycle PIT—will remain the core elements of the ADM program. The Distribution PIT will focus on customer wait time, requisition wait time, backorders, and stockage improvements designed to raise productivity in supply support activities. The Repair Cycle PIT will continue to be integrated with the entire logistics process and focus on equipment readiness and order quality.

The Army's Supply Chain Integration Management Office in the Office of the Army's Deputy Chief of Staff, G–4, will publish two new Army regulations (ARs) by the end of fiscal year 2003; they will be the first in a series under the general category of supply chain management. AR 711–1, Supply Chain Management, will introduce and describe the Army's supply chain management program and include policies and responsibilities. It will serve as the capstone regulation for other regulations to be developed in the supply chain management series.

AR 711–2, Army Distribution Management, will establish policies, responsibilities, procedures, and methodology for the ADM program and also will provide direction for Army leaders on how to enhance their supply, maintenance, and transportation support operations.

The Integrated Logistics Analysis Program (ILAP), version 6.0, will be the primary source for all ADM metrics. ILAP will incorporate both customer wait time and requisition wait time data in easy-to-use graphic interfaces designed for customer queries and pipeline analyses. The equipment downtime analyzer will collect maintenance and supply data for readiness analysis.

The Army Distribution Management Board of Directors will meet annually instead of semiannually, with the next meeting tentatively scheduled for August 2003. The ADM homepage, www.cascom.army.mil/adm, has been redesigned graphically and functionally. It will continue to serve as a medium for disseminating information about ADM initiatives and the workings of PITs, process action teams, and related Department of the Army supply chain management committees and workgroups.

## STRYKER EXCELS IN OPERATIONAL BAPTISM

The Army's new Stryker wheeled armored vehicle met key transformation goals during its first "battle" at the National Training Center (NTC) at Fort Irwin, California. Sixteen Stryker infantry carrier vehicles participated in Army Transformation Experiment 2002, which was part of the U.S. Joint Forces Command's larger experiment, Millennium Challenge 2002.

The Stryker's transportability was demonstrated on both C–17 and C–130 aircraft. The 16 Strykers and their crews from Company A, 5–20th Infantry Battalion, 3d Brigade, 2d Infantry Division (Light), at Fort Lewis, Washington, were deployed on C–17s from McChord Air Force Base, Washington, to the Southern California Logistics Airport in Victorville, California. In the Stryker's first tactical deployment, four vehicles and their infantry squads were moved aboard C–130 transports to Bicycle Lake Army Airfield at the NTC. After this airlift, only 3 minutes were needed to offload the Strykers and 11 to 17 minutes to prepare them for operations.

The Stryker's mobility, sustainability, and lethality were demonstrated in contesting the NTC's opposing force (OPFOR). The Strykers' operational readiness rate was

(News continued on page 38)

ARMY LOGISTICIAN



# LOG NOTES

## **Munitions Survivability Software**

Information on how to obtain the Munitions Survivability Software described in the November-December issue of *Army Logistician* is available to anyone who will call (973) 724–2262 or DSN 880–2262, send a fax to (973) 724–5459, or send an email to dscar@pica.army.mil.

Duane S. Scarborough Picatinny Arsenal, Pennsylvania

## Officer Development

The article, "Designing a Lieutenant Professional Development Training Program," which appeared in your November-December 2002 issue, was a good update on an important aspect of officer professional development (OPD)-unit-level or operational training, education, and experience. This always has been recognized to one degree or another as a critical requirement for young, inexperienced company-grade officers. Programs have relied on the entire chain of command being involved and taking the time to ensure that the various requirements are met on time.

Anticipated changes in the Officer Education System (OES), specifically in the way captains complete their educational requirements, will make it necessary to better manage the OPD needs of this group of officers as well. Features include "justin-time" training and education for captains in a combination of Army distance learning (ADL) and TDYand-return resident courses rather than the current Captains Career Courses that require a 24-week PCS. Less time will be required to complete the new courses. Segments will include basic and branch-specific staff officer skills and common and branch-specific company commanders training. Commanders, brigade and battalion, will be responsible for managing OPD for captains as closely as for lieutenants who are now at the company and battalion level.

The goals are to reduce the trainees, transients, holdees, and students (TTHS) account; provide officers the skills they require to serve successfully in their immediate future positions; take advantage of emerging technologies, such as ADL; and reduce turbulence within units and families.

My first concern is about the reliance on ADL: We may be educating and training future leaders to lead through electrons. In addition, ADL may not provide the savings expected because of the cost of developing programs of instruction and providing the worldwide connectivity needed for access by the officers.

My second concern is about placing the burden of managing the educational development of captains on battalion and brigade commanders, both for training and operations, in a time of increased deployments. Will these commanders be willing and able to provide officers the time to concentrate on ADL courses when their units are gearing up for combat training center or operational deployments?

Finally, what will we, as an Army, lose by not bringing together young officers to share ideas and discuss experiences?

Lieutenant Colonel Mike Lemm Fort Leavenworth, Kansas

Log Notes provides a forum for sharing your comments, thoughts, and ideas with other readers of Army *Logistician*. If you would like to comment on an Army Logistician article, take issue with something we've published, or share an idea on how to do things better, con-sider writing a letter for publication in *Log Notes*. Your letter will be edited only to meet style and space constraints. All letters must be signed and include a return address. However, you may request that your name not be published. Mail a letter to EDITOR ARMY LOGISTI-CIAN, ALMC, 2401 QUAR-TERS ROAD, FT LEE VA 23801–1705; send a FAX to (804) 765-4463 or DSN 539–4463; or send an e-mail to alog@lee.army.mil.

## A Letter From the G-4 On DS+

Dear Editor:

I am writing in reference to the commentary in the September-October issue of *Army Logistician* entitled "Direct Support Plus in Korea." The article detailed how the 2d Infantry Division uses the Direct Support Plus (DS+) program as a means to reduce the cost of ordering engines from the wholesale supply system as well as a training tool for forward support battalion maintenance support teams. While the article certainly highlighted significant accomplishments by the soldiers in the 2d Infantry Division, I feel that I must take this opportunity to comment on the future direction of Army Maintenance and the impacts of DS+.

Today, the Army is faced with increasing operating and support costs driven in part by inconsistent standards of repair and a clear need to increase the mean time between failure (MTBF) for all components. Consequently, the National Maintenance Program was established to provide a sustainment base focused on the repair and return to stock of components repaired to a single quality standard.

As part of this effort, an integrated product team (IPT) was established to look specifically at the DS+ maintenance process, engine reliability, and ASL [authorized stockage list] stockage requirements. The IPT consisted of representatives from the heavy divisions, the major Army commands, and the Army staff. They examined DS+ from all perspectives. The AGT 1500 engine was initially designed to provide 1,100 hours of operation from the power train, but over time this reliability has declined significantly, to the point where we routinely get only 250 to 300 hours of operation between failures (MTBF) and readiness standards are maintained through the heroic efforts of our mechanics. The realities of current AGT 1500 reliability force us to institute better ways of sustaining our equipment. Emerging doctrine pushes the site of repair on such major components as the M1 tank engine increasingly toward the rear, where tools, facilities, and parts are available in more stationary facilities.

Currently, we are experiencing an MTBF of 750 hours on engines repaired to the national standard. In view of this success, DS+ is being phased out. Along with increased reliability, this change will reduce demand for AGT 1500 engines, lessen units' maintenance workloads, decrease the size of their ASLs by eliminating forward and rear modules as stocked items, and provide a 40percent decrease in the funding requirements to support the AGT 1500 engine. Unit commanders also will get back those soldiers pulled from their authorized positions to perform the DS+ mission. As the Army continues to define the sustainment base and size its maintenance capacity to meet maintenance requirements, we also must consider the utilization of available capacity at all levels of maintenance. In the case of the AGT 1500 engine, the Army currently funds repair at 12 locations worldwide. However, demand analysis shows that we can meet our total requirement by using far fewer maintenance facilities. Forward positioning our engines where they are needed will ensure that we provide the best product possible without degrading engine availability to the field.

One of the additional challenges the Army faces today is our inability to track components throughout their life cycles and document reliability, usage, and costs. Consequently, as the Army develops its Enterprise Resource Planning (ERP) Model-based objective Global Combat Support System-Army (GCSS–Army) to replace the Standard Army Management Information Systems (STAMIS), we will realize the ability to track components by serial number and document the cost to complete all maintenance actions. This will enable the National Maintenance Manager to determine where system components are repaired most effectively, be it at the local, theater, contract, or organic depot level.

As an institution and as an Army, our objective remains providing the soldier with a quality product produced by a world-class organization for the best value. To achieve this, we must change our business practices and develop an automated logistics system (GCSS–Army) that provides us with the right information to make the best decisions possible.

Discontinuing the DS+ conversion program is a necessary step toward improved reliability. The Army has made a large investment to buy out DS+. The benefits will be improved engine life, reduced efforts to sustain the Abrams on the battlefield, and elimination of borrowed manpower to run the DS+ program. These benefits will enable commanders to better focus soldiers' efforts on other critical systems and reduce unnecessary soldier workloads caused by excessive engine failures. When required, Army maintainers have always given, and will continue to give, personal time and energy to ensure unit success and equipment readiness. The Army's leaders are committed to reducing those sacrifices whenever we can. Elimination of DS+ is one of our efforts to do so.

> Sincerely, Charles S. Mahan, Jr. Lieutenant General, U.S. Army Deputy Chief of Staff, G-4

**ARMY LOGISTICIAN** 

## AMC's New G Staff Structure

by Gary J. Motsek

A Deputy Chief of Staff for Operations, or G–3, is part of the recently reorganized Army Materiel Command.

On 1 May 2002, the Army Materiel Command (AMC) headquarters structure was reorganized under the "G staff" model to improve AMC's responsiveness, effectiveness, and integration and to better align the command with the Department of the Army staff directorate structure (see chart below). The G staff concept was used first in 1917, when General John J. Pershing organized his staff while preparing the Army Expeditionary Forces for combat in World War I.

As part of its reorganization, AMC formed the Office of the Deputy Chief of Staff for Operations (G–3) (see chart at right), headed by Major General John J. Deyermond, to coordinate AMC's operations, planning, and logistics responsibilities.

AMC chose not to develop a corresponding Deputy Chief of Staff for Logistics (G–4) to augment the G–3 and other major staff sections. "There isn't a separate G–4 because we consider ourselves the G–4 for the Army," said General Paul J. Kern, Commanding General of AMC.

AMC previously had structured its headquarters by aligning the operational staff elements under the Deputy Commanding General and the major support elements under the Chief of Staff. Although that headquarters structure provided strong service and support, the new AMC organization will significantly improve integration internally across the headquarters components and major staff elements and externally with major Army commands, the Department of the Army, the Department of Defense, and the other services.

To form the G–3 organization, General Kern consolidated the Offices of the Deputy Chief of Staff for Lo-



AMC Reorganization

4





**Legend:** ARNG CSS

: Army National Guard Combat Service Support Nuclear, Biological, and Chemical Coordinating relationship NBC

gistics and Readiness and the Deputy Chief of Staff for Chemical and Biological Matters; most of the Office of the Deputy Chief of Staff for Research, Development, and Acquisition; most of the Office of the Deputy Chief of Staff for Ammunition; the Office of Security, Force Protection, and Law Enforcement; and the Office of Strategic Affairs. The consolidated organization then was restructured under Deputy G-3s for-

 Current Operations. Subelements include the Plans and Operations Division and the Office of Security, Force Protection, and Law Enforcement. A coordinating relationship exists with the Commander of the Logistics Support Activity.

• Support Operations. Subelements include the Maintenance Management Division; Munitions, Nuclear, Chemical, and Biological Support Division; Materiel Management Division; Combat Service Support Operations Division; and the Office of the Army National Guard Advisor.

• Industrial Operations. Subordinate elements are the Industrial Base Capabilities Division and the Integrated Engineering Management Division.

 Enterprise Integration. Functions include oversight of the Strategic Integration Division, the Operational Systems Integration Division, and the Single Stock Fund Division.

• Future Operations. This element is divided into the Strategic Planning Division, the Technology Support and Integration Division, the Concepts and Requirements Analysis Division, and the Life Cycle Management Support Division.

The G–3 reorganization was effective on 15 October 2002. The G-3 is responsible for both vertical and horizontal integration and internal operations. Formerly independent operations will be integrated and realigned to establish a more customer-centered organization. Throughout the transition and beyond, the G–3 will maintain continuity of operations and high standards of service. The G-3 Operations Center, which provides 24-hour support 7 days a week, will assist in this effort.

AMC's mission remains essentially the same as it was before the reorganization: to provide superior technology, acquisition support, and logistics to ensure dominant land force capability for soldiers, the United States, and our allies.

The G–3 has developed a separate mission statement to reflect its assigned responsibilities: to be the principal staff responsible for preparation and sustainment of warfighting in peace and war today and tomorrow.

For more information concerning the AMC reorganization, contact the AMC Public Communications Office at (703) 617–8010. ALOG

Gary J. Motsek is the Deputy G-3 for support operations for the Army Materiel Command (AMC) in Alexandria, Virginia. Previously, he was the AMC Assistant Deputy Chief of Staff for Ammunition. He has a bachelor's degree in environmental engineering from Syracuse University and a master's degree in management from Troy State University.

## Hazardous Materials and Supporting Troops

by Colonel James M. De Paz

Production of hazardous materials is an unavoidable consequence of modern military operations. The products that sustain the Army each day—such as motor oils, paints, cleaning compounds, and aircraft fluids—generate hazardous materials that present installations and units with significant health, safety, and environmental issues and management challenges. At Fort Campbell, Kentucky, the Army's third largest installation and the home of the 101st Airborne Division (Air Assault), management of hazardous materials has come into crucial focus as the post supports the Nation's fight against terrorism.

Fort Campbell has emerged as a prime example of how a comprehensive and successful hazardous materials management program (HMMP) can support vital logistics management for today's combat troops. This success is the result of a 6-year partnership between the acquisition and logistics program at Fort Campbell and the Army Environmental Center at Aberdeen Proving Ground, Maryland, that has integrated a Department of Defense-designed software package with Armyrecommended business practices. The automated HMMP at Fort Campbell has streamlined its acquisition and logistics efforts into a well-established support program for deployed troops.

## A Comprehensive Automated System

The Army Environmental Center assisted Fort Campbell in fielding the first version of the Hazardous Substance Management System (HSMS) software in 1996 as part of an Army initiative to field a "life cycle" tracking system for hazardous materials. Fort Campbell was selected for initial fielding of HSMS because of the importance of its mission and the magnitude of its supply operation.

HSMS is the Department of Defense's hazardous materials and hazardous waste tracking system. It is an automated tool designed to help installations achieve specific hazardous materials objectives as part of meeting health, safety, materials-handling, and environmental compliance requirements. The HSMS software allows not only better manipulation and control of inventory items than previous methods but also better visibility and accountability of hazardous materials and wastes.

As of July 2002, the HSMS initial operating capability

had been fielded at 65 Army installations in and outside of the continental United States as part of the installations' HMMPs. Sites using HSMS represent the full spectrum of Army installations. Additional fielding of HSMS to other Army installations is projected for 2004.

### **Army-Recommended Business Practices**

Successful hazardous materials management in the Fort Campbell supply operation has resulted from combining effective business practices with ongoing improvements to the HSMS software. Fort Campbell has established a comprehensive set of business practices that are based on eight practices outlined in Army Regulation 200–1, Environmental Protection and Enhancement. These practices include—

• Establishing centralized issue and storage of hazardous materials.

Implementing a tracking system (HSMS).

• Establishing a centralized hazardous materials management cell.

• Establishing inventory levels at the user level.

Establishing reuse procedures.

Establishing authorized user/use lists (AULs).

• Ordering and dispensing products by "unit [or quantity] of use" rather than "unit of issue."

• Implementing a hazardous materials training and awareness program.

## Fort Campbell's Hazardous Materials Program

Following these business practices, the first step in developing the Fort Campbell HMMP was establishing a single supply point on the installation through which all hazardous materials are processed, issued, and stored. Fort Campbell's Pollution Prevention Operations Center (PPOC) includes two 7,000-square-foot warehouse facilities that centralize the installation's HMMP operations.

One facility is a hazardous materials contingency support center. It currently supports 122 deployable customers and manages 141 contingency packages, with 24hour support available. The other facility is a hazardous materials supply warehouse used for processing and storing incoming materials and distributing them to garrison and contingency operations.

The installation's acquisition and logistics program managers use HSMS very aggressively as an automated "cradle to grave" tracking tool for hazardous materials management. Everything they do is tracked with HSMS.

## **Combat Support**

To accommodate unit needs for power projection, Fort Campbell commanders have identified 30-day supply packages with hazardous materials that are needed to sustain a unit or operation in a combat environment. These packages represent a wide spectrum of combat

support materials and include items such as motor oils, engine oils, turbine engine aircraft fluids, paint, adhesives, and cleaning compounds. An estimated 1,200 packages have been pushed out from Fort Campbell since 1997 to support soldiers in combat and in training.

Fort Campbell commanders first developed two hazardous materials requirements lists. One is a 7-day acquisition and logistics list to be used for supporting installation activities, including motor pools, hangars, and maintenance facilities. The second list outlines a 30days of supply (DOS) hazardous materials combat load, usually referred to as a unit basic load; commanders, executive officers, environmental officials, and the full command staff developed this list. The items on this second list are maintained at the Fort Campbell PPOC's hazardous materials contingency center as customer property.

To accommodate combat soldiers' potential aroundthe-clock needs, the HMMP at Fort Campbell is networked into the installation emergency operations center. Appropriate inventory levels at the user level also have been established. A key part of achieving program efficiency has been the continuity of the process. To date, Fort Campbell's hazardous materials contingency support for Operation Enduring Freedom has included the following—

• Issuing 109 of the 30-DOS packages for divisional units.

• Issuing 16 of the 30-to-90-DOS packages for supporting Special Operations Forces (SOF) units.

• Supplying divisional and SOF units with nonhazardous materials contingency center items such as fire extinguishers 521 times.

• Packaging and issuing three class IX (repair parts) battery contingency packages and one class III (petro-leum, oils, and lubricants) contingency package.

• Issuing 12,000 pounds of lime, sixty 55-gallon drums of dust-suppressing chemical and spray equipment, 24 chemical packages for reverse-osmosis water purification units, and 20 field sanitation kits.

 Issuing 170 additional contingency packages to divisional units for training exercises.

The planning stage of this contingency support program was purely logistics oriented, focusing on unit demands and the availability of current resources. The entire acquisition process has been command driven over time to understand what customers need. Logistics is involved throughout the preparation process to ensure that supplies are available on the shelf when the need for them arises.

## **Centralized Management**

As part of their HMMP, the installation's acquisition and logistics program managers adopted a centralized approach for managing hazardous materials. Centralized hazardous materials management provides installationlevel visibility and management of all hazardous materials being used or stored at an installation.

The solution for avoiding hazardous waste accumulation requires a program to reuse hazardous materials. This is accomplished with shelf-life management and stock rotation practices. The establishment of an AUL identifies authorized users who have a justified need to order, receive, and use hazardous materials. The AUL also documents those hazardous materials stock numbers approved for use on the installation and furnishes a screening mechanism for product substitutions; it also provides safety and health information on hazardous materials.

Fort Campbell has developed a process for ordering and issuing by unit of use. This is the ordering or issuing of the exact quantity of a product required to complete a specific process. Asking the customer explicit questions during acquisitions allows for much greater cost savings and accountability.

The establishment of Fort Campbell's comprehensive hazardous materials training and awareness program has encouraged safety and product awareness at all management levels. Throughout their support of Operation Enduring Freedom, the environmental personnel at Fort Campbell have been carefully teamed with personnel at the materiel management center.

As a result of implementing this HMMP, the Fort Campbell staff earned two prestigious White House "Closing the Circle" awards for "Greening the Government." The awards were made in the categories of model facility demonstration and education and outreach.

The Army Environmental Center plays a key role in initiating HMMPs on installations and in guiding them to successful implementation. The progressively expanded HMMP and HSMS support a very successful initiative for managing installations and for aiding our combat troops. The behind-the-scenes support management of hazardous materials has enabled Fort Campbell and the 101st Airborne Division to accomplish their missions in supporting the battle against terrorism a little more efficiently and effectively. **ALOG** 

Colonel James M. De Paz is the Commander of the Army Environmental Center at Aberdeen Proving Ground, Maryland. He holds a M.Ed. degree in science from North Georgia College and is a graduate of the Chemical Officer Basic and Advanced Courses, the Army Command and General Staff College, the Air War College, and the Airborne, Ranger, and Pathfinder Schools.

# Conducting an MSB External Evaluation

by Captain Christopher D. Noe and Second Lieutenant William D. Brosey

Picture this: a main support battalion (MSB), the logistics backbone of an armored division, moving 30 miles down a construction-ridden autobahn in a lengthy convoy carrying hundreds of soldiers and huge quantities of equipment. That is exactly what the 123d MSB at Anderson Barracks, Germany, did in June 2002, when nearly 700 soldiers and 400 pieces of equipment moved to a local training area for a weeklong battalion external evaluation (EXEVAL).

The last time the 123d MSB had participated in an event of this size was during a 1996 deployment to Bosnia. The lack of experience since then made planning the 2002 EXEVAL difficult. However, the 123d MSB learned that, even though MSB EXEVALs are difficult in a fast-paced heavy division, they are not impossible.

The experiences of the 123d MSB EXEVAL offer leaders of other units a "recipe" for conducting EXEVALs. The essential ingredients of this recipe are a detailed planning period, a focused train-up period, proper resources to conduct the event, and a detailed, controlled execution period.

## **Evaluation Train-Up**

Planning and conducting intense training for an MSB EXEVAL is nearly impossible because MSB personnel are constantly on the move providing support to the forward support battalion or to a combat maneuver training center. Conducting a major training event such as an EXEVAL is more difficult when the MSB is separated from major support operations. Just taking the



□ Soldiers participate in a company communications command post exercise.

Mission-Essential Task List Function	Mission Training Plan Task		
Project the force.	Perform quartering party operations.		
	Establish battalion command post (forward).		
	Coordinate movement of subordinate elements.		
	Plan battalion deployment upon receipt of a warning order.		
	Establish communications.		
	Plan rear operations.		
	Develop occupation plan.		
	Supervise establishment of subordinate elements and battalion headquarters.		
	Supervise operations security program.		
Protect the force.	Supervise nuclear, biological, and chemical defense operations.		
	Maintain communications.		
	Maintain command and control.		
	Operate base cluster operations center.		
	Direct response to threat actions.		
	Direct area damage control.		

□ "Crosswalk" from METL tasks to collective tasks.

entire MSB to the field causes a major strain on the division's readiness. Therefore, when preparing to conduct an EXEVAL in the MSB, it is important to have—

• A clearly defined mission-essential task list (METL) for the unit.

• A vigorous training plan that maximizes collective training at the battalion and company levels while reducing the impact on division readiness.

Do not assume that all mission-essential tasks can be performed in a weeklong field exercise. The METL must be tailored for a battalion EXEVAL. For example, when the 123d MSB conducted its EXEVAL, it focused on just two of the four tasks on its METL: project the force and protect the force.

The tailored METL must be assimilated into the training and evaluation outlines (T&EOs) in the MSB's mission training plan. The tasks in these outlines are really the "collective" tasks for the battalion. It is important to tailor these tasks to correspond to those chosen from the battalion's METL. The chart above shows the "crosswalk" that resulted when the 123d MSB integrated the METL tasks with the T&EO collective tasks. Within each T&EO task are specific steps a unit must perform in order to accomplish the mission. These steps help guide the battalion when developing the MSB training plan.

The training plan for an MSB to conduct an EXEVAL must be strenuous enough to validate all battalion systems before the exercise. The MSB's direct support mission also must continue during the train-up period, so it must balance mission support with EXEVAL training.

The training before the EXEVAL must be focused on three areas. First, training the battalion staff and company headquarters is paramount to success. The 123d did this through tactical exercises without troops (TEWT). These events focused on specific procedures for communication between companies and the battalion and on tactical standing operating procedure (SOP) battle drills. TEWTs allow the battalion to establish the standard for procedures in the division support area. They also give the key leaders the information they need to train their soldiers at the individual and collective levels.

Second, intense and realistic platoon- and companylevel field training exercises (FTXs) are necessary to train the soldiers in the battalion on company-level tasks. Sergeant's time training is a good opportunity to teach topics such as leading and conducting reconnaissance and surveillance patrols and establishing work priorities. It also gives junior leaders a chance to communicate battalion SOPs to their soldiers.

Battalion command post exercises (CPXs) are another training tool to use during train-up. After company communications command posts are set up and their networks are in place, scenarios are put into motion to test company reactions. Such exercises allow the company and battalion command posts to address communications shortfalls and areas for improvement. The focus of these events should be on the communication between the battalion and company command posts and the standardization of operations as outlined in the battalion tactical SOPs.

Finally, special groups, such as quartering parties; nuclear, biological, and chemical (NBC) teams; quickreaction forces; and reconnaissance and surveillance teams, must be trained to ensure success. This training is probably the most difficult, because it usually involves



□ A soldier keeps watch from his camouflaged position.

personnel from different companies. Identifying personnel for all of the teams and conducting their training early is essential. The 123d MSB was very proactive in this area. Teams made up of soldiers from all five of the battalion's companies were created quickly, and extensive time during the train-up period was devoted to the mission training plan T&EO tasks for each team's area of focus.

Special teams within a battalion can train in many ways. For example, after the reconnaissance and surveillance team members are selected, they must receive training on areas that allow them to operate as a fluid, integrated team. Some of these areas are map reading, radio procedures, NBC reporting, calls for fire, patrolling techniques, vehicle identification, procedures for dealing with enemy prisoners of war, medical evacuation, night operations, battle drills, contact with the enemy, and weapons operations. This training is extensive and must be started early to acquire proficiency by the start of the EXEVAL.

## **Resource Factors**

When planning an event such as an MSB EXEVAL, resources often dictate what can and cannot be done. For the 123d MSB, the first issue was adequate training space. Doctrinally, an MSB requires a 6-by-12-kilometer area. The 123d conducted its EXEVAL at the Mainz Sand Dunes in Mainz-Gonsenheim, Germany.

That training area measures about 1 by 1½ kilometers, which meant that individual fighting positions had to be much closer to the perimeter than doctrine dictates. However, the need to support customers while at the EXEVAL led the 123d to choose the Mainz-Gonsenheim site because it was relatively close to home and the MSB's customers would not have to alter their daily routines very much.

Environmental laws, ecological considerations, and mission support requirements prevented the 123d MSB from taking 25 percent of their personnel and 30 percent of their vehicles to the field for evaluation. Because of these factors, the battalion created and controlled a "check-ride" system to confirm the tactical deployability of all of the battalion's vehicles. In this check-ride system, the trucks traveled on a predetermined route and thereby received credit for movement. A sticker was placed on the windshield of each truck that participated in the check ride. In this way, the battalion was able to move every vehicle in its motor pool but left wheeled assets behind so it could continue rear support missions during the EXEVAL. Elements that did not move to the training site operated at hardstand facilities to replicate field operations.

## **EXEVAL Execution**

A detailed schedule for the exercise is crucial to maximize the quality of the EXEVAL and minimize the time

NOT EXAMPLE         NOT EXAMPLE						
3 Jun 02         0700         0730         Perform batalion of securing of new batalion area. (AP leader).         QP coverage           3 Jun 02         0730         0800         operations.         Using M8 detector paper.         QP coverage           3 Jun 02         0730         0800         Detect chemical agents using M8 detector paper.         QP coverage           3 Jun 02         0730         0800         Detect chemical agents using QP coverage         QP coverage           3 Jun 02         0730         0800         Supervise securing of new M8 detector paper.         QP coverage           3 Jun 02         0730         0800         Detect chemical agent suing M8 detector paper.         QP coverage           3 Jun 02         0730         0800         Supervise radiation         QP coverage           3 Jun 02         0830         0930         Supervise rate preparation (QP coverage         Neutralize booby traps.         QP coverage           3 Jun 02         0830         0930         Supervise area preparation (QP coverage         Supervise area preparation (QP coverage           3 Jun 02         0800         1000         Inagenet hastly security (QP coverage         Supervise forward langs and digital (QP coverage           3 Jun 02         0800         1000         Inagenet hastly security (QP coverage         Super	DATE	NOT EARLIER THAN	NOT LATER THAN	EVENT	TASK TO BE REVIEWED	OBSERVER-CONTROLLER (O–C) REQUIREMENTS
3 Jun 02         0730         0800         quartering party (CP) operations.         QP coverage           3 Jun 02         0730         0800         operations.         QP coverage           3 Jun 02         0830         0930         secure new batalion area.         QP coverage           3 Jun 02         0830         0930         secure new batalion area.         QP coverage           3 Jun 02         0830         0930         secure new batalion plan.         QP coverage           3 Jun 02         0800         1000         fibal command post (CP)         QP coverage           3 Jun 02         0800	3 Jun 02	0700	0730	Perform battalion	Move QP to new operating site.	QP coverage
3 Jun 02         0730         0800           3 Jun 02         0830         0900           3 Jun 02         0830         0930           3 Jun 02         0800         1000           1000         1030         Establish command post (CP) (coverage           Jun 02         0800         1000           3 Jun 02         0800         1000           3 Jun 02         0800         1000           3 Jun 02         0800	3 Jun 02	0730	0800	quartering party (QP)	Supervise securing of new battalion area (QP leader).	QP coverage
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3 Jun 02         0730         0800           3 Jun 02         0830         0900           3 Jun 02         0830         0930           3 Jun 02         0800         1000           1000         1030         Supervise area preparation plan.         QP coverage           Jun 02         0800         1000         Establish communications plan.         QP coverage           3 Jun 02         0800         1000         Establish command post (CP)         QP coverage           3 Jun 02         0800         1000         Establish command post (CP)         QP coverage           3 Jun 02         0700         Until completion         Supervise forward lactical completion subordinate completion su	3 Jun 02	0730	0800		Supervise radiation monitoring.	QP coverage
3 Jun 02         0730         0800           3 Jun 02         0830         0900           3 Jun 02         0830         0930           3 Jun 02         0830         0930           3 Jun 02         0830         0930           3 Jun 02         0830         0900           3 Jun 02         0800         1000           1 Jun 02         0800         1000           3 Jun 02         0800         1000           3 Jun 02         0800         1000           5 Jun 02         0800         1000           6 Jun 02         0800         1000           6 Jun 02         0800         1000           7 Gordiante         Supervise forward lactical operations.         QP coverage           7 Gordiante         Coordinate suport for more of subordinate comparies and battalion tepore formafor	3 Jun 02	0730	0800		Locate mines by probing.	QP coverage
3 Jun 02         0730         0800           3 Jun 02         0730         0800           3 Jun 02         0830         0900           3 Jun 02         0830         0930           3 Jun 02         0730         0800           3 Jun 02         0800         1000           3 Jun 02         0700         Until completion           completion         Subordinate move of subordinate completions, subordinate support for move with headquarters (HQ) and supply company (staff sections).           3 Jun 02         0700         Until completion           3 Jun 02	3 Jun 02	0730	0800		Neutralize booby traps.	QP coverage
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3 Jun 02       0700       Until completion       elements.       Direct external support operations during move (support operations).       Support operations O-C         3 Jun 02       0700       0800       Monitor move of QP (S-2/3 section).       S-2/3 O-C         3 Jun 02       0700       1200       Supervise establishment of sub-ordinate elements and BN HQ.       Perform command post function (BN HQ).       S-2/3 O-C         3 Jun 02       0700       1200       ment of sub-ordinate elements and BN HQ.       Monitor deployment of sub-ordinate units and BN HQ.       S-2/3 O-C         3 Jun 02       0700       1200       Perform command post function (BN HQ).       S-2/3 O-C         3 Jun 02       0700       1200       Perform command post function (BN HQ).       S-2/3 O-C         3 Jun 02       0700       1200       Perform comparison of sub-ordinate units and BN HQ.       S-2/3 O-C         3 Jun 02       0700       1200       Perform comparison of sub-ordinate units and BN HQ.       S-2/3 O-C         3 Jun 02       1000       1200       Perform comparison of sub-ordinate units and BN HQ.       S-2/3 O-C         9 Jun 02       1000       1200       Perform comparison of sub-ordinate units and BN HQ.       S-2/3 O-C         9 Jun 02       1000       1200       Perform comperations security program for current operatio	3 Jun 02	0700	Until completion	Coordinate move of subordinate	Monitor move of subordinate companies and battalion (BN) HQ (S-2/3 section).	\$-2/3 O-C
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	3 Jun 02	1000	1200		Plan operations security program for current operations (S-2/3 section).	5-2/3 O-C

□ The schedule for 1 day of the 123d MSB's EXEVAL.

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required to conduct it. A "white cell" (a neutral element) from the next higher headquarters should facilitate the exercise. During the 123d MSB's EXEVAL, the division support command in Wiesbaden filled that role. The white cell drove the operations and, in conjunction with observer-controllers, dictated when events would take place. The chart on page 11 shows the schedule for 1 day of the 123d MSB's EXEVAL.

Although MSB EXEVALs are difficult to accomplish, they can be executed if a detailed training plan is followed. To ensure success, the participating unit also must carry out an intense train-up period that focuses on leader- and soldier-level tasks and training of special teams. Train-up events, balanced with an MSB's direct support mission, will help make a highly successful battalion EXEVAL attainable. ALOG Captain Christopher D. Noe is the Battalion S–3 for the 173d Main Support Battalion at Anderson Barracks, Germany. He has a bachelor's degree in mathematics from Virginia Military Institute and is a graduate of the the Field Artillery Officer Basic Course, the Combined Logistics Captains Career Course, the Combined Arms and Services Staff School, the Petroleum Officer Course, and the Mortuary Affairs Course.

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MARCH-APRIL 2003

## **Transporter Partnership Averts Logistics Crisis**

n late August 2002, a labor dispute shut down ports on the west coast of the United States for 2 weeks. Talks between longshoremen and shipping lines had ended when the union rejected the latest contract proposal. With no agreement in sight, supplies on military bases throughout the Pacific theater were dwindling and replenishment cargo was building up at west coast ports. A logistics crisis was developing. On 2 October, the Military Traffic Management Command (MTMC) notified the 834th Transportation Battalion to prepare to load a ship at the Military Ocean Terminal Concord (MOTCO), California.

Since the 834th is staffed at reduced operating status levels, it could not take on a mission of this magnitude alone. MTMC called on the 1397th Transportation Terminal Brigade, an Army Reserve unit at Mare Island in Vallejo, California, to help in the emergency.

In response to the MTMC call, the Reserve unit's fulltime staff immediately convened a port operation team. Seventeen members of the 1397th, who had been called the afternoon of 2 October, were on the ground conducting port operations the next morning.

Within a few days, more reservists volunteered to help. They already were trained and skilled at port operations jobs such as receiving and documenting cargo, supervising operations, and creating a vessel stow plan.

Containers of various sizes started rolling in by truck and rail as soon as the reservists arrived at MOTCO. The containers continued to arrive around the clock for the next several days. The 1397th team, which had been



□ Members of the 1397th Transportation Terminal Brigade review documents pertaining to military cargo containers destined for the Far East.



□ Reservists prepare documentation for more than 300 containers at Military Ocean Terminal Concord, California.

divided into two shifts, was able to help the 834th receive and document the cargo day and night.

More than 800 containers had to be processed in and out of MOTCO. Typically, port operators are able to load as many as 600 containers onto a single containership. However, no containership was available because of the ongoing dispute between shipping lines and longshoremen, so MTMC asked the Military Sealift Command (MSC) to activate the *MV Cape Henry*. The *Cape Henry's* last seagoing mission had been in the summer of 1997. It then had become part of MSC's Ready Reserve Force, where it was maintained well enough to allow it to be sea-ready within a 72-hour activation period.

On 11 October, the *Cape Henry* sailed for the Far East with 188 high-priority containers. The dispute between the shipping lines and longshoremen had been put on hold on 9 October, when President George W. Bush asked the courts to invoke the Taft-Hartley Act and order the longshoremen back to work. The remaining containers were moved back to the Bay Area ports for overseas shipment. Together, the 834th Transportation Battalion and the 1397th Transportation Terminal Brigade had averted a logistics crisis. **ALOG** 

The Army Logistician staff thanks Major Michael O. Donnelly, Public Affairs Officer of the 1397th Transportation Terminal Brigade in Vallejo, California, for contributing the information and photos contained in this article.



## Managing the Munitions Stockpile

by Mitch Hillard

he Ammunition Surveillance Information System Munitions History Program (ASIS MHP) is an Internet-accessible data system developed to determine the status of the munitions stockpile maintained by the Single Manager for Conventional Ammunition (SMCA). Once fully fielded, ASIS MHP will capture inspection, test, and Remote Readiness Asset Prognostic/Diagnostic System (RRAPDS) environmental sensor data. (RRAPDS is an integrated system that monitors the environmental conditions of munitions in storage [shock, temperature, and humidity] and gives local and remote users an accurate, near-real-time "health status" during the munitions' life cycle.) Data will be provided by inspection personnel around the world at both wholesale and retail levels, including those deployed to locations such as Afghanistan, Bosnia, and Kuwait. These data will be used to determine if munitions are mission capable and suitable for issue to the soldier.

## System Development

ASIS MHP is a joint endeavor. Computer applications are being developed at the Army Aviation and Missile Command (AMCOM) and by the Automated Test Systems (ATS) Team at the Army Tankautomotive and Armaments Command Armament Research, Development, and Engineering Center (TACOM–ARDEC). Program management and financial support are provided by AMCOM, the Defense Ammunition Center, the Operations Support Command (OSC), and TACOM–ARDEC's Logistics Research and Development Activity at Picatinny Arsenal, New Jersey.

Fielding and testing of ASIS MHP is planned during 2003 and is scheduled for Blue Grass Army Depot, Kentucky; Crane Army Ammunition Activity in Indiana; Letterkenny Army Depot, Pennsylvania; McAlester Army Ammunition Plant in Oklahoma; and Picatinny Arsenal. Conventional and missile munitions operations that support pre-positioned ships also will be included in the testing and fielding.

## **Global Visibility**

The objective of ASIS MHP is to increase strategic decisionmaking capabilities by providing global visi-

bility of the mission-capable status and condition of munitions across all levels of command. ASIS MHP also will integrate data on worldwide munitions inspections, environmental exposure of munitions, and Ammunition Stockpile Reliability Program test results, which will enhance analysis at engineering centers. Global visibility of the munitions conditions provided by ASIS MHP, along with its automated data input capability, will increase efficiency and accuracy at the operations level. Together, these functions will ensure that only serviceable munitions go to the front lines, thus keeping soldiers supplied and the logistics footprint minimized.

The current system for reporting unacceptable munitions conditions that result from peacekeeping or antiterrorism actions is inefficient. The unique ability of ASIS MHP to operate in a disconnected environment will provide an innovative solution to this problem. Using Oracle's 9i Lite "Web-to-Go" software, ASIS MHP personnel supporting deployment operations will be able to capture information on the condition of munitions at the actual operation site and report that information quickly and efficiently via the Internet. When Internet access is unavailable, the operation will be considered "remote," and personnel will continue to collect data on a laptop-based system operating in an offline mode. The next time an Internet connection is made, data stored on the laptop will be uploaded automatically to the central ASIS MHP server, and the server and laptop will synchronize the information. This capability will support all types of remote operations, from combat actions in a hostile area such as Afghanistan to shipments from an "igloo" in the middle of a depot in the United States.

## **Benefits**

The increased operational efficiency created by onsite data input will eliminate redundant inspections and reduce the quantity of munitions of uncertain or questionable serviceability. Delays in inputting and updating data will be eliminated, data errors will be reduced, and data integrity will be enhanced. The improved surveillance data provided also will reduce delays in selecting munitions for shipment, thereby accelerating the clearance and shipment processes at wholesale and retail levels.

An operator looking at an item will be able to input his observations immediately using ASIS MHP, eliminating errors introduced when there is a lapse between the time the observation is made and the time it is input. Also, because the operator making the observation actually does the input, errors caused when someone keys in another's notes, misinterprets values on poor-quality carbons, or misunderstands fine shades of meaning are

eliminated. Indeed, the benefits of data input at the source cannot be overstated. Unlike traditional Web-based systems that restrict the operator to an office environment or require cellular or satellite connections, ASIS MHP will allow inspectors to record observations for uploading into accountable systems, even

when operating



ahead of pristine stocks from a more favorable environment.

## Integrated Information Systems Role

In addition to providing access to data through the Internet, ASIS MHP will feed data to enterprise information systems such as the Standard Army Ammunition System-Modernization and the Standard Depot System. ASIS MHP also will provide data to emerging systems such as the Global Combat Support

> and the Logistics Modernization Program (LMP). In fact, the executive agent for the LMP reviewed and categorized the existing munitions information systems to determine which systems would continue to exist after LMP was implemented. ASIS MHP was designated as a 'code six

System-Army

□ Soldiers guide an M119 howitzer into place on an air delivery platform. The howitzer eventually will be airdropped to deployed U.S. troops.

at remote or deployed locations.

With ASIS MHP, munitions mission-capable decisions made at the point of operation will be visible quickly at the command level, which will assist in tactical decisionmaking. Similarly, the data will be available at engineering centers, which will greatly enhance the centers' analysis capabilities.

ASIS MHP also will collect and report environmental exposure history such as shock, temperature, and humidity for selected munitions. In effect, personnel at tactical or engineering decisionmaking sites will be able to see what the operator at the munitions site sees and rely on his information to provide a comprehensive view of the munitions' current state and environmental exposures. With this information, personnel at all levels can assess the serviceability of the munitions more accurately. Then essential decisions can be made about whether or not the munitions are mission capable and which munitions are best for a particular mission. For example, an item that has experienced harsher exposures but is still fully serviceable could be selected for use bridge and unique," which means that ASIS MHP will be included as part of the LMP core release that will provide surveillance data to the LMP.

With its worldwide data view, ASIS MHP will be an invaluable tool for effectively monitoring and managing the global SMCA munitions stockpile and for making tactical readiness decisions that efficiently allocate the best munitions for the soldier and the mission at hand.

Mitch Hillard is a quality assurance specialist (ammunition surveillance) (QASAS) at the Army Tankautomotive and Armaments Command Armament Research, Development, and Engineering Center's Logistics Research and Development Activity at Picatinny Arsenal, New Jersey. He is a member of the QASAS Surveillance Modernization technology team that is developing ASIS MHP and RRAPDS. He has a bachelor's degree in economics from the University of Virginia.

### **ARMY LOGISTICIAN**

# Ammunition Training in the 2d Infantry Division

by Major Christopher M. Jones

The 2d Infantry Division Ammunition Office initiated two new training programs designed to reduce ammuntion management problems caused by the high turnover of personnel in Korea.

he 2d Infantry Division Support Command (DISCOM) "Wagonmasters" are using their own resources to help the division's ammunition managers alleviate the chaos caused by distance, dispersion, turbulence, and congestion in the Republic of Korea. ["Wagonmasters" is the DISCOM nickname, which is derived from their radio call sign.]

Ammunition managers and handlers in Korea face several challenges in providing effective ammunition support. These challenges include using a unique local management system, the Single Ammunition Logistics System-Korea (SALS–K); working without a direct support ammunition structure; providing continuous operations despite high personnel turnover; and working with units that have their ammunition basic loads on hand and loaded in combat vehicles.

The Division Ammunition Office (DAO) reviewed the challenges facing the 2d Infantry Division's ammunition managers and handlers and determined that an aggressive training campaign was needed. So the DAO developed two courses to provide the maneuver brigades and DISCOM personnel with ammunition training that would offset the unique challenges of ammunition operations in Korea: the Warrior Leader's Ammo Academy and the Wagonmaster "Backbone" Tech: Ammunition Transfer Point (ATP) Training.

## Warrior Leader's Ammo Academy

The Warrior Leader's Ammo Academy is a course designed for the support platoon leader and ammunition manager. It is a one-stop source of information on basic ammunition management. Between January and April 2002, DAO conducted the Ammo Academy three times, with a total of 65 officers and senior noncommissioned officers attending. DAO plans to host monthly Ammo Academy classes to help address the training demand created by the division's constant personnel turnover.

Using student feedback as a guide for improving the course, DAO expanded the Ammo Academy from 1 day to 2 days, mainly because so much information had to be covered. On the first day, students review the procedures for requesting and turning in live ammunition and ammunition residue. The turn-in process has been a hot topic in the division. In May 2001, it took an average of 45 days for units to get a turn-in appointment at the ammunition supply point (ASP). Since the course began, the appointment wait time has been reduced to 20 days. DAO expects the wait time to continue to decrease as more personnel take the course.

Also on the first day, students review ammunition doctrine, vehicle safety, and proper completion of all documents required to request, turn in, and transport ammunition. The course also includes briefings and question-and-answer sessions with representatives from the Division Safety Office, the 17th Ordnance Company's quality assurance specialist (ammunition surveillance) (QASAS), and the Division G3 Training Office.

On the second day, the students move away from the classroom for onsite training. They are taken to the 17th Ordnance Company, where the company's accountable officer leads them on a tour of the facilities. The 17th Ordnance Company is the U.S. element of the joint operation under which all ammunition in Korea is handled.



Most students assume that the United States owns and operates the ASP. That is not the case, as ammunition in Korea is governed by the SALS–K agreement.

The SALS–K memorandum of agreement between the U.S. Government and the Republic of Korea Government prescribes conventional ground ammunition logistics in the Republic of Korea. Under the SALS–K, the United States owns and provides accountability, surveillance, and maintenance production control over its ammunition. The Republic of Korea receives, stores, provides security for, performs maintenance of, and transports U.S.-owned conventional ammunition from point of embarkation to depots; transports stocks being retrograded to point of debarkation depots; and provides all intratheater movements between storage points.

The students tour the ASP that is run jointly by the 17th Ordnance Company and its Korean counterpart, the 9657th Ordnance Company. The tour includes a visit to the operations section, the issue point, the unit turn-in facility (UTF), and the residue yard. The tour provides a firsthand look at the ASP, its facilities, and its people.

## Wagonmaster "Backbone" Tech: ATP Training

Wagonmaster "Backbone" Tech: ATP Training is internal training that is designed to reinforce the training of the division's forward support battalion and aviation support battalion ammunition specialists.

Wagonmaster "Backbone" Tech: ATP Training is actually a series of six training sessions taught once a month during low-density military occupational specialty (MOS) sergeant's time training. The joint training sessions include slingload operations, forklift operations, ATP operations, emergency destruction procedures, site selection, and field storage. DAO publishes a course schedule for the support battalions and all personnel available to participate in the training, excluding those in the field. The sessions are open to all who wish to attend, but the subject matter is geared specifically to the technical aspects of the ammunition specialist MOS.

The two courses that DAO has developed are inexpensive, in-house resources for 2d Infantry Division soldiers. Based on the comments of former students, DAO has added guest lecturers, increased hours of instruction, and provided takeaway packets for students. DAO also is creating a hip-pocket smart book as an easy reference guide for ammunition procedures in the Republic of Korea. As the course continues to develop, DAO expects the Ammo Academy to become a division requirement for all support platoon leaders and platoon sergeants.

The ammunition training courses developed by the 2d Infantry Division DAO are improving ammunition operations in Korea. The division leaders expect continued improvement, both in the courses offered and in ammunition operations, because course developers are listening to their students and molding the courses to meet student and organization needs. **ALOG** 

Major Christopher M. Jones is the corps ammunition officer for the 1st Corps Support Command at Fort Bragg, North Carolina. He was the 2d Infantry Division ammunition officer when he wrote this article. He has an M.S. degree in logistics management from the Florida Institute of Technology and is a graduate of the Ordnance Officer Basic Course, the Combined Logistics Officers Advanced Course, the Combined Arms and Services Staff School, and the Army Logistics Management College's Logistics Executive Development Course.

### **ARMY LOGISTICIAN**

## **Creativity: The Sustainer's Field of Dreams**

by Colonel Larry D. Harman

What follows are some thoughts on the creative art of sustaining the world's premier land force in times of heightened terrorist activity at home and abroad, frequent world crises, protracted conflict, and transformation. The creative nature of sustainment is important. Creativity in a profession does matter, especially in our profession of arms. If rapid and decisive defeat of highly creative adversaries is an expectation of the American people, then creativity must be central to our profession. Absent this professional creativity, combat and sustaining forces in combat are just hazardous occupations.

Without question, sustainment creativity is required at all levels, albeit in different forms. The extremely complex acts of conducting logistics preparation of the battlefield, logistics preparation of the theater, strategic sustainment of both deployed forces and forces committed to homeland security, and Army-wide transformation all require mastery of the science and art of sustainment.

Sustainment artistry has never been more important than it is now. It requires a deliberate and disciplined process, and it is not just the domain of senior sustainers; it is the realm of talented noncommissioned officers (NCOs), warrant officers, commanders, battle staffs, Government civilians, and, surprisingly, even Defense contractors. Creativity counters stagnation and predictability, revitalizes the force, and provides a competitive edge over would-be adversaries. In short, creativity is a sustainer's "field of dreams."

## The Need for Creativity

For those charged with sustaining air-ground maneuver forces today and into the Objective Force era, there is but one nonnegotiable goal: rapid and assured provisioning of sustainment to forces worldwide across the full spectrum of military operations. This will guarantee the Army the ability to build and maintain overmatching combat power at the point of decision as determined by the commander on the ground.

To meet this enormous challenge, sustainers must be creative masters of transition. They, along with their supported units, must be accustomed to transitioning rapidly and seamlessly from home station to deployment, from forcible entry to defense, and from defense back to offense, and they must do all of this with little warning and with a smaller sustainment footprint. More than ever before, Army sustainers, working with their industrial, joint, interagency, and coalition counterparts, are required to anticipate and overcome monumental challenges in time-sensitive, chaotic, unforgiving, and oftentimes brutal circumstances. And since most sustainment capability resides in the Reserve components (RC), these challenges apply to our RC sustainers as well. Creativity is, and will continue to be, a core attribute for the thinkers and doers who must build and sustain combat power if victory is to be certain.

## **Historic Problems of Transformation**

The relationship between creativity and military transformation is problematic. Historically, the Army has undergone, or at least attempted, numerous transformations. The Army and Department of Defense (DOD) transformations are aimed at achieving a profound revolution of technologies, organizations, and concepts at both levels. Marginal, incremental gains are insufficient; dramatic leapahead improvements are sought.

Historians can argue that the United States does not have a commendable track record when transforming itself militarily. This is especially true when one considers that, after every war, the Army normally executes a "reverse," or "negative," transformation led by congressionally mandated downsizing, budget cuts, and drastic reductions in military research and development. In such circumstances, creative gains evaporate quickly. Some transformations are even interrupted by top-level military opposition. A military transformation that is perceived as successful also can turn out to be a catastrophic failure. Throughout history, there are examples of military transformations performed incorrectly. The military force prepared for the wrong type of war, and adverse strategic consequences ensued.

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Positive transformations normally do not begin in the U.S. military until after the Nation suffers a horrific attack or defeat or faces an imminent war. At such times, of course, support by the public, the President, and Congress is provided. With the benefit of learning from history, this pattern in military transformation can be dealt a creative blow.

## **Revolutionary Ideas**

The Army's sustainment community can be a catalyst for creative change in transformation. In fact, Army sustainers currently are engaged in budgeting for and implementing over 80 initiatives to reshape the Army. But these sustainment initiatives are mostly evolutionary, Army-only applications. Hardly any have joint, revolutionary potential.

Nonetheless, some revolutionary ideas are emerging. Ideas with enormous potential include—

Providing sustainment to preemptive strikes.

• Revamping DOD's Uniform Material Movement and Issue Priority System (UMMIPS).

• Designating one commander as the single DOD distribution process owner.

• Designating one

commander within each geographic combatant command as the single distribution process owner.

• Providing a dedicated, self-deployable, intratheater vertical take-off and landing (VTOL) aerial fleet to perform rapid and as-

sured distribution and medical evacuation for small, widely dispersed units.

• Developing an Army multifunctional sustainment capability that can self-deploy without relying on strategic airlift or sealift.

• Sustaining early-entry forces by combining new VTOL aircraft; shallow-draft, high-speed sealift vessels loitering offshore; and a "web of command" system.

• Reducing customer wait time to minutes and hours instead of days and weeks.

Optimizing homeland security sustainment.

• Optimizing Active component and RC force structure and command and support relationships.

• Replacing supply chain management and focused logistics with a joint, distribution-based "sense and respond" sustainment concept that is effective regardless of whether the force is deployed, in garrison, in port, at sea, in training, or organized for combat.

The desired outcomes behind these ideas are unrivaled sustainment assurance, velocity, visibility, control, accuracy, accessibility, capacity, and protection.

## Parochial Impediments to Creativity

The single greatest impediment to creative, revolutionary sustainment progress appears to be entrenched parochial jurisdictions. To be more specific, enormous opportunities for revolutionary change can be found at the functional "seams" (or overlapping areas) shared by two or more DOD agencies, services, Army branches, or echelons of command. These seams are horizontal and vertical and include, for example, joint interoperability; force projection; acquisition and procurement; distribution, including dedicated VTOL aerial distribution; sustainment command and support relationships; force readiness; Active and RC integration; sustainment protection; homeland security sustainment; and combat and materiel development.

When creative, high-payoff solutions are required between jurisdictions, key stakeholders often are reluctant

to engage aggressively to

eliminate the harmful

seams. Essentially, stake-

holders assume a hands-

off attitude for fear of

jeopardizing their core

priorities. This parochial

paralysis can halt pro-

gress for years. Regret-

tably, without bold and

courageous intervention

by one or more stakehold-

We need to transform not only our Armed forces, but also the Department of Defense itself, by encouraging a culture of creativity and sensible risk taking. We need to encourage a more entrepreneurial approach to developing military capabilities—one that is not mired in the past and one that does not simply wait for new threats to emerge to take us by surprise.

-Secretary of Defense Donald H. Rumsfeld

ers, either Congress intervenes and passes "seam-busting" legislation to end the stalemates or the harmful seams linger on to the detriment of National security. To make matters worse, new sustainment seams definitely will appear as the U.S. military executes its transformation campaign plans. If DOD and the armed services cannot mend existing seams, how can they be expected to cope with emerging sustainment seams?

All of this raises several questions. Does any senior Army sustainer have or need the authority to make a revolutionary decision? Does our Army have uniformed sustainers who are genuine futurists? If so, who are they? Where should they be assigned? Are they contributing to the ongoing transformation? Who is listening to them? Do sustainers morph into creative futurists when they are promoted to a particular rank or report to a headquarters that has a mission of designing the Army of the

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future? Who is mentoring and protecting them? Who are their joint counterparts?

## Technology, Talent—and Tolerance

In his recently published book, *The Rise of the Creative Class*, Professor Richard Florida of Carnegie Mellon University asserts that there are three keys to understanding the creativity landscape: technology, talent, and tolerance. Each is a necessary but, by itself, insufficient condition. All three must meld harmoniously to achieve creativity. Technologically superior weapon systems, emerging warfighting and sustainment concepts, the explosion of information technologies, and the anticipated

operational environment demand highly educated, multifunctional, innovative, technologyoriented sustainers. The demand for and retention of these highly talented sustainers of all ranks are hallmarks of our ever-increasing sophistication. So the military has technology and talent. But what about tolerance?

Achieving tolerance for creativity is extremely problematic for the Army. Professor Florida determined that high organizational tolerance must be demonstrated to reap the benefits of creativity. Culturally, the Army is a monolithic institution built on tradition, hierarchal leadership, a sacred chain of command, service and branch parochialism, conformity, proponents, and conservatism. This cultural environment is nearly 180 degrees from that espoused by Professor Florida to accommodate sustained, entrepreneurial creativity.

Simply put, the Army does not appear to have a high level of institutional tolerance for sustained creativity. Can this explain why much of the Army's creative workload is outsourced to civilian research centers, institutes, agencies, or contractors? Can this help explain why creative, uniformed sustainers suppress their own creativity or leave the service, only to be hired by dynamic companies that seek highly creative employees with prior military service? In today's Army, is it a professional blessing or a curse for a sustainer to be a highly creative visionary? Metaphorically speaking, is the Army scratching the creative itch possessed by many of its soldier sustainers?

## A New Army Culture

Assuming that the Army decides to unleash the full

power of sustainment creativity, how does it proceed? Here are some ideas that could be incorporated into a future Army culture. I encourage each reader to decide if these ideas would help sustain the Nation's warfighters better—

• Adopt a "Joint First, Army Second" approach to sustainment innovation and transformation. To "fight joint," start by "sustaining joint." Subsequent transformation efforts by the Army's sustainment community then will fit harmoniously into the various combatant commanders' warfighting missions. This courageous cultural shift is long overdue. The Army's Surgeon General appears to be proactive here with a Joint Theater Medical

My biggest concern is that we will attempt to pursue

the one best way. This would be a grave error. We

don't want the one best warfighting concept. We want

to have alternative, competing warfighting concepts,

and we want to have continuous debate. We don't

want someone to declare the single architecture or the

single standard. We have to be *tolerant* of continuing

debate at the operational level, the organizational level

and the tactical level. [Emphasis added.]

Command initiative.

• Amend Title 10 of the U.S. Code as needed. As currently written, Title 10 prevents or complicates any major attempt to create a seamless DOD-wide sustainment strategy.

• Address the antiintellectual, anticreative bias against uniformed soldiers by insisting that the Army transform its promotion and assign-

ments process. Studies by Colonel Michael Cody and retired Colonel Lloyd Matthews show that troop time remains the ultimate measure of promotion worthiness. Modifying this practice is warranted. To illustrate this need, consider that, if Karl von Clausewitz, Maxwell Taylor, George C. Marshall, and Dwight D. Eisenhower had been in my 1973 year group, it is highly probable that each would have retired in 1993 after a 20-year career because lack of troop time would have reduced their promotion opportunities. Consider the implications of this scenario.

–Arthur K. Cebrowski

Director of Force Transformation

Office of the Secretary of Defense

• Balance sustainment authority and responsibility. Senior Army sustainers are responsible for transformation progress. However, they often lack the corresponding authority to make significant progress.

• Test young soldiers and officers on their creative abilities. Use leader efficiency reports to track and assign creative thinkers and doers. This is a "win-win-lose" situation for the sustainer, the Army, and any future adversary, respectively.

• Devise a simple way for potentially leap-ahead sustainment ideas and concepts to get the attention of Army and Office of the Secretary of Defense leaders. Throughout history, truly revolutionary solutions have had trouble finding enthusiastic supporters. The Army needs to by-

pass excessive layers of command and staff review, wouldbe skeptics, and "idea assassins" and implement an immediate feedback mechanism to avoid creating the frustrating impression of non-interest by leaders.

• Revamp the research and development and science and technology processes so revolutionary materiel solutions can be prototyped rapidly without the cumbersome bureaucratic headaches that exist in today's Army.

• Allow sustainment headquarters and agencies to provide venture capital-type financial support to commercial companies, academia, and private-sector inventors who are pursuing potentially revolutionary sustainment solutions. Make this process simple to implement in a decentralized manner.

• Identify where the primary places of sustainment creativity should be located. Deliberately resource each of the creative centers with highly creative officers from multiple services and Army branches, not just Army sustainers. Only three primary locations appear logical. The Army Combined Arms Support Command at Fort Lee, Virginia, is ideal for tactical-level sustainment innovation. The Joint Forces Command at Norfolk, Virginia, could be the host for operational- and theater-strategic (joint)-level sustainment innovation. One strategic sustainment innovation center staffed by the Defense Logistics Agency (DLA) and the U.S. Transportation Command (USTRANSCOM) is justified. (Ideally, DLA and USTRANSCOM could merge in the near future to become the single DOD distribution process owner.)

• Explore methods of institutional creative mentorship. Just one of many examples would be to expand the aide-de-camp program down to the battalion commander level. These aides would mature as multifunctional sustainers more quickly by observing and interacting with their bosses on a continuous basis. This learning experience could replace the requirement for the young officers to attend certain institutional schooling. Key staff principals also could have junior aides.

• Expand the variety of assignments that provide branch qualification.

• Require logisticians to be certified by SOLE–The International Society of Logistics.

• Do not award Functional Area 90 to any sustainer until he is tested and certified.

• Allow advanced civil schooling for qualified warrant officers and NCOs.

• Convert the Army Logistics Management College's Logistics Executive Development Course to a program like the School of Advanced Military Studies (SAMS) at Fort Leavenworth, Kansas, for joint sustainers. Allow captains to enroll in joint sustainment courses that currently are reserved for field-grade officers. Continue sending field-grade sustainers to SAMS.

• Emphasize reciprocal multiservice assignments throughout a sustainer's career.

• Implement a reciprocal training-with-industry program.

• De-emphasize resident senior service college attendance by sustainers. Instead, distribute students throughout the Nation's high-technology industrial complex, Capitol Hill, other Federal agencies, academia, research laboratories, major city governments, and the other armed services. Allow students at least 1 year to work in non-Army sectors that influence the sustainment community.

• Automate as much of the science of sustainment as possible to free sustainers to focus on the creative aspects of sustainment while in garrison or when deployed.

• Focus the military education of junior field-grade sustainers on logistics preparation of the theater. This is inherently a joint process. Focus military education of company-grade sustainers on leadership, unit deployment preparedness, battle staff operations, and logistics preparation of the battlefield.

• Expand the roles and the knowledge of warrant officers and NCOs. In the Objective Force, warrant officers and NCOs will perform leadership, staff, and technical duties that more senior leaders perform today or that do not exist today but will be critical in the future.

• Expand the below-the-zone promotion rate for sustainers to accommodate larger numbers of highly creative thinkers and doers.

Our Army is *not* pre-ordained to remain the world's premier land power. In its quest to remain so, the Army must transform wisely, deliberately, and expeditiously. This requires a creative ethos within the DOD, joint, and Army sustainment communities. Now is not the time to be parochial, averse to risk, or fearful of change. Sustainment creativity must thrive. The Army's highly creative sustainers are not luxuries; instead, they are vital professional and cultural assets. Our senior leaders must unleash the powerful creative spirit and energy of uniformed sustainers, Government civilians, and contractors in new and revolutionary ways.

We can do this right! Let's keep this question in mind: "How will history remember this generation of Army sustainers?" ALOG

Colonel Larry D. Harman is the Army Combined Arms Support Command member of the Headquarters, Department of the Army, Logistics Transformation Working Group. A multifunctional Transportation Corps officer, he has served in numerous command and staff assignments.

## **Contract Support for Operation Enduring Freedom**

Local and international contractors are supporting soldiers from many countries as they fight in the war on terrorism around the world. A look at contingency contracting in Operation Enduring Freedom demonstrates how well local and international contracting works.

"In today's operational environment, contracted support is an integral and often transparent part of the military's day-to-day operations during deployments," said Major Ruthann Haider, Contingency Contracting Officer (CCO) for Combined Joint Task Force (CJTF) 180 at Camp Stronghold Freedom, Uzbekistan. "We supplement the military supply system by providing deployed commanders a means to obtain needed materials, services, and supplies not readily available through normal supply channels."

CJTF 180's contingency contracting capability falls under the Joint Logistics Command and is a vital, integral part of day-to-day support operations across the theater. Contracted support often supplements, or is a component of, other logistics, engineering, or base camp quality-of-life initiatives.

CCOs usually are among the first soldiers to deploy into an area of operations and the last to leave. In addition to procuring supplies not available to deployed units, CCOs often contract with local construction firms to improve the base camp and construct new buildings.

Camp Stronghold Freedom's contracting office com-



□ This building is one of several being constructed at Camp Stronghold Freedom by a Russian company to provide more permanent facilities for service members.

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□ At top, local Uzbekistani workers lay cement for power generator platforms. Civilian contractors then will replace the existing Army powergeneration unit. Above, one of the workers removes air bubbles from one of the platforms.

prises a small and dedicated team—three contracting officers, two host nation interpreters, two transportation movement officers, and an administrative specialist that awards and oversees contracts for base infrastructure improvements.

Communication through interpreters is critical for accomplishing many base camp improvements. CCOs rely heavily on the interpreters to conduct market research to find and develop a pool of local vendors who are able to meet the military's requirements.

"It's quite a challenge to deploy 7,000 miles to a remote location and build a base camp from scratch, but it's something we are trained to do," said Haider. Between July and December, the 1st Corps Support Command Contracting Team awarded more than 700 contracts valued at \$17 million. ALOG □ Below, this 15-mile-long cement blast wall that surrounds the perimeter of Camp Stronghold Freedom was constructed by a local contractor. In the bottom photo, Afghan workers begin construction of a culvert in Mazar-e Sharif, Afghanistan.



The Army Logistician staff thanks Specialist Travis Edwards of the 1st Corps Support Command Public Affairs Office at Fort Bragg, North Carolina, for providing the information and photos contained in this article.

# **Training With a Tactical Focus**

by Major Mark D. Collins

It is 0630 hours in the country of Mojavia. A Company of the 202d Forward Support Battalion, 3d Brigade Combat Team (BCT), 52d Mechanized Division, is preparing to move forward on the battlefield to support combat operations against the Krasnovian Army, which invaded Mojavia 2 weeks ago. A week earlier, A Company, along with the rest of the 3d BCT, had deployed into the theater by commercial air from Fort Bliss, Texas, and had drawn modification table of organization and equipment (MTOE) equipment immediately from pre-positioned Army war reserve stocks.

Throughout the reception, staging, onward movement, and integration (RSO&I) of the 3d BCT, the unit has been under the threat of theater ballistic missile attacks from the Krasnovians, who also possess an extensive arsenal of chemical agents. Krasnovian sympathizers in Mojavia have conducted several demonstrations against the U.S. military presence in the region. The People's Parumphian Guerillas (PPGs) have conducted two acts of sabotage in the last 3 days, killing four U.S. soldiers, including two fuel handlers from A Company. The fuel handlers were performing preventive maintenance checks and services on a 5,000-gallon fuel tanker when a car bomb exploded just outside the perimeter wire near the A Company vehicle line, detonating the tanker and 3,000 gallons of JP8 fuel.

During RSO&I, a chief concern in the battalion has been the arrival of the containers filled with each company's communications equipment; night-vision goggles; nuclear, biological, and chemical equipment; and other essential gear not available from the pre-positioned Army war reserves. Until the containers arrive, all communications are sent over military-procured, off-the-shelf PRC–127 radios and a number of commercial handheld radios bought at a local electronics store just before deployment. The radios are invaluable in relaying information among leaders who were spread out during the equipment draw process.

Unfortunately, the radios are not secure, so PPG sympathizers using radio-scanning equipment bought at an electronics store in Krasnovia are privy to information transmitted in the battalion. The PPGs know what the unit plans to do each day, the combat readiness of the unit, its movement timelines, and the designated routes for the support battalion. Using the information gathered over the airwaves and from local informants friendly to their cause, the PPGs plan to ambush and destroy the support battalion—a high-payoff logistics target—along the route. Using cell phones, they are able to provide their commander with almost real-time information.

The A Company commander, in the lead vehicle, moves at the designated time toward the start point, followed by six 5,000-gallon tankers, 2 palletized load system trucks containing most of the battalion's construction and barrier materials, and 15 assorted wheeled vehicles, none of which have mounted crew-served weapons. Unfortunately, the commander's serial, most of its soldiers, and all of its supplies are lost in the first 5 minutes of contact with the PPGs.

he mission of logisticians is to ensure that warfighters have what they need at the right time, in the right place, and in the right quantity. However, when operating in a field environment, many supply companyand troop-level soldiers find it challenging to perform the tasks they learned in skill levels I and II commontask training. Rigorous tactical training can enable sol-

diers to meet the challenges of providing support in a battlefield environment.

A typical rotation at the National Training Center (NTC) at Fort Irwin, California, includes training on RSO&I planning; moving; site occupation and setup; force protection; and leadership. Leaders can easily apply the lessons learned at the NTC to training any-

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where in the United States, Europe, or the countries of the Pacific Rim.

## **RSO&I** Planning

RSO&I is hectic. Units must pass several readiness tests imposed by the theater commander before going into combat. These tests require them to conduct some in-country training while simultaneously trying to build logistics combat power. An entire unit, normally a BCT or an armored cavalry regiment (ACR), must draw equipment from the pre-positioned vehicle fleet while its home station equipment is arriving by air, rail, or ground through a point of debarkation. Always looming are threats of theater ballistic missile strikes or terrorist activity.

Effective command, control, and communications are critical and include detailed planning and rehearsals at home stations before any major training event or combat operation. Command posts (CPs) must have effective, easily established systems to track equipment readiness, unit training, percentages of unit equipment loaded and ready to roll, weapons test fires, ammunition distribution, and supply status so unit leaders will know what support each unit can provide.

The most vital function of the CP is facilitating accurate and timely communication. One means of aiding communication is to post large, laminated tracking charts in the CP. The charts must be kept current and have an "as of" time posted. The soldiers manning the CP must understand how to update the information and where to send it after it is updated. The commander should keep a book containing copies of the tracking charts so he can remain informed during a movement or when the CP is not fully operational.

The ability to communicate in a secure mode is crucial, so it is important to front-load this capability in the deployment sequence. At least two secure radios should be on hand in the "jump" CP. The commander needs a portable radio, and one should be positioned at the site of the equipment draw. Each radio should be equipped with an OE-245 long-range antenna. The commander must give specific guidance to advance party personnel and have them brief other units informally as they arrive. The briefings should cover current operations, the unit's direct support capability, the status of unit equipment, and a current threat assessment. This will bring all key personnel up to speed quickly. Superior units must disseminate information so that even soldiers on the fuel nozzle have a clear vision of the commander's intent, tasks, purpose, and desired end state.

Soldiers must arrive with the equipment, tools, and supplies they will need to function when they leave a vehicle or aircraft. A "scrub" by unit leaders of the list of equipment that is to accompany troops is crucial. Performing preventive maintenance checks and services on the equipment before deployment also is key. A load exercise of the equipment to accompany troops, usually conducted in the unit motor pool, provides hard data on the number of pallets and containers needed for deployment and gives leaders an accurate picture of their deployment requirements. Unit chemical defense equipment must deploy incrementally, starting with the lead element.

Many company or troop leaders wait for a formal order from their battalions before beginning their own planning, which puts them behind the power curve. The eight troop-leading procedures practiced at the NTC (see chart below) are a continuous process and do not start with the receipt of a written order. Unit leaders must get the word out to their soldiers so they can prepare adequately. Many combat service support (CSS) operations are repetitive, so the focus should be on those things that will change: missions, timelines, routes, terrain, weather, and tactical conditions. Rehearsals and supervision are critical when supporting tactical operations. Murphy's Law can go into effect at any time; if something can go wrong, it will. Unit leaders need to have a plan B to use if plan A fails. Checklists are helpful when spot-checking to see how plans are being carried out.

Tro	oop-Leading Procedures
1.	Receive the mission.
2.	Issue the warning order.
3.	Make a tentative plan.
4.	Initiate movement.
5.	Conduct reconnaissance.
6.	Complete the plan.
7.	Issue the order.
8.	Supervise.

Time is a finite resource. Therefore, unit leaders must keep their troops focused to ensure that soldiers understand their priorities and can move from one task to the next without specific leader involvement. "Down time" should be used to conduct battle drill reviews, hip-pocket military occupational specialty (MOS) common-task training, and training on rules of engagement. Unit leaders should strive to keep the soldiers busy and focused on the upcoming mission.

## Moving, Site Occupation, and Setup

Good unit moves result from good planning and rehearsals. Successful units use standing operating procedures (SOPs) to bridge the gap when time is constrained. Commanders and leaders can help ensure

success by enforcing the one-third/two-thirds rule in planning. (One-third of the available time should be used for staff planning and two-thirds for subordinate elements to plan and execute.) Rehearsals and inspections are critical to successful execution. Noncommissioned officers (NCOs) and platoon leaders should check and recheck to ensure that loads are configured and secured properly and that unit ammunition has been distributed correctly. Soldiers must be trained on convoy defense, immediateaction drills, and night driving to succeed on the 21st century battlefield.

As an observer-controller at NTC, I saw that the most successful company commanders were those who followed troop-leading procedures, issued formal orders, conducted rehearsals at company level, and allowed subordinates enough time for subunit rehearsals. The idea behind rehearsals is to achieve a common, relevant picture of the mission in the light of mission, enemy, terrain, troops, time available, and civilian considerations. By rehearsing early on, units have an opportunity to make any necessary changes to the operation plan before they commit themselves to a plan that will not succeed.

Rehearsals greatly enhance unit movement to, and occupation of, a new site. Soldiers who are informed of the mission, the commander's intent, and where they fit into the big picture are more focused. Follow-up inspections enable company leaders to reinforce the plan and check soldier knowledge and situational awareness.

During convoy operations, company leaders must make sure that crew-served weapons are mounted and manned, every vehicle has a strip map, air guards are posted, and convoy security is established during halts. At night, company leaders must ensure that drivers and assistant drivers are trained on and use night-vision goggles.

Risk management is a continuous process that requires everyone's involvement. Young soldiers will do the right thing if they know that standards are enforced. Routine dissemination of key information and spot checks are essential elements of safety.

The quality of a unit's rehearsals has a significant effect on site occupation and setup. A well-planned and well-rehearsed move, site occupation, and setup will minimize any CSS blackout or degradation of direct support.

Reconnaissance of a new site is not always feasible, and often the plan will change once the battalion advance party arrives at the site of a new base support activity or regional support activity. The actions of the battalion's advance party contribute greatly to a successful site occupation and setup. At the NTC, I observed a number of units that rolled into a new site and waited for the company commander to arrive before getting to the business of occupying the site. The senior company leader forward with the advance party must have a clear vision of how the commander wants to occupy the new site and how it meshes into the battalion plan. This leader must be empowered to make decisions as the situation changes. Empowerment is a true combat multiplier.

Units are most vulnerable during the occupation and setup of the site. Therefore, a tracking system to account for the units and weapon systems that have arrived at the new site is critical. Establishing communications also should be a priority task. Most pri-



□ A soldier prepares his individual fighting position during occupation of the base support activity site at the National Training Center.



## □ Engineer assets are used to protect high-payoff targets.

ority work can be accomplished simultaneously if leaders have delegated responsibility and have empowered subordinates to see that the work is done.

It can take days for a unit to recover from a poorly conducted site occupation and setup. A botched occupation degrades direct support CSS and combat health support operations, frustrates everyone, and hampers the establishment of a viable defense.

Rock drills, rehearsals, and SOP reviews are opportunities for key leaders to brief and rehearse with their soldiers. One useful technique used at the NTC is to select an easily identifiable vehicle or object for use by the other elements in the company as the base for establishing platoon and section locations. For example, during one rotation, the company command post antenna was used as the base for locating individual support sections. Sections were able to confirm their locations as soon as they rolled into the new site.

At times, some of the support sections had to relocate because of terrain. The relocations were accomplished quickly because the soldiers were familiar with the requirements of their SOPs but were still flexible. A wellexecuted rehearsal or rock drill conducted by soldiers familiar with their unit SOPs sets the tone for occupying a site, establishing a defense, and setting up direct support operations.

## **Force Protection**

To ensure victory, the rear threat must be defeated. Many CSS soldiers, NCOs, and officers think they can perform their primary jobs, such as pumping fuel, purifying water, issuing supplies, cooking meals, and conducting maintenance, without keeping a vigilant watch for the enemy. Those soldiers, NCOs, and officers cannot do their jobs if they cannot defend themselves. The trend toward increased throughput of supplies from echelons-above-division support units makes convoy security and force protection just as important for a platoon leader in a corps supply and services company as they are for a supply platoon leader in a forward support battalion.

Properly drilled unit force protection measures often lay the foundation for a CSS unit's ability to support in combat. Individual proficiency in loading and firing all weapons in the company should be the standard. Active reconnaissance and surveillance plans are critical. Welldisciplined units conduct daily weapons maintenance and enforce the wearing of night-vision goggles from dusk until dawn. They also keep a number of crew-served weapons in their ring mounts ready to fire at all times.

Perimeter wire erected to standard is only one component of a good defense. Guards must be alert to prevent infiltration of their unit area. Unit leaders must check at odd intervals to ensure compliance.

Defense rehearsals conducted during both daylight and hours of limited visibility are essential. Mass casualty evacuation drills involving the designation of nonstandard evacuation vehicles with primary and alternate drivers and the appointment of aid and litter teams should be incorporated in the rehearsals.

## Leadership

Leadership is what distinguishes superior units from mediocre units. Leaders are "grown" through experi-

### **ARMY LOGISTICIAN**

ence and empowerment. Company and battalion leaders have a responsibility to train and mentor future first sergeants, sergeants major, and commanders.

The old saying, "Soldiers will do what they know you are going to check," still applies. Soldiers normally will aspire to achieve whatever standards the chain of command accepts. If



□ A soldier guards the base support activity site during occupation.

high standards are set and enforced at all levels, soldiers naturally rise to those standards. Units should have systems in place in which all leaders frequently check company training, maintenance, and mission support and all senior company leaders spot-check those functions often.

Training soldiers and units is hard and demanding work. Assessing a unit's mission-essential task list proficiency continuously is the first step in planning quality training. It requires focus from the top. A detailed 12-month training plan, coordinated with higher echelon training calendars, provides direction. Key events such as combat training center rotations and deployments can help focus unit training and assist in time management.

Company training meetings should be held the same time every week and should not be simple informationdissemination sessions. Company training meetings give leaders an opportunity to work critical issues in a timely manner.

Home-station training at the lower levels is key. CSS battalion commanders who require platoon leaders to plan and run their own field training exercises make an impact on the future force. The platoon leaders develop training plans and, with some mentorship from their company commanders, present them to the battalion commanders. Once the plans are approved, the battalion staffs work diligently at resourcing basic requirements and ensuring that the units are protected from taskings and other distracters. Platoon field training exercises (FTXs) set the standard for what "right" looks like, but they should not be external evaluations. The FTXs give junior leaders opportunities to learn, make mistakes, build teams, and think on their feet.

Tactical training focuses on the basics. Most soldiers are adept at their MOS skills. However, as an NTC observer-controller, I saw that the level I and II common-

task tests continually challenged rotating units. For example, in many instances, soldiers could not set up triple-strand concertina wire; dig fighting positions; react to a nuclear, biological, or chemical attack; or operate unit crew-served weapons correctly. This trend was not prevalent in units where leaders were engaged and actively enforced standards.

Enemy forces typi-

cally strive to create the most damage and casualties while limiting the risk to themselves. They seek out easy targets. For example, during Russian incursions into Chechnya, rebel forces constantly targeted Russian CSS troops, inflicting casualties so dramatic that Russian infantry units had to be reconstituted into CSS units to replace fallen CSS soldiers.

The odds of soldiers being deployed into harm's way in today's smaller, force-projection Army are significantly greater than they were in 1990. Therefore, leaders must ensure that soldiers receive challenging, quality training. Training to standard and hands-on training are hollow phrases if they are not realities at the sergeant level at home station. Well-trained soldiers commanded by well-trained leaders will ensure that warfighters receive the timely support that will ensure victory on the battlefield. ALOG

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# Proprietary Packaged Petroleum: A Growing Logistics Concern

by Maurice E. Le Pera

The use of proprietary petroleum products by the Government continues despite directives to curtail their procurement.



he ability of the U.S. military to control and reduce its use of proprietary petroleum products could play an important role in the Army's transformation to the Objective Force. "Proprietary petroleum products" are those packaged petroleum, oils, and lubricants that are procured for the military services by the Defense Supply Center Richmond (DSCR), Virginia; by local procurements; or by credit card purchases. These proprietary products are not described by a performance specification, Federal specification, commercial item description, industry standard, or military or commercial drawings. Instead, they are defined merely by a company, supplier, or manufacturer item number or company brand name.

National stock numbers (NSNs) identify petroleum products according to their unit size (quart, gallon, 5gallon can, or drum). They are used by all installations and activities when submitting requisitions for packaged petroleum products. NSNs continue to be assigned to proprietary packaged petroleum products, even though the requirement to limit their number has been imposed or implied in publications such as—

• Army Regulation 70–12, Fuels and Lubricants Standardization Policy for Equipment Design, Operation, and Logistic Support, chapter 2-2, paragraph k.

• Military Handbook (MIL–HDBK)–113C, Guide for the Selection of Lubricants, Functional Fluids, Preservatives, and Specialty Products for Use in Ground Equipment Systems, paragraph 5.1.

• MIL–HDBK–838C, Lubrication of Military Equipment, paragraph 5.1.2.

## **Evaluating the Problem**

In an attempt to measure the extent to which the military uses proprietary petroleum products, I compared two listings of NSNs for all packaged petroleum under Federal supply class (FSC) 9150, which includes cutting, lubricating, and hydraulic oils and greases. It is important to note that the total number of NSNs for both standard and proprietary petroleum products includes separate numbers for different unit quantities of the same product. In other words, one product could have three different NSNs because it is available in three different container sizes, whereas another product could have only one NSN because it is only available in one container size. This makes the total number of actual products in each category somewhat less because individual product entries could have more than one NSN because of the variety in packaging.

The two listings were provided by Ernest Jeniolionis of DSCR. The first was generated in the November– December 1998 timeframe, and the second was dated 21 April 2000. In discussions with other DSCR personnel about the NSN list, I was advised that some of the NSNs listed should be considered "inactive." They stated that the listings should be viewed only as marketing tools to familiarize potential suppliers and customers with the full line of packaged petroleum products available from DSCR rather than as the basis for any statistical analysis. However, I believe that, because the lists are available to both customers and suppliers, there is a valid basis for their use in a statistical context. Based on that belief, I proceeded to determine

## Commentary

the approximate distribution of standard versus nonstandard, or proprietary, NSNs.

The earlier listing revealed a total of 895 NSNs. Of those, 453, or 50.6 percent, were identified with standard products, and 442, or 49.4 percent, were identified with proprietary products. The 21 April 2000 list showed a total of 967 NSNs; 480 of those, or 49.6 percent, were linked to standard products. The remaining 487 NSNs, or 50.4 percent, were identified with proprietary products.

This comparative review of both listings revealed that, within a period of approximately 1 to 1½ years, there had been a 1-percent decrease in the number of standard products and a 1-percent increase in the number of proprietary products. Stated another way, standard products represented only 37.5 percent of the 72 newly established NSNs, whereas proprietary products represented 62.5 percent.

A further illustration of this proliferation can be seen in recently posted Requests for Quotation (RFQ) and awarded contracts. Using the DSCR Procurement Gateway Web site (http://progate.daps.mil/home), I searched for all RFQs for commodities under FSC 9150. The 12 December 2002 search revealed 33 RFOs. Of these, 19, or 58 percent of that single sampling, identified scheduled procurements for proprietary products. Two days later, I conducted a parallel search for all contracts that have been awarded for FSC 9150 product commodities. Because of the cumulative nature of these searches and the large number of contracts awarded, I reviewed only the first 50 contract awards. Of these 50 awards, 22, or 44 percent, were for proprietary products. Although these two searches represent only snapshots, they illustrate the continuing demand for and use of proprietary products.

## Why the Increase?

Several factors contribute to the proliferation of proprietary petroleum products. First, enforcement of the regulations designed to limit the number of proprietary products entering the inventory appears to have waned. This can occur when program managers or other responsible personnel place a greater reliance on the contractor or subcontractor to recommend packaged petroleum products for a particular materiel system. In many instances, a threat by the manufacturer or contractor to withdraw the equipment warranty unless those recommended proprietary products are used influences the military's decision to use them.

Second, the changes in military specifications directed in the Secretary of Defense's June 1994 memorandum,

"Specifications and Standards—A New Way of Doing Business," generated a new push for greater use of commercial products by the military. This includes proprietary products as well as those defined by standards set by the American Society for Testing and Materials, the Society of Automotive Engineers, the American Gear Manufacturers Association, and others. Two of the directives in that memorandum were to change existing military specifications to reflect existing commercial practices and, when those specifications already reflect commercial practices, to accept the voluntary standards set by industry. Unfortunately, some packaged petroleum products defined by commercial standards do not perform as required when subjected to the environments and conditions under which military systems typically operate. This has forced the incorporation of militaryunique requirements into all Government specifications for packaged petroleum products that are developed.

Third, because of increasing costs for acquisition of hardware systems, the military services do not have the necessary funding or manpower to demonstrate the suitability or equivalence of existing standardized products to proposed proprietary products or, in some instances, to develop new products. As a result, new NSNs have been established for those proposed proprietary products.

Of all the services, the Army seems to be impacted the most because of the nature of the supply and distribution systems used in ground-force operations. The proliferation of proprietary products tends to be greater within the Army because its packaged petroleum for automotive and ground systems is less standardized; there is no meaningful, core-funded program to address packaged petroleum requirements fully; and the Army cannot demonstrate equivalency and substitutability of existing military products with the proposed proprietary products because of funding constraints.

## **Future Concerns**

The trend toward increasing numbers of proprietary products entering the military supply system will have a negative effect on the Army's Objective Force doctrine. The principal objectives of the Objective Force are responsiveness, deployability, agility, versatility, lethality, survivability, and sustainability. Two of these objectives could be affected directly by the trend toward usage of more proprietary products. Deployability demands focused and flexible logistics, whereas sustainability requires that both the logistics footprint and replenishment demands be reduced. Obviously, the greater the numbers of packaged petroleum products needed to support and sustain operational units, the more difficult they will be to obtain and distribute.

Another factor adding to the proprietary products dilemma is the recent trend within the automotive industry to move toward special original equipment manufacturer (OEM)-approved lubricants and fluids. Some OEMapproved products provide extended drain capabilities and other high-performance qualities. Because many of these products offer extended equipment warranties that mandate their use, the military tends to use them instead of products already in the military supply system. This tendency likely will lead to more NSNs. It is not unrealistic to envision a scenario in which vehicles and equipment in the same operating units will require specialized products based on who manufactured the particular hardware systems.

Increasingly, the Government procures hardware systems from foreign manufacturers. Although typical contract language stipulates that the systems must be capable of operating on standard U.S. lubricants and fluids, some exceptions occur, and problems have surfaced as a result. For example, the Swedish manufacturer of the Army's heavy dry support bridge requires that a proprietary hydraulic fluid (Bio Max NX 16) manufactured in Sweden be used to operate the bridge instead of the standard fluids already in use by the military services. Likewise, a German manufacturer of the Army's improved ribbon bridge also requires that a proprietary German fluid be used instead of the standard fluids available in the U.S. military supply system.

Different procurement costs also create problems. In procuring standard products, a certain degree of competition always exists among manufacturers and suppliers, which results in competitive pricing for the eventual purchase of those products by DSCR. A review of contracts awarded in fiscal years 2000 and 2001 for eight different types of engine oil revealed that the unit cost of proprietary products averaged \$116 more than the unit cost of standard products. Some cost as much as \$500 more per unit. However, proprietary products often can become costly items because there is essentially no competition when a product is made by only one manufacturer. With procurement from a single manufacturer, the potential exists for a no-response bid if the supplier undergoes a merger, encounters financial problems, elects to stop manufacturing the particular product, or goes out of business. A serious supply problem could occur quickly if no immediate alternative manufacturer or supplier is available to fulfill that procurement requirement.

Product interchangeability within North Atlantic

Treaty Organization (NATO) countries is important because units from different nations sometimes need to share consumable products with each other during conflicts, peacekeeping operations, or training exercises. Annex C of NATO Standardization Agreement 1135, Interchangeability of Fuels, Lubricants, and Associated Products Used by the Armed Forces of the North Atlantic Treaty Nations, lists the petroleum products that are interchangeable among NATO forces. With standard products, it has been relatively easy to determine which products can be interchanged safely with those of other nations. However, determining any degree of interchangeability among proprietary products becomes difficult, if not impossible, because of their proprietary nature.

The problems associated with increased use of proprietary products by the military could interfere with achieving the goals of the Army's Objective Force. Several steps should be taken by the military to prevent the further escalation of proprietary product use and the problems that could result—

• First, establish a process to monitor and question the assignment of NSNs to any proprietary packaged petroleum product.

• Second, adopt a mechanism for curtailing the assignment of NSNs to proprietary petroleum products. More rigid enforcement of the existing regulations is needed.

• Third, and most importantly, make greater efforts to encourage product consolidation as a means of reducing redundancy in NSNs and promoting the multiple uses of existing products. The need to consolidate products has been recognized recently within industry as part of a three-pronged initiative to reduce overall maintenance costs, extend equipment life, and simplify the lubricant purchasing process.

Following these three steps will go a long way toward alleviating the supply and distribution difficulties associated with proprietary products and will significantly help the Army in achieving its ultimate goals for the Objective Force.

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### **ARMY LOGISTICIAN**

## **Another Look at Property Accountability**

by Lieutenant Colonel Robert A. Swenson

## Regardless of all the good things a commander does while in command, the last question his senior rater is likely to ask is, "How did the inventory go?"

recently read an article on property accountability that discussed only the change-of-command inventory. I did a little research and found that most of the information available on property accountability deals only with the change-of-command inventory. (Lieutenant Colonel James C. Bates' article in the January-February 2002 issue of Army Logistician is a great resource on the subject.) Certainly, the change-ofcommand inventory is a critical part of property accountability. However, a commander is less likely to have problems with property during the change-of-command inventory when everyone's attention is on it and the inventory is the commander's only responsibility. Problems are more likely to develop during the next 12 to 18 months, when he has a thousand other things to worry about. In this article, I would like to share some of the tactics, techniques, and procedures that I have used or seen others use to maintain property accountability successfully.

## After the Change-of-Command Inventory

Because Lieutenant Colonel Bates and others have discussed change-of-command inventories thoroughly in previous articles, I will not go into detail about them. I only will add that you should keep the records of where things were when you took command and hang on to all your notes. You will be surprised at how often you will refer to them to determine what happened to property. Remember that the change-of-command inventory is the only time in command that you will be able to focus all your attention on property, so set yourself up to succeed.

You must understand that no one will care about your property as much as you do. You may be as lucky as I was in my first company command and have one of the finest supply sergeants in the Army. Or you may not. Your sub-hand receipt holders will be a mixed bag: some will be great at accounting for their property; some will not. So you personally need to ensure that things are done right.

Each month, get a copy of your hand receipt and compare it to the one from the previous month. Have the supply sergeant attach a copy of the change documents that explain each of the changes that have been made. If an item was issued to the unit, ensure that it was subhand receipted properly. Once everything balances, put the copies of the change documents in a folder. If there is a problem later, you may be the only one who has copies.

Next, compare your hand receipt to the sub-hand receipts. The Unit Level Logistics System (ULLS) can produce a report that shows that all your property is subhand receipted, but it will not indicate if those sub-hand receipts actually are signed and the sub-hand receipt holders have accepted responsibility for them. The best way to do this is with a spreadsheet with the line item numbers down the left side and the sub-hand receipts across the top. The last time I commanded a company, I didn't have a personal computer on my desk, so stubby pencil entries directly on the hand receipt worked just fine.

Another advantage to the spreadsheet is that it fits nicely into your smart book. If someone asks if you have a mechanized sandbag filler, you will have that information at your fingertips. Carrying around your whole hand receipt is awkward.

By reconciling your hand receipt every month, you will know that it is correct and that everything you have signed for is sub-hand receipted correctly. If something is not right, you will know that the problem happened in the last 30 days and not at some point in the last 10 months, which would be the case if you waited until you inventoried that item during your monthly 10-percent inventory.

## **Shortages**

Keeping track of end item components can be a night-



□ Keeping track of end item components can be a nightmare, especially in a maintenance company. Here, a soldier stationed at Camp Bondsteel, Kosovo, inventories the tools and components in his shop area.

mare, especially if you command a maintenance company with over 100 toolboxes. Although you may have reviewed the shortage annexes carefully during the change-of-command inventory to ensure that everything was on hand or on order when you signed the hand receipt, changes will have occurred by the next day. Some items will have come in, and some requisitions will have been canceled. You must have a system to ensure that components coming in are accounted for properly and that canceled items are reordered or obtained from another source.

There are several tools available to help track shortages. ULLS–S4 provides a transaction report that is reliable if your supply sergeant "BLASTs" (blocked asynchronous transmission) information to the supply support activity on a regular basis. The report will tell you what was received and what has been canceled.

The report I found most useful was the Integrated Logistics Analysis Program (ILAP) report. You can do two things with this report. First, if a short item is received, you can confirm that the item was hand receipted properly to the sub-hand receipt holder and that the shortage annex was annotated. Second, if something was canceled, you can check to see if it was reordered. Some orders, especially tools, will be canceled by the supply system because you did not order the minimum order quantity. If you are short only one wrench, you don't need to order 15, so local purchase may be the best way to go.

Shortly after I took command of a battalion, two of my companies changed command. Both had large shortage annexes but nothing on order. The outgoing commanders had done the right thing when they took command and had everything on a shortage annex and on order. But after they took command, everything either was canceled by the supply system or came in and was not annotated on the shortage annexes. Devoting about an hour a month to reconciling your hand receipt can prevent that from happening to you.

## Sub-hand Receipt Holders

Counsel your sub-hand receipt holders in writing during the change-of-command inventory or as soon as they assume their duties. Prepare a standard memo that explains what you expect of them and all of the regulatory requirements. Have the property book officer help you prepare this. Some of your sub-hand receipt holders will have no idea what is required of them, so a short memo from you explaining their duties will be a great help to them. Also keep track of when these soldiers are leaving, and ensure that they sign the hand receipt over to someone and that everything is straight before you sign their clearing papers.

That's it. Do these things, along with your monthly 10-percent inventories, and you should stay out of trouble or at least be able to find and correct problems soon after they happen. Remember that, regardless of all the great things you do in command, the last question the senior rater is likely to ask is, "How did the inventory go?" Good luck!

Lieutenant Colonel Robert A. Swenson is the Army Secretary for Joint and Defense Affairs at Headquarters, Department of the Army. He previously served as the Commander of the 498th Corps Support Battalion in Seoul, Korea. He has an M.S. degree in logistics management from the Naval Postgraduate School and is a graduate of the Ordnance Officer Basic and Advanced Courses and the Army Command and General Staff College.

## Transforming USTRANSCOM: Is USSOCOM a Model?

by Lieutenant Commander Cynthia Womble, USN

Efforts to enhance the mobility of U.S. military forces are focused largely on platforms: how many are needed, and how should they be used? However, platforms are only a small part of the answer to the challenge of transforming our military mobility capabilities. An additional question needs to be asked: How can the total mobility forces best be organized to achieve the focused logistics and dominant maneuver of Joint Vision 2020?

The Department of Defense (DOD) no longer can afford the bloated transportation infrastructure of today. By reengineering the Defense Transportation System (DTS), DOD can free money and manpower for other transformation needs. One way this reengineering might be accomplished is by transforming the U.S. Transportation Command (USTRANSCOM) using the U.S. Special Operations Command (USSOCOM) as a model.

Today, USTRANSCOM controls only portions of DOD's transportation assets and processes. The US-TRANSCOM mission statement, "to provide air, land and sea transportation for the DOD, both in time of peace and in war," is misleading. According to joint doctrine, USTRANSCOM is the single manager for Defense transportation, with the exceptions of service-unique and theater-assigned assets. So the DTS is more than just USTRANSCOM; it includes, according to Joint Publication 4–01, Joint Doctrine for the Defense Transportation System, all of the "nation's transportation infrastructure that supports DOD common-user transportation needs across the range of military operations." The DTS consists of all military and commercial assets, services, and systems operated by, contracted for, or otherwise controlled by DOD.

A 1996 General Accounting Office (GAO) report concluded that Defense transportation costs were too high, processes even within USTRANSCOM were fragmented, and the cost of maintaining mobilization capability was driving the higher costs. GAO's primary recommendations called for changes within USTRANSCOM to reduce duplication among its component commands.

## Comparing USTRANSCOM and USSOCOM

The case for change in USTRANSCOM seems to be strong. To determine the feasibility of such a transformation, the first step is to compare the two organizations. Both USTRANSCOM and USSOCOM are unified commands with worldwide responsibilities determined not by geography but by a unique function. Both USTRANSCOM and USSOCOM support combatant commanders with specialized and unique assets. Both have broad, continuing missions that are best executed under a single commander. USTRANSCOM provides strategic mobility, while USSOCOM provides trained and ready Special Operations Forces (SOF). To a degree, both USTRANSCOM and USSOCOM control a limited set of scarce resources that must be managed carefully and allocated worldwide. Neither USTRANSCOM nor USSOCOM has the resources to say "yes" to every request from a supported combatant commander.

USTRANSCOM and USSOCOM exercise combatant command over assigned forces and delegate operational control of those forces to supported combatant commanders as required. Through their subordinate component commands, both USTRANSCOM and USSOCOM have limited responsibilities for functionally similar forces and tasks under the combatant commanders. USTRANSCOM's component commands are the Military Traffic Management Command (MTMC), Military Sealift Command (MSC), and Air Mobility Command (AMC). USSOCOM's component commands are the Army Special Operations Command, Naval Special Warfare Command, and Air Force Special Operations Command.

USTRANSCOM and USSOCOM have some significant differences. The most significant is that US-SOCOM was created by Congress and given the authority to train and equip forces, a power previously vested by law only in the armed services. The same legislation also established a new category of funding within DOD, Major Force Program 11, and gave USSOCOM responsibility for its management. This ensured that SOF had visibility at the DOD and congressional levels.

USTRANSCOM does not have acquisition authority. Instead, USTRANSCOM is authorized only to provide input to the services for the development, acquisition, and organization of mobility and transportation systems and platforms. USTRANSCOM is distinctive among the unified commands because of its role as manager of the Transportation Working Capital Fund (TWCF), which includes submission of the TWCF Program Objective Memorandum directly to the DOD Comptroller.



□ The Army's logistics support vessel is classified as service-unique.

Organizational differences also exist between US-TRANSCOM and USSOCOM. While both commands include Army, Navy, and Air Force components, only USSOCOM has established functional component commands under the command of the regional combatant commanders. The two commands also differ in the scale of their operations. USSOCOM manages a budget of over \$3.7 billion and has just over 45,000 assigned personnel, including active-duty military, National Guard, and Reserve personnel and civilians. By contrast, USTRANSCOM manages a budget of over \$4.2 billion and has 63,000 active-duty military personnel and civilians. Including National Guard and Reserve units increases USTRANSCOM's strength to over 159,000 people. USTRANSCOM also differs from USSOCOM in that the commander of USTRANSCOM is also the commander of one of its subordinate commands, AMC.

USSOCOM does not offer a perfect model for transforming USTRANSCOM. USSOCOM is responsible for equipping and training SOF, and USSOCOM's budget includes funding for assigned military personnel; however, these personnel still belong to their parent services. Some platforms have been procured on USSOCOM's initiative to fill validated special operations requirements, but not all of the personnel required to operate these platforms are SOF. Any transformation of US-TRANSCOM using USSOCOM as a model must include steps to mitigate these challenges.

## Proposed USTRANSCOM Transformation

What actions should be undertaken to transform USTRANSCOM using USSOCOM as a model? Changes are needed in four major areas. USTRANSCOM should be—

Granted the same budget and acquisition authority

## that USSOCOM has.

• Given an expanded mission, to include all DOD operational and strategic transportation assets and supporting infrastructure and organizations.

• Reorganized internally to increase efficiency and effectiveness.

• Provided with a commander separate from the AMC commander.

## **Budget and Acquisition Authority**

In order to integrate intertheater transportation effectively, efficiently, and seamlessly with intratheater transportation, USTRANSCOM must have

acquisition authority similar to USSOCOM's. As the single agent in DOD responsible for procuring operational and strategic mobility platforms and systems, US-TRANSCOM should be able to eliminate unneeded duplication among the services, ensure robust and flexible mobility to meet joint and service requirements, and optimize the size and shape of the mobility force to enhance strategic responsiveness.

The need for USTRANSCOM to have more authority over transportation procurement is recognized within the command. USTRANSCOM is pursuing acquisition authority for commercial transportation services. Currently, USTRANSCOM is not interested in gaining acquisition authority to develop and purchase new mobility systems, such as ships and aircraft. Although seeking authority for commercial services is a positive step, it is not aggressive enough to gain the efficiencies and effectiveness possible with full acquisition authority.

Moving to direct funding may not be as big a jump as it may appear at first. Revenue gained from transportation services provided (managed in the TWCF) is not USTRANSCOM's sole source of funding. Some funds for maintaining capacity for wartime mobilization are included in the service budgets. For the past several years, USTRANSCOM has been successful in gaining a separate funding line from Congress called Mobility Enhancement Funds (MEF). USTRANSCOM has used these funds for en route infrastructure repairs and improvements not addressed by the services. The existence of MEF demonstrates that USTRANSCOM and Congress recognize the need for a centrally controlled funding source to ensure funding of some capabilities that are required by all of the services but not paid for by any one service. Thus, direct funding of USTRANSCOM may not be such a radical transformation.

## **Expanded Mission**

The mission of USTRANSCOM must be expanded to include all operational and strategic transportation assets and supporting infrastructure and organizations. A number of organizations within DOD have a primary mission of transportation. Only a few (namely the service-component transportation commands) fall under the purview of USTRANSCOM. Many of these organizations would be more effectively integrated into the DTS and more efficiently employed by joint forces if they were part of USTRANSCOM.

The Army's 7th Transportation Group is an excellent example of the type of transportation activity that should be part of USTRANSCOM. This unit is charged with providing many transportation capabilities that cross the boundaries among tactical, operational, and strategic mobility. One type of watercraft operated by the 7th Transportation Group is the logistics support vessel (LSV). These capable vessels are not part of the DTS because they are classified as service-unique. However, many mobility missions can be performed equally well by an LSV (an operational-level, service-unique asset) or a small ship chartered by MSC (a strategic-level, common-user asset). Including LSVs in the DTS under US-TRANSCOM would ensure that they are managed with other available transportation assets to meet joint mobility requirements, not just Army requirements.

Other organizations within DOD that could be used better as part of USTRANSCOM include Navy cargohandling battalions, the Navy Transportation Support Center, Army theater support commands in Europe and Korea, Navy fixed-wing passenger aircraft, and the prepositioning ship fleet. A study should be conducted to fully identify all operational- and strategic-level transportation activities and assets within DOD that should be included in USTRANSCOM. Activities that should not be considered as candidates for inclusion are those that perform only at the tactical level, which should remain under the control of the services.

## **Transportation Theater Component Commands**

The third area requiring change is establishment of transportation theater component commands. Similar to USSOCOM's theater commands, theater transportation commands would consolidate all the strategic and operational mobility organizations within a theater to improve responsiveness and efficiency, eliminate the divide between intertheater and intratheater lift, and streamline the reception, staging, onward movement, and integration process. Working for the theater combatant commanders and coordinating with USTRANSCOM, these theater transportation commands would allow the DTS to capitalize on the advantages of centralized control and decentralized execution. Any portions of the existing transportation component commands in a particular theater that are inappropriate for USTRANSCOM control (such as the Special Mission Ships Fleet within MSC) could be transferred to another organization.

For this change to work, the services and the theater combatant commanders will have to accept a paradigm shift in the way transportation assets are controlled. The tradition of placing tactical and operational mobility responsibility in the hands of the services will be hard to break. However, true efficiencies in Defense transportation and seamless mobility cannot be achieved without joint cooperation and optimization.

## Separate AMC Commander

To transform effectively along the USSOCOM model, DOD needs to disentangle the command functions of USTRANSCOM and AMC. The current policy of dualhatting the USTRANSCOM commander as AMC commander saves a general officer position. Since the number of general and flag officers in each pay grade is limited by law, creating a new four-star slot would be a new requirement for the service chosen to fill the position. However, this is a minor problem when compared to the benefits that could be realized by making the USTRANSCOM commander a truly joint, impartial position.

Providing more separation between USTRANSCOM and AMC will help prevent the appearance, and perhaps the tendency, to favor AMC over the other component commands. Complete impartiality will be required of the commander of a transformed USTRANSCOM in order to make procurement tradeoffs within USTRANSCOM's budget that formerly were made in the service budgets. Separating the two positions also would allow the commander of USTRANSCOM to be selected for the first time from any service, not just the Air Force.

## **Benefits of Realignment**

Funding USTRANSCOM in a way similar to US-SOCOM would yield several benefits. Both DOD and Congress would gain more visibility of mobility and transportation activities and costs. USTRANSCOM would gain the ability to compel (by holding the purse strings) the component commands to integrate command and control computer systems and make other changes that it can only coordinate today. USTRANSCOM also would have the authority to determine the types of mobility assets to be acquired and maintained across the services in support of DOD warfighting and transportation needs.

A new, improved USTRANSCOM would reap benefits for all of DOD and enhance the Nation's security posture. The quality and responsiveness of transportation and mobility service to the theater combatant commanders would be greatly improved. Efficiencies would



□ The USNS Shughart, a Military Sealift Command large, medium-speed, roll-on-roll-off ship, is part of the Defense Transportation System.

be gained by eliminating unnecessary transportation and mobility redundancies among the services while maintaining consistent policies and procedures for similar capabilities. By controlling all operational and strategic mobility, USTRANSCOM would remove the seam that exists between intratheater and intertheater transportation, reduce confusion, and increase effectiveness in times of crisis. USTRANSCOM also would be able to provide, for the first time, truly "one-stop shopping" transportation support to all the services and unified commands to meet their requirements. Having a single activity manage all transportation and mobility assets would allow optimal scheduling, routing, and use of all scarce strategic and operational mobility resources, no matter which service component operates them or whose cargo needs to be moved.

Over time, a more efficient and effective DTS would reduce costs significantly by reducing overhead and duplication of effort, minimizing misuse and underutilization of mobility resources, and maximizing options available to the warfighter. This gain in efficiency will free up resources that can be applied to other areas within DOD to assist with the total Defense transformation.

## **Risks of Realignment**

Such an ambitious proposal is not without risk. USTRANSCOM may become too powerful if it is granted budget and acquisition authority similar to that of the services. Consolidating all service strategic and operational mobility assets in the hands of USTRANSCOM and coordinating all movements through it, even intratheater movements, could reduce the flexibility of the theater combatant commanders and undermine theater unity of command.

This transformation would weaken the link between

transportation personnel and assets and their parent services. For this reason, it is likely that USTRANSCOM would need to exercise oversight of advancement and promotion opportunities for those personnel in transportation military occupational specialties, similar to the oversight currently exercised by USSOCOM over SOF.

USTRANSCOM also could come into conflict with the services over acquisition programs, especially those that would have a direct impact on service recruiting, training, or manpower limits or otherwise affect the shape and mix of forces and personnel within a service. Another concern is that expanding the scope and responsibility of USTRANSCOM could lead to additional overhead costs for transportation. However, disciplined restructuring of the DTS following careful study of redundancies across the services should result in significant overhead cost reductions that will far outweigh any small expansion that may be required at USTRANSCOM headquarters.

Finally, congressional action is required to change U.S. Code, Title 10, to grant USTRANSCOM acquisition and budget authority similar to USSOCOM's. Since the DTS has not elicited the same level of concern that SOF did in the 1980's, some might argue that it is unlikely that Congress will be inclined to take action. However, waiting for the DTS to fail in a contingency before giving US-TRANSCOM budget and acquisition authority may be waiting too long.

Reorganizing USTRANSCOM along the model of USSOCOM would remove service stovepipes that hamper flexible mobility support for joint operations. USTRANSCOM would remain solely a supporting unified command.

By transforming USTRANSCOM using USSOCOM as a model, the DTS can become more efficient, more effective, less costly, and ultimately better suited to provide the dominant maneuver and focused logistics capabilities envisioned in Joint Vision 2020. USTRANSCOM then will become the single, globally capable, intermodal DOD transportation activity providing responsive, efficient, fully integrated, ready, sustainable service to achieve the Nation's security objectives. **ALOG** 

Lieutenant Commander Cynthia Womble, USN, is stationed in Norfolk, Virginia. She holds a B.S. degree in industrial engineering, an M.S. degree in operations research, and is a graduate of the Naval War College. She served as an Associate Fellow on the Chief of Naval Operations Strategic Studies Group and commanded Military Sealift Command Office Northern Europe during Operation Noble Anvil/Allied Force.

### **ARMY LOGISTICIAN**



(News continued from page 1)

98 percent, and all 16 were available for all scenarios. They were able to carry additional supplies and equipment to support their soldiers for longer operations and proved more spacious than other Army combat vehicles.

The Strykers' average fuel consumption during two off-road missions was 2.92 miles per gallon, for a range of 150 miles; the vehicle's highway range is 300 miles. An OPFOR statement observed, "The Stryker went places at greater speeds, quieter, with more agility than any vehicle the OPFOR has ever encountered. We had to adjust our tactics."

The Stryker's remote weapons station (M2 machinegun and MK19 automatic grenade launcher) provided considerable firepower at a standoff range from enemy small-arms fire. The Stryker's ability to suppress enemy targets on the move also was shown.

For their return to Fort Lewis, the Strykers were transported on the high-speed vessel *HSV–X1 Joint Venture*. This was the Army's first demonstration of the high-speed vessel's capacity to move an Army unit, both soldiers and their equipment.

## **UNIVERSAL MEL 4 TRAINING TO BE OFFERED**

In March, the Army Logistics Management College (ALMC) at Fort Lee, Virginia, and other campuses yet to be named are scheduled to begin offering Military Education Level (MEL) 4-equivalent Intermediate Level Education (ILE) for majors and promotable captains.

This new course will afford all officers the opportunity to receive MEL 4–equivalent training that is tailored to their specializations. Typically, approximately 50 percent of field grade officers attend the Army Command and General Staff College (CGSC) to attain MEL 4.

Officers in the operations career field will continue to receive 10 months of training at CGSC. Officers in other career fields, such as installation support, information operations, and acquisition, will attend the 3-month ILE at ALMC, or other locations as appropriate, then transfer to other institutions for the remaining 7 months of specialized training.

For more information, call 804–765–0258 or send an email to jaecklr@lee.army.mil.

## CSS COMMANDERS' CONFERENCE SCHEDULED

Major General Terry E. Juskowiak, Commander of the Army Combined Arms Support Command (CASCOM), will host the 2003 Combat Service Support (CSS) Commanders' Conference on 24 and 25 April, at the Greater Richmond Convention Center in Richmond, Virginia. The conference will be held immediately following the Association of the United States Army (AUSA) Logistics Transformation Symposium and Exhibition, which will be at the same location 22 to 24 April. The theme of the Commanders' Conference is "Sustaining the Vision: People, Readiness, Transformation."

The conference is open to Active and Reserve component battalion-level and above CSS leaders in the ranks of sergeant major and above.

Anyone seeking more information on the conference, lodging, suggested readings, or registration should visit the conference Web site at www.cascom.army.mil/ CSS\_Commanders\_Conference/index.htm or contact the CASCOM Training Directorate by phone at (804) 765– 2092 or by email at csscdrconf@lee.army.mil.

## ARMY APPROPRIATIONS BILL FEATURES PROCUREMENT AND PERSONNEL HIKES

With President George W. Bush's signature on the Defense and military construction appropriations bills last October, the Army budget is set for fiscal year 2003. The appropriations total \$91.941 billion, which is \$3.441 billion (or 3.9 percent) more than fiscal year 2002's anticipated final spending and \$964 million (or 1.1 percent) more than the President's budget request.

The increase from last year is slanted toward people and materiel rather than operations and infrastructure. The figures for the major spending categories are as follows—

• Military personnel: \$35.344 billion (an increase of \$2.744 billion over last year, or 8.4 percent, but a decrease of \$276 million from the President's budget).

• Operation and maintenance: \$30.224 billion (a decline of \$2.076 billion from last year, or 6.4 percent, and down \$417 million from the President's request).

• Procurement: \$12.818 billion (up \$1.818 billion from last year, or 16.5 percent, and up \$539 million from the President's budget).

• Research, development, test, and evaluation: \$7.670 billion (an increase of \$570 million over last year, or 8 percent, and \$752 million over the President's budget).

• Military construction: \$2.026 billion (down \$374

million from last year, or 15.6 percent, but up \$388 million from the President's request).

• Family housing: \$1.381 billion (down \$19 million from last year, or 1.4 percent, and \$24 million from the President's budget).

Congress supported Army Transformation efforts by adding \$105 million for the Future Combat System and \$59.5 million for fielding of the Stryker brigade combat teams.

Congress increased the appropriation for UH–60 Black Hawk helicopters by \$116.6 million to provide 7 helicopters to the Reserve components; that increased the total procurement from 12 to 19 aircraft. Congress also added \$39.1 million to restructure the CH–47F Chinook helicopter upgrade program. A total of \$681.4 million was provided for 3,574 family of medium tactical vehicles trucks.

In the conference report accompanying the Defense appropriations bill, the congressional appropriators noted that there have been some shortages in soldier equipment in Afghanistan and other places. They therefore directed the Secretary of the Army to submit a report "assessing and identifying the major soldier equipment shortages in all major active and reserve component units, identifying the highest priority Army-wide soldier equipment items that require higher procurement rates and faster distribution, and explaining how the Army plans to address those needs. This report shall also present the Army's plan and timetable for transforming its practices and procedures for procuring and distributing soldier equipment in order to dramatically improve the distribution of modern soldier equipment across the board to all units-both active and reserve."

## **ARMY ACCEPTS THEATER SUPPORT VESSEL**

The 98-meter-long theater support vessel (TSV) USAV TSV-1X Spearhead has been built to Army requirements at the Incat shipyard in Hobart, Tasmania, Australia, and delivered to owner Bollinger/Incat USA for charter to the Army Tank-automotive and Armaments Command. The craft fulfills the Army's second contract for a high-speed wave-piercing catamaran and is its first TSV.

The USAV TSV–1X Spearhead is part of the Advanced Concept Technology Demonstrator (ACTD) program of the Office of the Secretary of Defense and the Army. The goal of the ACTD program is to assess significant new capabilities at a scale that will clearly establish their operational utility and systems integrity. The Army will evaluate the Spearhead's ability to perform during certain mission scenarios, assess its usefulness to the U.S. military, and refine the requirements for the next generation of Army watercraft.

The TSV is critical to the Army's ability to perform its intratheater missions. It is anticipated that the *Spearhead* will be used for missions that require maximal speed and flexibility in delivering sustainment supplies and moving pre-positioned stocks and troops.



□ The USAV TSV-1X Spearhead is the Army's first theater support vessel.

## DLA CONTINUES COMPETITIONS FOR DEPOT MANAGEMENT

The Defense Logistics Agency (DLA) has completed the first nine public-private competitions for management of its Defense distribution depots. In the most recently completed competition, operation of Defense Distribution Depot San Diego, California, was contracted to Labat-Anderson, Inc., of McLean, Virginia.

DLA announced in March 1998 that it would study 16 of its 18 Defense distribution depots in the continental United States for possible contracting out to the private sector (all except its primary distribution sites at Susquehanna, Pennsylvania, and San Joaquin, California). The competitions have been conducted under the guidelines contained in Office of Management and Budget Circular A–76, Performance of Commercial Activities.

Of the nine competitions completed to date, three resulted in operations remaining within the Government: Richmond, Virginia; Albany, Georgia; and Columbus, Ohio. Three competitions were won by EG&G Logistics of Manassas, Virginia: Warner-Robins, Georgia; Hill, Utah; and Barstow, California. Two were won by Labat-Anderson: Cherry Point, North Carolina, and San Diego. One competition was won by Management Consulting, Inc., of Virginia Beach, Virginia, for Jacksonville, Florida.

Competitions for seven depots are underway—

- Tobyhanna, Pennsylvania.
- Norfolk, Virginia.
- Anniston, Alabama.

- Red River, Texas.
- Corpus Christi, Texas.
- Oklahoma City, Oklahoma.
- Puget Sound, Washington.

All competitions should be completed by the spring of 2004.

## DLA SYSTEM PROVIDES HAZARDOUS MATERIALS INFORMATION

Military and civilian personnel now have easy access to hazardous materials information on the Defense Logistics Agency's (DLA's) Hazardous Materials Information Resource System (HMIRS). HMIRS is a comprehensive online repository of material safety data sheets (MSDSs) for more than 290,000 products. This information is available to personnel in the Department of Defense, the Coast Guard, and the General Services Administration who handle, store, transport, use, or dispose of hazardous materials.

HMIRS consists of an online Web application, which is used by workers at industrial facilities to access electronic hazardous materials documents; an online administrator application, used by system administrators to maintain key online information; online CD–ROM modules, which allow off-network users to search and view documents; and a document submittal Web site, which enables suppliers and Government personnel to submit electronic MSDSs to HMIRS. HMIRS streamlines the entry of MSDSs by replacing a labor-intensive, manual data-entry process with electronic submissions of image files and XML [eXtensible Markup Language].

DLA selected an off-the-shelf hazard communications system, ProSteward, because it closely matched their requirements and is supported by active users. ProSteward was developed by American Management Systems (AMS) in partnership with the Shell Chemical Company in the mid-1990s to support chemical life-cycle management in major international companies. Government users will benefit from the continuous product enhancements developed as a result of the system's comprehensive maintenance program and the initiatives of other ProSteward users.

According to Bob Milligan, senior principal of AMS's Federal Defense Group, "HMIRS supports the new XML MSDS standard and includes a Web site that allows industry to electronically submit MSDSs into the HMIRS repository. This revolutionizes MSDS data exchange with suppliers and among Government agencies. Users are reporting a 75-percent reduction in data capture time, which helps provide timelier access to new and revised products."

## HOSELINE SYSTEM ENSURES STEADY FUEL SUPPLIES IN UZBEKISTAN

The Joint Logistics Command at Camp Stronghold Freedom in Uzbekistan has created an alternative way to transfer petroleum products from an old Uzbekistan Ministry of Defense (MOD) fuel farm to a U.S contingency fuel farm. This alternative ensures that U.S. forces have access to fuel if the MOD fuel farm loses power or otherwise becomes not mission capable.

According to Master Sergeant Brian Shatswell, the noncommissioned officer in charge at the Joint Logistics Command's Distribution Management Center, "We are looking to the future and finding that the current fuel transfer system will be inadequate to meet the requirements we think we'll have. Improvements must be made



□ The assault hoseline can transfer fuel from an Uzbekistan Ministry of Defense fuel farm to a U.S. Army fuel farm when necessary.

in order to ensure there is a constant flow of petroleum. In order to ensure this constant flow of fuel, we installed an assault hose line system that ties directly into the Uzbek MOD bulk storage but bypasses their antiquated and sometimes unreliable pumping system."

The Joint Logistics Command uses a temporary system called an assault hoseline outfit to route the flow of petroleum over 300 meters to the U.S. fuel farm. The assault hoseline comes packaged in 13 containers called flaking boxes. Each box contains 1,000 feet of 4-inch collapsible hose that can handle 350 gallons of fuel a minute. A pumping assembly, a flow control kit, a roadway crossing guard, a hoseline suspension kit, a hoseline assembly, a hoseline packing kit, and a repair kit also are included in the outfit.

If the MOD fuel farm's pump system fails, the fuel foreman turns to the assault hoseline system to take over the mission. A fuel additive injector system is installed between the fuel blivets and the assault hoseline. After the required fuel additives are injected, the fuel can be used in aircraft.

"We have dealt with many electrical problems with the local power source, and that alone gave reason to come up with an alternative that ensured a constant flow of fuel for the mission," said Shatswell. "We have increased our readiness dramatically by placing this hoseline system into operation." (See related story on page 22.)

## USTRANSCOM CREATES A WEB-BASED TRANSPORTATION INTELLIGENCE TOOL

Transporters in the Department of Defense will benefit from more timely and accurate transportation intelligence through a new Web-based program developed by the U.S. Transportation Command's (USTRANSCOM's) Joint Intelligence Center (JICTRANS).

The new program, called the Transportation Intelligence Digital Environment (TIDE), has been on line since September. It permits JICTRANS analysts to combine text, graphics, photos, and video and audio files (including live feeds) into comprehensive reports, briefings, and other Web-based intelligence products, and it automatically codes those files for the Internet. Once on line, the information is instantly available to mission planners. Because TIDE is database driven, the posted information is updated automatically each time the databases connected to TIDE are updated.

According to the JICTRANS commander, Air Force Colonel James Marchio, "Many stand to benefit from faster, more efficient transportation intelligence. That includes sailors making overseas port calls and aircrews flying supplies to our troops in unstable areas of the world. It would also include the Afghani men, women, and children who escaped starvation last winter thanks to the millions of humanitarian daily rations USTRANSCOM air-dropped in-country."

TIDE currently is in use only in USTRANSCOM's Intelligence Directorate. Tests of TIDE with other joint intelligence centers are being scheduled.

## FORCE PROJECTION SYMPOSIUM SCHEDULED

"Deploying the Objective Force" is the theme of the fourth annual Force Projection Symposium, to be held in Tacoma, Washington, 6 to 8 May. The symposium will be sponsored by the Program Executive Office for Combat Support and Combat Service Support and is hosted by the Michigan Chapter of the National Defense Industrial Association.

The symposium promises to build on the success of last year's event and the current momentum in Army transformation. In addition to providing a direct interface among Government, industry, and academia, the symposium will stimulate an exchange of concepts and ideas for future force-projection systems and doctrine.

A demonstration is planned to showcase the full range of the force-projection process, from shelters and cargo airdrop technology to high-speed vessels and petroleum and water systems. Attendees will spend a full day rotating among the Port of Tacoma (to see the high-speed vessel [HSV-X1] *Joint Venture* and the Stryker), McChord Air Force Base (to view cargo aircraft



□ The HSV–X1 in dry dock.

operations), and Fort Lewis (to see cargo airdrop and military field-feeding demonstrations).

More information on the symposium is available at http://peocscss.tacom.army.mil/pmfp, or send email to fpsymposium@mindspring.com.

## SUPPORT OPERATIONS COURSE NOW A BETTER BARGAIN

The Army Logistics Management College's (ALMC's) Support Operations Course (SOC) now is available more often and costs the unit less.

In December, ALMC opened a new SOC training facility that will offer as many as 10 SOC classes per year double the number that have been offered in the past. The new Military Training Service Support (MTSS) program requires the training facility to pick up the tab for student lodging, meals, and local transportation, so the training costs less for the unit sending the student.

SOC teaches multifunctional tactical logistics to officers and senior noncommissioned officers (sergeants first class and above). It provides the tools to lead and execute sustainment support tied to maneuver in smallscale contingencies as well as in a major theater of war. Students learn what doctrine is and how tactics, techniques, and procedures affect their ability to provide logistics in the field. SOC is taught in two phases; the first phase is correspondence based, and the second is classroom based.

For more information on the course and how to enroll, visit the SOC Web site at www.almc.army.mil/ TLLDD/ALMC-SO/index.asp, send an email to SOC@lee.army.mil, or call (804) 765–0248/4359 or DSN 539–0248/4359.

## SOFT-LANDING AIRDROP SYSTEMS BEING STUDIED

Engineers at the Army Soldier Systems Center (Natick) are testing two retraction soft-landing systems that slow the fall of airdropped vehicles and supplies dramatically.

The first new system, the pneumatic muscle actuator, is a silicone tube reinforced with a braided Vectran® fiber that is inserted between the cargo slings and the parachute convergence point. A stick trigger hanging beneath a dropped platform strikes the ground and activates a generator that expands the actuator. When the actuator is inflated with nitrogen gas about 20 feet before impact, its diameter increases while its length decreases, pulling the cargo up toward the parachute and reducing its landing velocity.

The second system under study at Natick involves a cable retraction technique. With this system, soldiers drive vehicles right onto the platform to be rigged for airdrop. When the platform exits the aircraft, parachutes open and 20 feet of steel cable release through a pulley system. A stick trigger activates a gas charge at about 14 feet above ground, which forces a piston to move the pulleys and reel in the 20 feet of cable. Like the actuator, the shortened cable pulls the cargo toward the parachutes and decelerates the load to 8 feet per second.

An airdrop with a 10,000-pound load was tested successfully in November at Yuma Proving Ground, Arizona, using retraction, which decelerates the load as much as 20 feet per second before landing. The next step is to test loads of 15,000 to 20,000 pounds. Future upgrades would support airdrop of vehicles weighing up to 60,000 pounds.

## MTMC STORES SERVICE MEMBERS' POVS

The Military Traffic Management Command (MTMC) has contracted for a long-term privately owned vehicle (POV) storage program for service members assigned to areas where taking a vehicle is not an option. One vehicle may be stored at no cost for the duration of a qualifying tour.

Assignments that preclude taking a privately owned vehicle, but allow POV storage, include hardship tours to Korea without family members for a year or less; assignments to Japan for troops whose vehicles were made since 1976; and assignments to Egypt for troops whose vehicles are more than 4 years old.

"There is a service maintenance track to these vehicles," said Steve Douthit, operations manager. "The vehicles are covered and stored inside. Engines are started once a month. For each vehicle, we follow the manufacturer's recommendations for long-term storage."

Under the contract, vehicles may be turned in for storage at any of 39 processing centers operated by American Auto Logistics. Vehicles also may be left at other sites outside of the global privately owned vehicle contract, including Yokohama, Japan; Keflavik, Iceland; Guantanamo Bay, Cuba; and U.S. embassies and consulates.

## NEW 80-PASSENGER SYSTEMS REPLACE OLD "CATTLE CARS" FOR MOVING TROOPS

New 80-passenger vans will replace the decades-old "cattle cars" used to transport soldiers in basic combat training at Fort Benning, Georgia; Fort Leonard Wood, Missouri; and Fort Sill, Oklahoma. Called a personnel

carrier van, the new transportation system consists of a tractor and an 80-passenger trailer that can be air-conditioned or heated and has several different safety features.

Far from being a luxury item, the vans are a necessity in basic combat training and one station unit training, according to Staff Sergeant Randy Cheadle. "Training ranges can be 15 to 30 miles away from training barracks," he said. "You can't march new privates that far. You have to condition them before they can take long road marches." Three of the new vans can move an entire training company.

Fort Leonard Wood received a prototype of the van in June 2001 and has used the van to move troops to locations on and off post, with some trips as far as 75 miles one way. During fiscal year 2003, Fort Benning will receive four of the new vans and Forts Leonard Wood and Sill will receive three each. Ten more vans are



□ The 80-passenger van will improve the mode of transporting soldiers in basic combat training to training sites.

scheduled for production in fiscal year 2004. The vans are built by Lifeline Shelter Systems of Columbus, Ohio, with subcontractors Dado Trailer Corporation of Pocahontas, Arkansas, and ALLVAN of Nashville, Tennessee.

## 'WELCOME TO AKO—YOU HAVE MAIL'

The Total Army Personnel Command (PERSCOM) has replaced all soldier email addresses in its database with Army Knowledge Online (AKO) addresses. Documents such as officer record briefs now contain the "us.army.mil" address instead of the address previously listed.

Email is just one of the features of the AKO initiative. It includes functions such as AKO Chat, which allows soldiers to communicate electronically in real time, and the AKO White Pages, where soldiers can search for other soldiers.

AKO provides a central place for soldiers to receive information. The system is designed to speed information about assignments, professional development opportunities, and reenlistment to the field, saving both time and money.

Soldiers who currently do not have an AKO address may sign up for an account on the AKO Web site at www.us.army.mil.

## CALL ESTABLISHES INTERACTIVE WEB SITE

The Center for Army Lessons Learned (CALL) has established a "threaded discussion" area on its Web site at http://call.army.mil/callthreads.htm for issues and topics pertaining to the Stryker Brigade Combat Team and the Army Transformation. Users can email their comments on lessons learned or brainstorm each other in an attributable discussion, and the computer will maintain the originating message and all replies to it.

Access to CALL Threads is restricted. Users must register using a .mil or .gov email address and choose a password. They will be notified by email when access to the discussion area is granted. After approval, it will be possible to access the discussion area from computers that are outside of the .mil or .gov domains. Prospective users who do not have a .mil or .gov email address may request a waiver using the link provided on the Web site.

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