

Quartermaster

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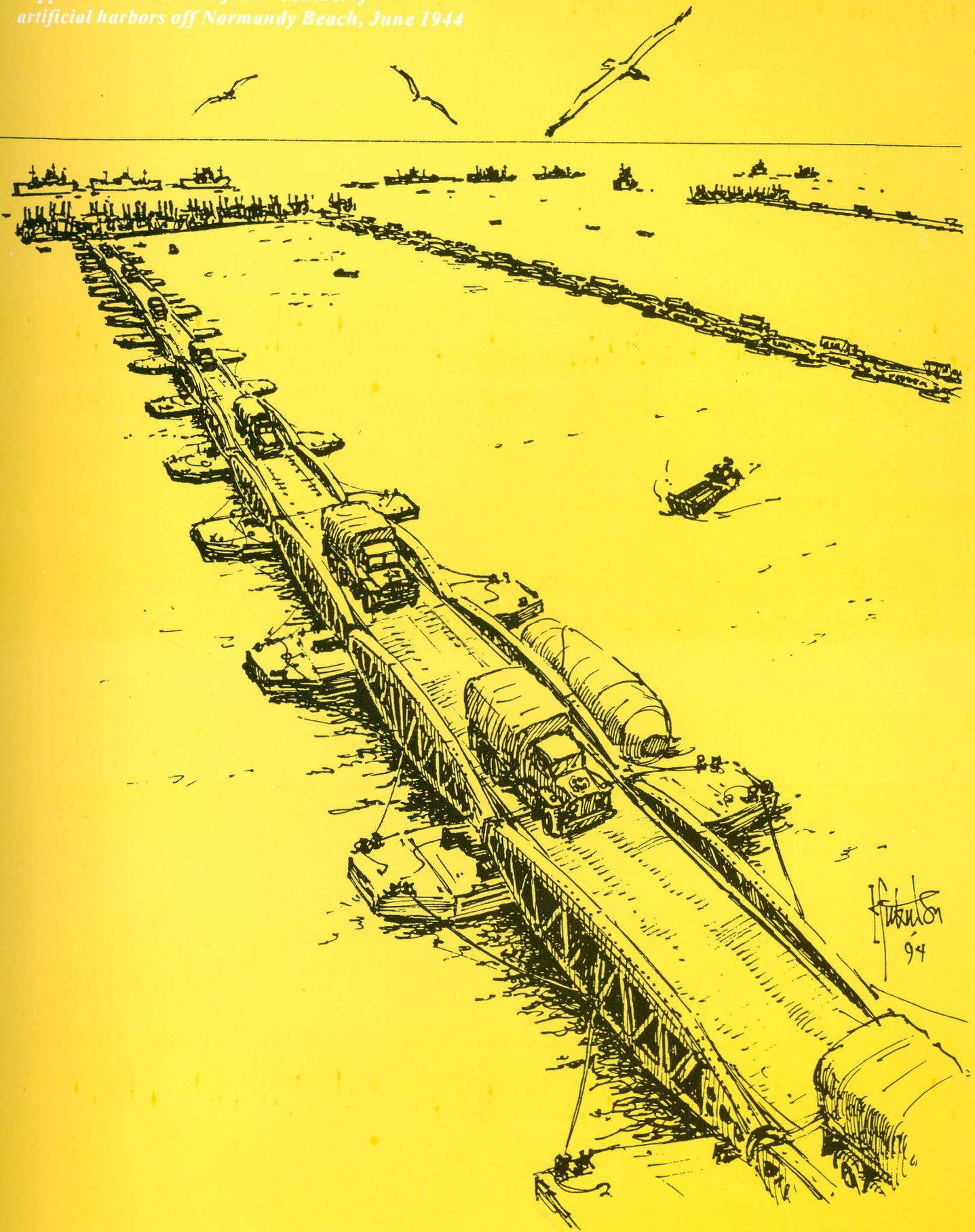
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SUPPORTING VICTORY

*Quartermasters and the
Force Projection Army*



Supplies stream ashore from "Mulberry" artificial harbors off Normandy Beach, June 1944



Quartermaster

PROFESSIONAL BULLETIN



The Quartermaster General
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06637

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COVER AND ILLUSTRATIONS: LTC Keith K. Fukumitsu, Quartermaster, created all the cover art for this edition, as well as the line drawings accompanying the articles. LTC Fukumitsu was formerly assigned as Chief of the Course Development Division, Directorate of Training and Doctrine, U.S. Army Quartermaster Center and School, Fort Lee, Virginia.

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From The Quartermaster General



Major General Robert K. Guest

Quartermasters and the Force Projection Army

Greetings to the soldiers and civilians of the Quartermaster Corps and welcome to another informative edition of our professional bulletin. To begin, I want to address the issue of declining resources in our Army. Our Army has been reduced in strength from 870,000 at the start of *Operation Desert Storm* and will continue to decrease until the goal of 495,000 soldiers on active duty is reached. This is the smallest our Army has been since before the start of World War II. We can expect limited financial resources for the next two to three years. We must carefully manage our resources and adopt the mindset that "Every Soldier Counts." Leaders will be expected to do the same with less. However, reducing standards in training is not an option! The Quartermaster Corps has quality officers, NCOs, and soldiers who will continue to accomplish the mission around the world despite the shortage of resources.

In this edition of the *Quartermaster Professional Bulletin*, we are saluting the Army's technological advances that make us a number one world power. From articles on **Quartermaster Force Projection to Quartermaster Training for the Future and Technology: Army Logistics, New Frontiers, Logistics War-**

rriors will continue to receive updated equipment and training to keep the combat soldiers of the future ready.

Happy birthday to the Quartermaster Corps. The Corps recently celebrated its 219th anniversary on 16 June. The official birth of the Quartermaster Corps was 16 June 1775, even before our country gained its independence. A depot system was soon established and the Army was supplied well enough to defeat the British General Cornwallis at Yorktown and win for America its hard-earned freedom. We have been "Supporting Victory" since those earliest days.



Major General Robert K. Guest, 43d U.S. Army Quartermaster General, has held a wide variety of command and key staff positions. His previous assignments include Deputy Chief of Staff, Logistics, U.S. Army Europe and Seventh Army; Commander, 3d Corps Support Command, Wiesbaden, Germany; Director of Logistics Management, U.S. Army War College, Carlisle Barracks; Commander, Division Support Command, 101st Airborne Division (Air Assault); Chief, Supply and Maintenance Policy Division, Office of the Deputy Chief of Staff for Logistics; Commander, 1st Supply and Transportation Battalion, 1st Infantry Division.



Insignia Changes

The Quartermaster distinctive unit insignia recently changed to add the motto "Supporting Victory" in an attached gold scroll inscribed in black. Also, the new insignia authorized by the Institute of Heraldry for the Quartermaster Corps has the colors black, red, white, blue and green in enamel. The first unit insignia, authorized 31 Mar 86, appears in gold-colored metal. Soldiers affiliated with the Quartermaster Corps under the U.S. Army Regimental System wear the insignia. The new insignia should be available in the Oct/Nov 94 time frame from the Army and Air Force Exchange Service.



Field Communications



Command Sergeant Major Ricky A. Vernon

Being the new Regimental Command Sergeant Major means relooking old ways of doing business, starting new programs and improving things that work. One area that jumped up to greet me was communications: "How do I talk to the Quartermaster soldier in the field?" This is important to me. I need feedback on how we are doing at training our soldiers, what is working and what is not. I need to get to you with proposed changes, status of the Corps, and just plain information.

Quartermaster NCO Update

One way to communicate is the *Quartermaster Professional Bulletin*. There are two problems with this. The publication is one-way. I can send out but not receive. The other is budget. We may not be publishing the publication in the future, and the bulletin does not get to everyone at present. Another way is the *Quartermaster NCO Update*. Same situation, however, you can influence whether you receive a copy. Your 2A, section III, unit data, #8, should read: Regimental Affiliation QM or Quartermaster. If it does, we will mail you a copy. If it does not, see your personnel staff noncommissioned officer (PSNCO). We get the mailing addresses from the records that reflect Quartermaster. Again, one-way communication.

Another means of communicating is the telephone. Good two-way communication, but everyone does not have access and, frankly, not everyone has the time to answer 50 phone calls a day. I will try. Before you call, understand that I cannot move all Quartermaster soldiers to Fort Lee, VA, and I do not

sit on all the promotion boards. I will try to return every call made.

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Stop By And See Me

The last method of communicating I will address is the best way. Stop by when you are in town. I will see many of you at the Advanced Noncommissioned Officer Course (ANCOC), Basic Noncommissioned Officer Course (BNCOC), and some functional courses. I am located in Room 229, 2d floor, Mifflin Hall. Be Quartermaster. Be Proud. Be Professional.



Command Sergeant Major Ricky A. Vernon is the Command Sergeant Major of the Quartermaster Regiment and of the U.S. Army Quartermaster Center and School, Fort Lee, Virginia.

Supporting Victory

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Professional Dialogue

Who Says Logisticians Can't Fight?

CPT Nick Gonzales

Logisticians rarely get a chance to practice and hone their tactical skills on a regular basis. Also, today's tightening budget constraints impose many limitations on training on a regular basis. In response to those constraints, the logisticians of Company A, 502d Forward Support Battalion (FSB), 2d Armored Division came up with challenging, low cost, high return, tactical training. Their tactical game, called "Logistics Warrior," involves squad-sized elements equipped with the Multiple Integrated Laser Engagement System (MILES) conducting force-on-force maneuver against each other. The course can be set up on a field roughly 200 meters wide by 300 meters long. Each squad starts at opposite ends of the maneuver box and fires and maneuvers against each other, while attempting to capture the company guidon in the center and advance the guidon through the enemy area to the start point.

Numerous additional missions can be inserted into the tactical scenario before entering the maneuver box. The game can be in-depth or concentrate solely on fire and maneuver skills and MILES gunnery skills. We have incorporated such factors as an S2 intelligence brief on the enemy situation. The squad leaders receive the tactical situation/briefing and then present an operations order (OPORD) to their squads. The scenario can be anything from a dismounted reconnaissance of a possible logistics release point (LRP) location to a search and recovery mission involving mortuary affairs.

Once the mission has been briefed, the squads must tactically carry out all remaining collective tasks. This can encompass everything from a dismounted tactical road march with the use of land navigation skills to encountering prisoners of war (POWs) or snipers. The difficulty can be increased by requiring all checkpoints to call in on FM radio. Another great way to develop junior leaders is to put them in charge of the squad and see how they react to pressure. Once they have successfully navigated the road march course, they move into a tactical assembly area.

Once on the field, the opponents maneuver against each other. The tactics are entirely up to the squad leader. The attrition level can be high so that everyone has a chance to lead some portion of the squad. Because MILES does not always travel well through vegetation, the officers in charge act as the honest brokers for any near misses. If they deem the situation warrants a "kill," they will execute a MILES kill.

The training within the maneuver box makes all soldiers think quickly and shows them the importance

of zeroing, physical fitness, camouflage, MILES gunnery and teamwork. To add some additional competition, run several squads through the training, advancing each winner to the next round to face another squad.

The rules for the game are as follows:

- Soldiers cannot come within 10 meters of their opponent or they will both be assessed as killed in action (KIA). This prevents chances of injury when firing blank ammunition. All participants are required to have a blank firing adapter (BFA) on their weapons.
- There will be no hand-to-hand combat.
- All players must stay within the boundaries at all times.
- Each soldier will get a limited amount of ammunition to practice ammunition conservation.
- When a soldier's MILES goes off indicating a kill, he must stop, sit down, remove KEVLAR and stay quiet until the game ends. Any participant still alive may take ammunition from any KIAs.
- The game inside the maneuver box has a time limit of 30 minutes. This will cause more activity and put soldiers in a fast-paced, decision-making mode. If no one has advanced the guidon through the enemy sector after 30 minutes, the squad in possession of the guidon will be declared the winner.

The following requirements are essential to properly plan for the training:

PLAN — Put the game on the training schedule six weeks ahead to lock in the land needed. Also, take some time to train the two officers in charge so that they are well-versed on the game and safe squad control. Equipment requirements: individual MILES gear, engineer tape to mark the maneuver box, M16/load-bearing equipment and rucksack.

TEACH — Take some time beforehand to teach soldiers the skills for accomplishing the mission. Also, the officers in charge must learn proper techniques by Army doctrine.

RECONNAISSANCE — Perform reconnaissance of the sites so the officers in charge know the route. Perform reconnaissance of the maneuver box to ensure it provides adequate cover and concealment without too much vegetation that interferes with the MILES.

OPORD — To make the situation more realistic, add an OPORD from the company to the squad to the scenario. It will enhance the realism if the battalion

S2 is involved in this process.

REHEARSE — Rehearse the entire scenario.

EXECUTE — This is the key to good, realistic training.

AFTER ACTION REVIEW (AAR) — This will help teach the soldiers by reinforcing both positive and negative actions.

RE-EXECUTE — As needed.



CPT Nick Gonzales is a Distinguished Military Graduate of Eastern New Mexico University. His first assignment was with the 3d Armored Cavalry Regiment at Fort Bliss, Texas, where he held positions as Tank Platoon Leader, Scout Platoon Leader and Troop Executive Officer. After branch transfer, he attended the Quartermaster Officer Advanced Course. During assignment to the 5th Infantry Division at Fort Polk, Louisiana, he was the General Supply Officer for the division and S4 for the 105th Forward Support Battalion (FSB). He is currently Commander of Company A, 502d FSB, 2d Armored Division.

Logistics Lightfighters on the Move

COL Hawthorne L. Proctor

The 45th Corps Support Group (Forward) participated in one of the largest airlifts involving the 25th Infantry Division (Light) and U.S. Army Hawaii soldiers. The recent Emergency Deployment Readiness Exercise (EDRE) was designed to train soldiers in rapid deployment readiness procedures.

This EDRE included operating an intermediate staging base (ISB) that permitted the soldiers and their equipment to transition from strategic to tactical airlift and vice versa. In fact, the group's task force worked closely with the 60th Air Lift Control Element (ALCE) from Travis Air Force Base, CA, to safely operate the ISB.

Unlike the 25th Infantry Division (Light), which has an "N-Hour" deployment sequence, the group requires an "X-Hour" or crisis action planning sequence. This "X-Hour" sequence enables the group's elements to deploy with or ahead of the division, as demonstrated during the EDRE.

The group's command and control element deployed aboard the lead C-141 aircraft to join its advance element at the ISB, located at the Hilo International Airport. A total of 2,429 passengers, 162 pieces of equipment and 28 pallets moved through the ISB on 171 sorties of C-5 and C-141 aircraft during the five-day exercise. Further, the 87th Quartermaster Detachment (Riggers) rigged 102 bundles and 146 individual parachutes to support the Air Force air crew training.

This opportunity displayed the group's diverse capabilities. One task force deployed to Hilo. Another 275-soldier task force from the group, including aviators and combat heavy engineers, was already deployed to Thailand to support Exercise Cobra Gold '94. This task force conducted a similar ISB mission at the port of Chuk Samet and adjacent airfield at Utapao before establishing a sustaining base at Lop Buri to support the 6th Infantry Division (Light) and Special Operations Forces. Also, the group's combat heavy engineers conducted civic action engineering missions for several Thai communities.

The group's task force at Hilo included the Group Assault Command Post, a supporting element from the 524th Corps Support Battalion and a communications element from the 125th Signal Battalion. These elements were tailored to provide command, control, communications and support in the ISB. ISBs are usually austere and set up in an area of reduced threat. They facilitate the transition of a force from strategic to tactical airlift, training, equipment inspection and rest.

Operating an ISB to support a rapid deployment is the type of mission that provides a training opportunity for the group. The group's wartime mission is to sustain corps units operating in a division's area and to provide backup support to a division and support units occupying an area behind a committed division.

Today's power projection Army calls for forces of varying sizes to deploy in support of contingency operations. Therefore, with its unique peacetime capability, the 45th Corps Support Group (Forward) can assemble a range of combat support and combat service support capabilities to support forces deployed in this theater. For instance, while the bulk of the task force from the group was at the ISB, a terrain analysis team from the 29th Engineer Battalion deployed with the division's tactical operations center at Pohakola Training Area.

Now that the ISB mission is complete, the 45th Corps Support Group (Forward) will take a critical look at the lessons learned to improve on the group's ability to execute future ISB missions. Without the help of the 60th ALCE, the group would have many more lessons to learn. Group soldiers are already looking for another challenge of this nature so that they can again "fight to serve."



COL Hawthorne L. Proctor, Quartermaster, is Commander of the 45th Corps Support Group (Forward), Schofield Barracks, Hawaii.

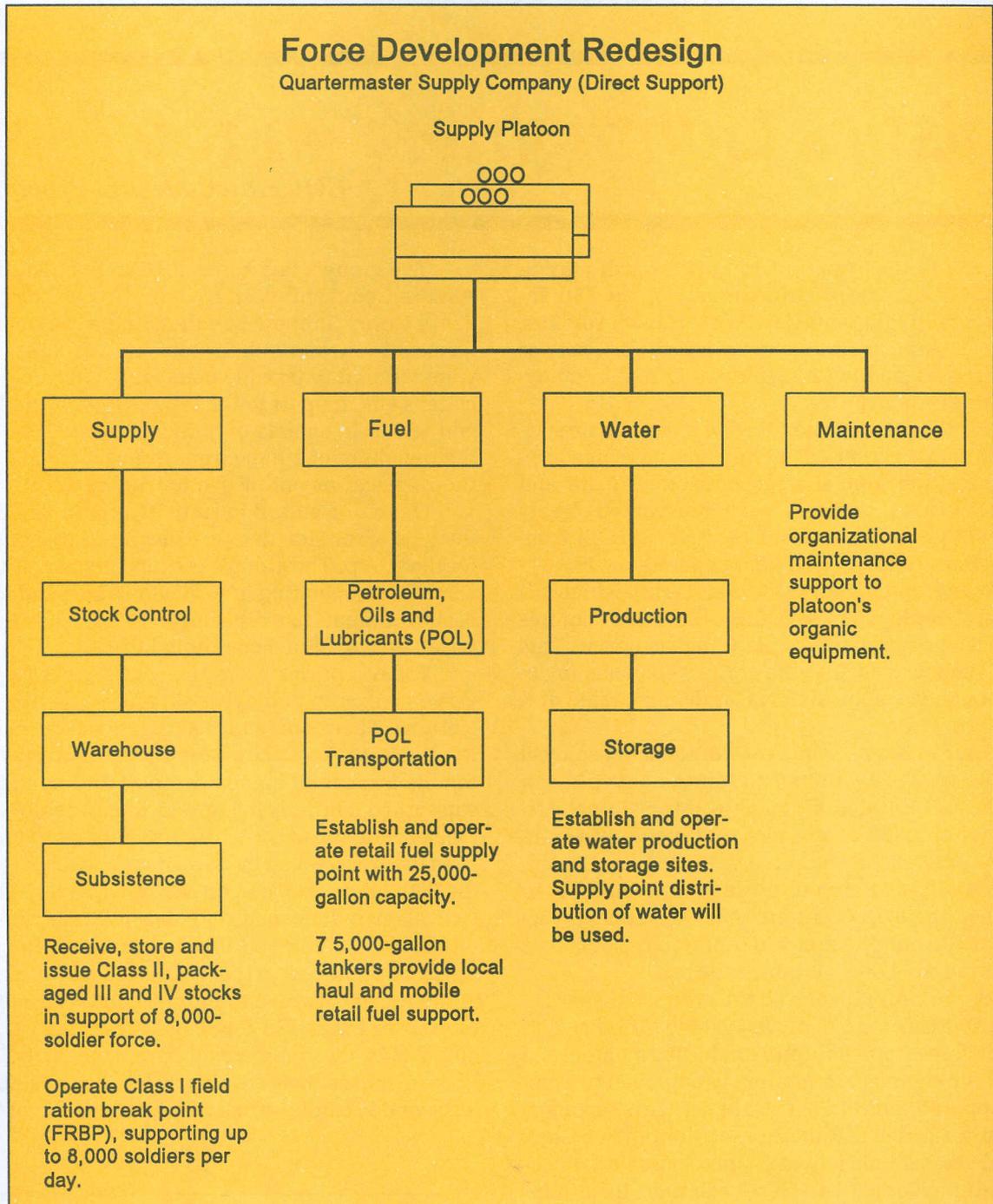
Quartermaster Force Projection

CW3 Daniel C. Parker

The end of the global Cold War, *Operation Desert Shield/Storm* in the Persian Gulf and relief efforts in

Somalia left us facing different enemies, different threats and changing missions. The logistician now

must plan for deployments of shorter duration into undeveloped or underdeveloped theaters anywhere



in the world. The logistics support structure must support task force-sized elements during deployment, immediately upon arrival in the area of operations and sustain the force until redeployment. At the same time, the combat service support (CSS) structure must make sure nondeploying units are ready to deploy into a current or a second area of operations.

The threat environment changed with the collapse of the Soviet Union and the end of the Cold War. Today's world is a more unstable place because the former Soviet Union suppressed many regional conflicts that are currently emerging. Possible sites of conflict threatening U.S. and allied interests span such diverse areas as Korea, Kurdistan, the Balkans, the Andean Ridge and Palestine. These threat environments range from insurgencies and terrorism to major regional conflicts through nuclear war. Plausible threats vary so much that one or two scenarios for planning purposes are inadequate. These new threat environments also include the impact of worldwide news networks reporting on conflicts in near-real time. This enhances the ability of threat governments to use the media as a tool of warfare.

In the Persian Gulf War, the U.S. forces learned that technology must be equal to or greater than any opponent. Modernizing nations follow one of three technological paths:

- A large force using low technology.
- A small force using high technology.
- A large force using a few high technology inserts.

Without the pressure of a superpower rivalry and the erosion of imposed restrictions, high technology weapons are spreading throughout the world at a tremendous rate. Due to economic conditions, few nations can afford to modernize an entire force, but most nations can

afford to purchase some advanced weaponry. Theater ballistic missiles and weapons of mass destruction (nuclear, biological and chemical) are of particular concern. An enemy can use these weapons to deny U.S. forces the time to build up strength.

A threat of war still exists anywhere on the globe, so the logistician must be prepared to support the next battle. Soldiers must train in defensive and offensive tactics in a variety of situations and environments. Logisticians must plan, anticipate and thoroughly understand the maneuver commanders' objectives and tactics. Training coupled with flexibility and vision will ensure logistics support for the maneuver commander.

Strategy Foundation

The foundation of the National Military Strategy derives from the National Security Strategy. Logisticians must support these four fundamental military demands:

- Ensuring strategic deterrence and defense.
- Exercising forward presence in vital areas of the world.
- Responding effectively to crises.
- Retaining the capacity to reconstitute forces.

The Army's ability to react promptly and conduct sustained land battle makes Army forces decisive. To the Quartermaster Corps, this means ensuring support reaches the field on time and in the right quantities to support and sustain operations. Supporting combat missions on a moment's notice anywhere in the world is woven into the fiber of the Quartermaster Corps.

Quartermasters must remain capable of full-dimensional operations. This means Quartermasters must think war and use all means available to accomplish any mission decisively and at the least cost. Supply and field service units must train to support as part of a joint, com-

bined, United Nations, or inter-agency force. Logistics plans must be synchronized with the operational plans of tactical commanders for timely logistical support and sustained operations.

Logistics commanders and planners must tailor packages for the land combat requirements of a theater in a variety of strategic contingency plans. The modularization of logistics units will enhance this capability. Modular units, coupled with prepositioned equipment on land and at sea, will ease the burden on strategic lift requirements.

The keys to expandable CSS units are thoroughly trained and ready Active and Reserve Component units to respond to support any crises in the world. This timely mobilization of forces across CSS units for missions ranging from disaster assistance within the U.S. to global war enables the Army to sustain combat and noncombat operations.

Force projection is the demonstrated ability to rapidly alert, mobilize, deploy and operate. *Operation Just Cause* and *Operation Desert Shield/Storm* dramatically demonstrated how logistics units can synchronize assets at all levels of war and respond rapidly, projecting forces forward.

Successful force projection requires tailorable, flexible logistics units. The nature and size of logistical projection depends on the size of the deploying task force to be supported, maturity of the theater of operations, availability of in-theater stocks and the host nation support structure. The existing infrastructure will greatly affect logistics planning. Road networks and capacities, seaports, inland waterways, availability of airfields, utilities, buildings, construction capabilities and raw resources will affect the types of logistics units required to support operations. Infrastructure in the area of operations will also affect unit and supply sequencing.

Considerations of infrastructure and unit requirements may require the development of forward support

bases, intermediate staging areas, and lodgments in a theater with over-the-shore or airflow requirements. Also, the logistics planner must consider contract logistics (if available) as an alternative to assist military capabilities during initial phases.

The purpose of force projection, which is mission accomplishment and not necessarily forced entry into an area of operations, requires logistical commanders to deploy only necessary logistical forces to successfully support the mission requirements of the task force commander. What this means to the logistics commander and planner is tailoring units to meet task force requirements and deploying only necessary personnel, equipment and supplies.

Logistics planners must consider split logistical operations to support task force deployments. This concept will reduce deployment flow requirements and supply stockage buildup in the area of operations. However, split logistical operations must have reliable communications systems to be effective. These systems will allow simultaneous support of nondeployed and deployed forces for short duration deployments. The logistics base, nondeployed, would receive and act on requirements from forward-deployed elements, pushing required supplies to the forward-deployed unit's area of operations. As the theater develops for longer duration deployments, the forward-deployed element becomes the catalyst for follow-on logistics elements.

In addition to supporting task force deployments and combat operations, the logistics planner must plan and execute post-conflict sup-

port. Logistics units should plan to be among the first into an area of operations and the last to redeploy—primarily because of the need for logistics support before, during and after operations.

Leader Challenge

Force projection operations will challenge logistics leaders at all levels. Force projection requires an early critical analysis of the tactical commander's intent, threat, geography, culture and climate. This analysis will be accompanied by decisions that are shadowed by uncertainty and friction. Analyses will be required at every level of logistics: strategic, operational, tactical and in operations other than war. The keys are anticipation and synchronization of logistics to the tactical commander's mission.

To successfully anticipate requirements, the logistics planner must understand the commander's intent, know the location of supported units at all times, maintain total asset visibility before and throughout the operation and, lastly, maintain a continuous intelligence picture of the area of operations.

The keys to success for future deployments require training with

maneuver commands for an understanding of their intent and mission requirements. This training, along with the development of logistical support modules deployable to support a wide variety of mission profiles, will ensure mission imperatives of fixing, fueling, protecting, supplying and sustaining the soldier.

The wall is down, but new threats remain. As Logistics Warriors and sustainers of soldiers since the Quartermaster Corps began in 1775, we must be vigilant and prepared for war on a moment's notice. As the Army becomes based more in the continental U.S., deployments of smaller and more mobile logistics elements will emerge. We can also expect more deployments of short duration. For successful missions, maneuver commanders must focus on planning and not on building up supplies. Quartermaster leaders must anticipate requirements of the maneuver commander and project the correct logistics support to the area of operations in quantities required to support the mission. This focus will give the maneuver commander the decisive edge to fight and win the next battle or to provide successful operations other than war.



CW3 Daniel C. Parker is presently a Supply Systems Officer for the Concepts and Force Integration Division, Directorate of Combat Developments, Fort Lee, Virginia. He holds the following degrees: master of business administration, Webster College; master of science in logistics management, Florida Institute of Technology; bachelor of business administration; bachelor of science in professional aeronautics; and associate of arts degree in aerospace technology. He also is a graduate of the Warrant Officer Advanced Course, Logistics Management Development Course and Warrant Officer Staff Course. CW3 Parker has served in a variety of leadership positions with the 7th Corps Support Group, Germany, 5th Infantry Division, 3d Infantry Division, 101st Airborne Division, and the 25th Infantry Division.

Distinguished Member of the Regiment

Anyone wishing to submit a nomination for Distinguished Member of the Regiment should send an application packet before 30 Oct 94 to USAQMC&S, ATTN: REGIMENTAL ADJUTANT, ATSM-QMG, FORT LEE, VA 23801.

Quartermaster Training for the Future

The world is changing. The Army is changing. The Quartermaster Corps is changing.

The Cold War is over. The nation's major threat, the Soviet Union, collapsed. Without superpower rivalry, the Army's doctrinal emphasis shifted to regional conflicts throughout the unstable world and to operations other than war, such as hurricane disaster relief in

both realistic and achievable.

Vision targeted training as the top priority. *Vision* described future Quartermaster training as "significantly different."

New Army doctrine requires units of both the Active and Reserve Components in all military operations, from peacetime support to a major war. *Vision* states that the Quartermaster battlefield concept

what Quartermasters can do in the force structure. Emerging doctrine will enable Quartermaster units to provide fuel support for all U.S. and coalition land-based forces. For a theater of operations, petroleum handling, storage and pipeline equipment will be maintained afloat on prepositioned ships or located in CONUS near ports of debarkation. The Army will become the military's

The Quartermaster battlefield concept will reflect a small, CONUS-based, rapid deployment force with a growing Reserve Component totaling about 77 percent of Quartermaster units and 60 percent of personnel.

the U.S. and United Nations peacekeeping missions in Somalia, Africa. National security policy calls for Army soldiers working with the other military services and often with forces of other nations and agencies. To meet evolving strategic, economic and human needs at home and overseas, the Army is both reshaping and downsizing at the same time.

The Army's blueprint for its doctrinal shift from forward presence overseas to force projection from the continental U.S. (CONUS) is Field Manual (FM) 100-5 (Operations), published in June 1993. To translate the new doctrine into Quartermaster terms, FM 10-1 (Quartermaster Principles) was published in June 1994.

However, at the very beginnings of severe budget reductions and the resulting personnel cutbacks, the Quartermaster Corps preceded FM 100-5 and FM 10-1 with a *Vision of the Future* statement. *Vision* was written as a foundation for launching the Quartermaster Corps into the future. A broad range of Quartermasters—active and retired soldiers, enlisted personnel to general officers, and civilians—concentrated on areas

will reflect a small, CONUS-based, rapid deployment force with a growing Reserve Component totaling about 77 percent of Quartermaster units and 60 percent of personnel. More Army training materials will be joint and combined to support the Army's direction for soldiers and leaders to "train as they will fight."

The overall strategy for the U.S. Army Quartermaster Center and School at Fort Lee, VA, as proposed in *Vision* includes the following:

- Consolidate military occupational specialties (MOSs),
- Provide generic advanced individual training (AIT),
- Refine noncommissioned officer (NCO) and officer training,
- Reduce course lengths by distributive training, and
- Reduce doctrinal and training literature requirements.

Training strategies from *Vision of the Future* are goals rather than a list of issues or actions. The following highlights of training objectives in Quartermaster functional areas are from *Vision*'s Appendix A:

Training will change a great deal. Establishing a single fuel on the battlefield will simplify petroleum management and increase

executive agent for fuels and conduct joint training for all services at the U.S. Army Quartermaster Center and School.

Future water doctrine will move supply point distribution to unit distribution of water at the tactical level. This change will require better packaging concepts and will modify supply unit personnel and equipment requirements. Drills at the U.S. Army Quartermaster Center and School and the National Training Center at Fort Irwin, CA, and the Joint Readiness Training Center at Fort Chaffee, AK, will reinforce doctrinal design unit capabilities. War plans of Theater Commanders in Chief (CINC) will be used to develop joint training scenarios.

Quartermaster leaders will study the processes of acquisition, receipt, storage, control and issue of petroleum and water. Leaders will learn how to design and operate within modular corps-level units. The focus will go beyond the Army's petroleum and water requirements to requirements of joint and combined forces.

For recovery efforts after natural disasters, the U.S. Army Quartermaster Center and School endorses development of a planning guide for military food service sup-

port at the national level. The guide would provide advice on how local and state governments would request support from military assets. Also, joint food service training must begin, with the Army as the trainer.

Since the Army will be buying sanitation centers, more hands-on training will concentrate on the sanitation center, the mobile kitchen trailer (MKT), and the kitchen, company level field feeding-enhanced (KCLFF-E) operations. By FY 96, the Army also will begin fielding containerized kitchens (CKs). Units will be able to prepare A- and B-Rations at

As equipment becomes more sophisticated, training students becomes a greater challenge. Quartermasters will rely less on resident training and more on mobile training teams and nonresident instructional materials. Reserve Component units will need more technical assistance as the Army relies more and more on reserve forces.

CONUS-based airdrop support will continue as the primary means of emergency resupply. Prerigged supplies will be placed near departure airfields. Airdrop training procedures will remain flexible and stress

With the ability to recover and evacuate the war dead quickly, training in mortuary affairs will become shorter and less technical. Many technical tasks will be conducted in CONUS. The mortuary affairs force may become a United Nations force with standardized training and procedures. Officer and senior non-commissioned officer training will include training on multinational support. Joint and combined forces will operate with the same logistical plans and procedures during allied or United Nations exercises and military operations.

As schoolhouse training draws down, Quartermasters will focus on expansion through satellite training and teleconferencing. Joint service training will be very important.

company level. All levels of training will include how to feed soldiers on the forward line of own troops (FLOT) using company-level cooks and the KCLFF-E.

The most important change to training, during the next five years, will be adding the Marine training to the Quartermaster Logistics Warrior Exercise. Humanitarian and disaster feeding scenarios and Class I (rations) automation also will be added to the exercise.

The CK will eventually phase out all MKTs, and training will be revised to include all the latest rations. All baking will be in the CK rather than field bakeries. Pouch bread may totally eliminate bread baking.

Doctrinal changes will drive changes in Training Support Packages (TSPs) used in U.S. Army Reserve schools for food service courses. CK training will be added to all TSPs.

The new Army Field Services Concept calls for a more mobile and forward-deployed soldier. Quartermasters in MOS 43M (fabric repair specialist) and 57E (laundry and shower specialist) will train to deploy together, as far forward as the FLOT. The need for mobile training teams will increase.

deployability to support various contingency operations. Because airdrop requirements reflect changing needs of the field, the future training base may be a joint services airdrop training program.

Mortuary affairs will be standardized among the military services and taught by the Army with joint staffing. Soldiers will train to respond to a variety of requirements from the joint/combined force level. New courses, such as Disaster Response and Professional Development Training for Mortuary Officers, will mirror the Army's changing doctrine. Mortuary affairs training at the National Training Center and unit level will be expanded. Commanders will conduct more MOS certification and sustainment training in their units.

Civilian and military mortuary communities will train to support disasters and military operations. At the tactical level, divisional mortuary affairs assets reside and train in the corps area. Mortuary affairs assets detach and move with maneuver elements as they deploy. Training for the mortuary units in the corps will be largely unit training, evaluated by Readiness Group and Mortuary Affairs Center personnel.

In repair parts resupply, Quartermasters will use automation and artificial intelligence technology to eliminate the costly, ineffective layering that currently exists. Shrink-pack and vacuum-pack technology will reduce the bulk of a wide range of items, thereby reducing storing, shipping and handling costs. Containerization will enhance deployability and forward support of the soldier.

Within the next five years, a smaller Quartermaster Corps with more combat service personnel and equipment in the Reserve Component translates into a need for more multifunctional training for Officer Basic Course (OBC) soldiers in supply. Second lieutenants will train to act as multifunctional platoon leaders in any combat service support battalion. As OBC training strategy evolves, Quartermasters will develop and export common core training by correspondence. Resident training will be reduced by 30 to 40 percent.

Quartermasters will emphasize multifunctional training with scenario-driven exercises such as a situational training exercise (STX), command post exercise (CPX), map exercise (MAPEX) and field training

exercise (FTX). Scenarios will be less branch-specific, with less classroom instruction and more hands-on training.

Several major initiatives will shape warrant officer training. The U.S. Army Quartermaster Center and School will become more of a nonresident trainer and training exporter instead of mainly a resident trainer. Initiatives include correspondence courses, video courses, satellite instruction, and computer-assisted training. The move toward training a multifunctional lieutenant or captain will mean more reliance on the technical expertise of Quartermaster warrant officers.

AIT for MOS 92A (automated logistical specialist) will continue to focus on the newest automation systems and hardware. Reliance on a paper-based supply system will continue to decrease.

The Basic Noncommissioned Officer Course and Advanced Noncommissioned Officer Course will concentrate on train-the-trainer and new methods of unit training. A long-range aim is moving more training to areas outside the U.S. Army Quartermaster Center and School. Regional training centers will become central locations for supply and service training instead of the schoolhouse.

As schoolhouse training draws down, the Reserve Component will send more soldiers to regional training centers and fewer to Fort Lee. Training will focus on expansion through satellite training and teleconferencing. Joint service training will be very important.

Vision of the Future maps out a strategy to produce the best quality of Quartermaster training for the fewest dollars. Soldiers will train for joint military operations and standardization between the services. Of course, political, social and economic factors will continue to modify the scope, content and direction of Quartermaster training.

Modernized Airfoils, Gliders

The U.S. Army Training and Doctrine Command (TRADOC) is turning to parafoils and hang gliders to improve accuracy and security of aerial resupply. The project is managed by the Early Entry Lethality and Survivability (EELS) Battle Laboratory. EELS is one of six battle labs in the command working to prepare the Army for future battlefields.

Parafoils or gliders, equipped with guidance systems connected to Global Positioning Satellites (GPSs), will increase the safety factor as well as accuracy of the drop. Aircraft can release cargo on either parafoils or gliders from 25,000 feet altitude 10 to 40 miles away from the drop zone. As the cargo descends, an onboard guidance system picks up the GPS signal. Ground coordinates have been loaded into the system while in the aircraft. The system activates servos to guide the parafoil or glider to each navigational reference point on the way to the drop zone. In demonstrations, parafoils capable of carrying 1,200 pounds are routinely hitting the ground within 100 meters of the target.

Parafoils that can deliver 42,000 pounds are being tested at Yuma (AZ) Proving Ground. Parafoils can carry greater weights, but gliders can maneuver more easily against winds. A large-capacity parafoil is equipped with a braking parachute and reefing system. The chute slows the drop as the foil is gradually extended, or reefed, to its full size. If the foil opened immediately, forces created by dropping 20 tons from 25,000 feet would destroy it.

Drops can be done at night. Parafoils and gliders have low radar signatures, so they can drop undetected. Loads detectable by radar can be covered with newly-created stealth blankets.

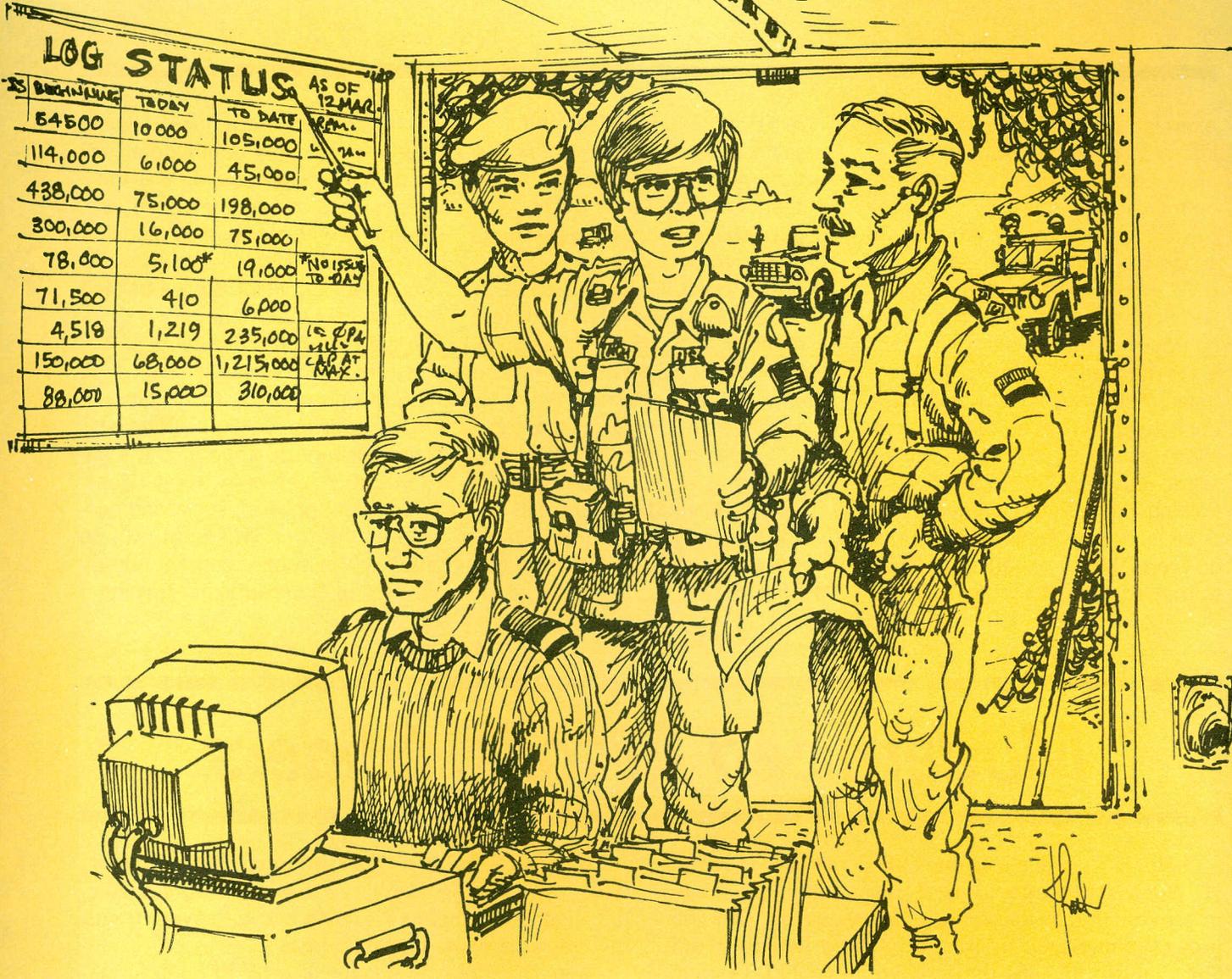
Cargo aircraft do not have to fly in large formations as is now required for sizable airdrops. Since planes can be a long distance from the drop zone, locations of covert teams will not be compromised.

A possible disadvantage to an onboard GPS guidance system is that it requires four satellites to orient on. Loss of signal from even one satellite will make it useless. An internal navigation system (INS) could eliminate reliance on satellites. However, INS packages cost more.

A beacon guidance system has been tested as well. Under ideal conditions, a beacon ensures an accurate drop. The drawback is that radio transmissions can throw it off course. The enemy can also detect a ground team's beacon.

The capability of the GPS guidance system was shown in a demonstration at Fort Bragg, NC. A parafoil with a 1,200-pound load was released from a C-130 at 8,000 feet. At the same time, paratroopers also using parafoils exited another aircraft. Wind speed at ground level was 10 knots gusting to 50 knots. The jumpers were blown completely off course, but not the cargo. The GPS made adjustments ahead of time and hit within 100 meters of its target.





Rationalization, Standardization and Interoperability

CPT Marietta Wells CW3 Daniel C. Parker

Although each nation must sustain its own forces, many future operations will feature mutual logistics support among allied forces. Effective and efficient mutual logistics support requires as much standardization and interoperability as possible. The continuation of United Nations peacekeeping operations in Bosnia and Somalia, and the activation of the multinational corps in Europe will change the face of logistics support for combined operations.

Commanders of coalition forces will gain greater autonomy

for logistics support in an area of operations. This could mean that one "lead" nation is responsible for commodity support beyond national boundaries. Current examples of this commodity support are water, fuel and transportation. Also, the military must develop automated systems to give managers Total Asset Visibility in the theater. Coalition commanders can then establish combined Materiel Management Centers to apply logistics support based on mission priorities. What does this mean? Instead of the tra-

ditional, single, national supply pipeline feeding an area of operations, multiple pipelines will feed a single distribution system in theater. Then, supplies will be broken down and pushed forward to multinational forces.

To increase coalition warfare capabilities, the Army focuses on battlefield interoperability in its rationalization, standardization and interoperability (RSI) activities. RSI activities are a way to increase the capabilities of U.S., allied and friendly nation forces by using com-

mon or interoperable procedures and resources. RSI is essential to the successful integration of allied forces during combined operations.

Basic Army priorities for RSI include these abilities:

- Fight together using common or compatible doctrine, tactics, techniques and procedures.
- Communicate and share data.
- Share consumables.
- Care for casualties.

The Army actively seeks compatible land forces doctrine, logistics, procedures and systems with allied and other friendly forces.

Operation Restore Hope in Somalia provided a rare opportunity to view command and control relationships in a joint/combined operation other than war. Military forces, United Nations, U.S. Department of State, over 80 nongovernmental organizations, military units of more than 20 coalition countries, and the International Committee of the Red Cross cooperated to provide relief to the Somali population.

Logistics planners must consider logistics support to coalition forces. Twenty-one countries participated in United Task Force (UNITAF) Somalia operations. Several came self-sufficient, including the French, Italians, Austrians, Canadians and Belgians. Other nations received varying degrees of logistics support to encourage coalition participation in the operation. Logistics support to coalition forces in UNITAF was arranged through existing or new cross-service agreements.

Bilateral Army exchanges with other nations promote RSI through army-to-army initiatives and assist in arranging cross-service agreements. These exchanges occur in the form of "staff talks." Discussion topics include training, doctrine, leader development, equipment and force design. Recently, U.S. and German Army officials met in Germany for these staff talks. Also, U.S. and United Kingdom officials plan to meet to discuss RSI initiatives.

The effectiveness of logistics doctrine is ultimately measured by the ability to support tactical units on a dynamic battlefield. During attack on allied or friendly nation forces, they must operate together. Different nations will likely group in multinational formations, deploy and fight alongside each other and pass through each other's area of responsibility. Since significant differences exist, particularly in organization and equipment, allied and friendly nation forces must have a common understanding of the principles of logistics doctrine. To fulfill the new National Military Strategy, the U.S. Army must prepare for unique missions within a joint and combined command structure.

Definition of Terms

Rationalization — Any action that increases the effectiveness of allied forces through more efficient or effective use of defense resources committed to the alliance. Rationalization includes consolidation, reassignment of national priorities to higher alliance needs, standardization, specialization, mutual support or improved interoperability, and greater cooperation. Rationalization applies to both weapons and materiel resources and nonweapons military matters.

Standardization — The process of developing concepts, doctrines, procedures, and designs to achieve and maintain the most effective levels of compatibility, interoperability, interchangeability, and commonality in the fields of operations, administration and materiel. Standardization is the process by which nations achieve the closest practicable cooperation among forces, and the most efficient use of research, development, and production resources, and agree to adopt on the broadest possible basis:

- Common or compatible operational, administrative and logistics procedures.
- Common or compatible technical procedures and criteria.
- Common, compatible or interchangeable supplies, components, weapons or equipment.
- Common or compatible tactical doctrine with corresponding organizational compatibility.

Interoperability — The ability of systems, units or forces to provide services to and accept services from other systems, units or forces and to use the services so exchanged to enable them to operate effectively together.



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Army Map Distribution

John D. Greaves III

As the branches of the Army continue to realign and redefine their roles, functions are moving from longtime relationships to new areas. One function in this category is map distribution. This mission was previously the responsibility of the Engineer topographic battalion. The Quartermaster Corps has assumed proponentcy and developed a Map Distribution Platoon (42- 518LC00) for wartime functions.

Recent deployments highlighted the problems with the follow-on sustainment mission of providing map products to deployed forces. Problems included outdated charting, nonavailability of maps, wrong sizes, and reliance on foreign sources. Also, the ability to receive, store and issue maps to requesting units was so difficult that map distribution had to be handled outside the normal supply procedures.

The peacetime map distribution system provides quick response and focuses primarily on training requirements and contingency planning. In the past, these requirements usually were in well-established areas of the world, and the requests were for relatively small quantities.

Recent crises changed the requirements. The Army found units deploying to areas without up-to-date mapping. In some cases, the requirements for map sheets far exceeded the war reserve levels. For example, 38 million map sheets were sent to support *Operation Desert Storm*. The Army consolidated after action reports and looked at problems of supplying the force projection forces in the desert in a Total Distribution Study. One recommendation was

to integrate the requisitioning and supply of maps into the Army's retail supply systems.

The Defense Mapping Agency (DMA) currently has a stand-alone automated system named "Get-A-Map." Customers with a registered Department of Defense activity address code (DODAAC) request map products directly. These products are cataloged in a DMA publication, and the unique map numbers are used in the requisitioning process. Studies are underway to determine the best way to allow valid requisitioners to submit requests through the existing and emerging Standard Army Management Information Systems (STAMISs). As an added feature, bar codes are being applied to newly produced maps for easier handling and processing.

Map Platoons

Active Component map platoons have transitioned from the Engineer topographic battalions to Quartermaster supply companies. Authorization documents are bringing the platoons to an authorized strength of 1 officer and 21 enlisted soldiers. These platoons will operate existing facilities and provide direct customer support. The peacetime missions vary with the location of the units and correspond to the requirements of the installation/command that controls operations. The wartime mission is to operate as a general support (GS) storage facility in support of a corps or theater Army area. The platoon will attach to a supply company (GS) and respond operationally to its supporting Materiel Management Center (MMC). What happens is that the map platoons cannot do in peacetime what they

must do in wartime or in training to support large-scale operations.

A new map storage facility at Fort Bragg, NC, officially opened in April 1994. This modern facility will serve the many customers relying on Fort Bragg. In addition to the Fort Bragg platoon, this facility will provide an excellent environment for Reserve Component annual training. Reserve units could replace the Active Component platoon when it is involved in training exercises or forward deployed to support actual operations.

DMA has aggressively pursued the technology to reduce the need for storing and distributing printed mapping, charting and geodesy (MC&G) products. The emerging technology of digitization and more capable printing and replication facilities will allow creating the required product in the area where needed. This capability could alter the role of the map distribution team.

While a separate field manual for map operations is not envisioned, the changing missions and roles will be incorporated into revisions of the existing manuals. A section of FM 10-27 (General Supply in Theaters of Operations), dated April 1993, is devoted to map supply. The next scheduled revision of FM 10-1 (Quartermaster Principles) will discuss map supply in greater detail. As the integration of map requisitioning and supply continues, map supply and distribution will become less unique, thereby eliminating the requirement for special emphasis.

Formal training opportunities for the map distribution platoon are limited. However, the integration of map requisitioning into the

supply STAMISs and the conversion of the enlisted slots to military occupational specialty (MOS) 92A (automated logistical specialist) will contribute to focusing on a single set of operational tasks. Future deployments and training exercises will provide excellent training and operational opportunities for all, or a modular part, of the platoon. The resident courses at the U.S. Army Quartermaster Center and School at Fort Lee, VA, are under review for integration of map functions into existing programs of instruction. The development of nonresident instructional packages is also being considered.

As the Army moves toward Force XXI, map distribution must

be continually reevaluated so that missions and functions reflect the needs of the emerging forces. This will also include the joint arena. If recent operations are a trend, joint and force projection

deployments will be the preferred option. Filling the role as the joint dominant user will be the Army's key contribution to map distribution. The current initiative will allow us to do just that.



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The Topographic Readiness Facility at Fort Bragg, NC, has more than 35,000 locations for storage of printed mapping, charting and geodesy (MC&G) products.

Subsistence Distribution

John D. Greaves III

The changes in feeding soldiers on the battlefield dictate new ways to provide Class I (rations). Lessons learned in *Operation Desert Storm* highlighted the distribution system's inability to maintain visibility of stocks both in transit and on the ground. Subsistence often arrived in containers shipped directly from suppliers in the continental U.S. (CONUS).

More Requirements

The containers' contents often required unloading and assembling into unit and meal-configured packs. The ports of debarkation terminals and supply units did not have enough equipment and trained personnel to break down the contents. The end result: the system could not give the ration support requested by the units. With the Army Field Feeding System-Future, the distribution system will be taxed with an even greater requirement to provide quality meals to the soldier.

A Total Distribution Study identified shortcomings in subsistence distribution. Corrections are underway in our current environment, and the architecture for future changes is being developed.

New Army technologies will give Total Asset Visibility of stocks from the manufacturer to the forward areas of the battlefield. For proper use of this information, the entire subsistence distribution system requires revamping. In the past, labor-intensive forms generated at the battalion had to make their way up through the chain to a ration request consolidation point, only to arrive after the break had been made. Without paper work from the battalion, materiel managers had to make decisions without considering what the commander chose as best for the soldier.

The proposed system requires ration requests to enter the auto-

mated management information system at the battalion level. Ration requests can be seen by a Class I manager who has visibility of the theater's entire stockage position, including stockage in transit. A concept statement describing such a system has been recently approved. The major changes to the subsistence system include the theater Class I manager, theater subsistence distribution company, subsistence platoons, unitized group rations, and automation and communications.

The role of the Class I theater manager will expand to operational oversight and control of subsistence distribution flowing into and through the theater. As a general rule, the manager will be located with the highest Materiel Management Center (MMC) in the theater or a Centralized Distribution Management Activity.

Trade-Offs

Requests from battalions and other food preparation sites will flow into the MMC. The Class I theater manager will determine the supply system's ability to fill the requests and begin actions to provide the required supply. The manager will evaluate workloads. Trade-offs and substitutions will be made at the MMC level.

With the creation of the theater subsistence distribution company (TSDC), a developed theater can receive large volumes of supply in containers and consolidate supplies into loads that will cut down on handling forward. The TSDC will also store the bulk of the theater reserve. The table of organization and equipment (TOE) is being developed to support 165,000 soldiers. The TOE will have modules to operate in three separate locations or to deploy in increments to lessen the in-theater soldier requirement.

The concept will not eliminate throughput of containers, but make the onward movement of supplies easier with reduced handling. The percentage of throughput can markedly increase by Total Asset Visibility and the role of the theater manager. Unstuffing and restuffing supplies can be held to a minimum. The goal is handling rations no more than once in theater. This concept will increase the speed at which supplies move through the distribution pipeline and therefore decrease the amount of supplies in the pipeline at any one time.

Subsistence Platoons

Subsistence platoons attached to general support (GS) supply companies in the corps and theater army areas will receive subsistence from the TSDC, through local contracts or directly from the port. Subsistence will arrive in different configurations. Configurations will range from full truckloads and containers of one type of item, meal or unitized group ration to mixed loads that can be quickly configured and moved to ration break points for issue to consuming units. The subsistence platoon will build meals that require perishable subsistence or any other type of assemblage. Meals for direct support ration break points will be palletized and packaged for minimum handling and accounting. The platoons will provide refrigerated transportation and storage capability at supply companies (GS) and direct support ration break points. The basis of allocation for this unit will be 1 per 55,000 soldiers.

To make subsistence distribution easier, rations configuration design is under revision. The objective is to end the requirement to handle individual components of a meal. The semiperishable part of the meals will be unitized into boxes

that contain 100 meals. These 100-meal boxes will be positioned as one layer on a pallet. Pallets will be configured with four layers for a total of 400 meals. The Unitized Group Ration (UGR) will be for A-, B-, and Heat and Serve Rations. When required, the perishable portion of the meal will be issued with the UGRs. Studies will determine if the UGR can be subdivided to allow a smaller unit quantity. The objective is to reduce waste and excess.

Total Asset Visibility and a centrally controlled distribution system depend on available automation systems and assured communications. Both objectives are being aggres-

sively pursued. The technology to make this system function is available. Developing the software and obtaining the equipment will allow the design to function.

The Army is on the threshold of major breakthroughs in distribu-

tion and force support of the future. Subsistence distribution stands at the top of efforts to provide support in the most efficient and effective manner.



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Technology: Army Logistics, New Frontiers

SFC Karlo A. Aquilar

In the Autumn 1993 issue of the *Quartermaster Professional Bulletin*, I discussed emerging technologies within the LOGMARS-T (Logistics Application of Automated Marking and Reading Symbols-Tactical) systems as well as new innovations in bar coding technologies. Since then I have had the opportunity to look into LOGMARS-related systems as part of the ongoing Battle Lab initiatives in total asset/in transit visibility headed by the Quartermaster Automation Office, Deputy Assistant Commandant for Future Developments (DAC-FD), at the U.S. Army Quartermaster Center and School, Fort Lee, VA.

So what's new? I thought we would talk about radio frequency/data collection (RF/DC) terminals, system network controllers, Personal Computer Memory Card International Association (PCMCIA), and optical memory cards. Don't have a clue? Relax. We'll start with the "tekkie talk" and then look into how these devices and systems can im-

prove the way we do business within the combat service support logistics community.

What makes up an RF/DC network? When establishing an RF/DC system, three things must be considered: the systems network controller, radio link controllers, and RF terminals.

Systems Network Controller:

Usually the systems network controller is a 32-bit microprocessor (looks like a small shoe box) that controls communications between the terminal (hand-held or vehicle-mounted data collection device) and the host computer. The systems network controller connects to the host by a wire or a modem and communicates with terminals on the narrow or spread spectrum bands (more on this later).

The network controller uses the same communications technology as in cellular phone systems (the same technology that keeps your car phone calls connected as you drive). Network controllers come with software that enables

simultaneous communications with up to six dissimilar host STAMISs (Standard Army Management Information Systems) such as SARSS-O (Standard Army Retail Supply System-Objective), SAMS (Standard Army Maintenance System), and SAAS (Standard Army Ammunition System). The software allows operators working in large facilities, such as a main support unit in a heavy division, to perform different tasks, such as issue, receipt and storage, while maintaining the communications links with the STAMIS through RF communication.

OK, big deal, you may be saying. What does this device do for me, the soldier responsible for conducting inventories, reducing in-theater receipt processing time, and increasing asset visibility, demand satisfaction and customer satisfaction? Well, simply put, the network controller allows an accurate real-time support capability assessment by

Continued on next page

updating the STAMIS data base as each transaction type is processed or completed. Let's look at the next piece in the RF/DC network.

Radio Link Controllers: These devices are usually 32-bit microprocessor-based radio link controllers that gather data from free-roaming terminals (hand-held/vehicle-mounted LOGMARS devices) and deliver the signals to the network controller. Radio link controllers are for large, multisite and multihost facilities where operators need to move around the entire facility. They are also required in small- or medium-sized sites (supply support activities, for example) where protocol emulation demands the use of a network controller.

Up to six radio link controllers can be used in a group with one controller. A radio link controller can also function as a stand-alone network controller in non-emulation, small to midsized sites. Now does this sound confusing? Hold on, it will all make sense shortly. The last piece in the RF/DC system is the RF terminal.

RF Terminal: LOGMARS-T was the Army's first widely used portable data collection device (PDCD). LOGMARS-T was designed to decode, store and upload decoded bar code data into a host STAMIS, such as SARSS. The new generation of PDCDs performs the same functions as the old LOGMARS-T but with greater capabilities and options. First and foremost, the RF terminal eliminates the requirement for tethered or batch upload. Also, as with SARSS storage operations, the application software no longer has to be downloaded into the PDCD. Now the soldier can take the hand-held PDCD where required, such as the loading dock to process receipts or anywhere within the storage site to perform inventories, without the restriction of cable hook-ups. RF terminals are usually 32-bit, microprocessor-based and feature a tactile-touch, color-coded, water-resistant keyboard with program function

keys and LED (light emitting diodes) status indicators for easy operation. (For you LOGMARS-T veterans, that means no more pressing Shift, Space, and the On keys to cold start.) Keyboards on the new generation of PDCDs are available in ABCD or QWERTY formats and are color-coded by functional area. Layouts and options vary with the model selected. Here's an example of the specifications for a PDCD:

- 32-bit, microprocessor-based.
- Available in both narrow band and spread spectrum radio technologies.
- Hands-free RF scanning options.
- Accept either voice or data input for RF communications.
- Compatible with most bar code scanners and printers.
- Powered by a replaceable, rechargeable battery.
- Liquid crystal display with automatic backlighting.
- Displays available in sizes from 8 lines of 20 characters to 16 lines of 32 characters.
- Rugged designs for all types of demanding environments.
- Available in low-temperature versions.
- Several keyboard options to fit mission requirements:
 - 55-key format for data entry.
 - Large 40-key format.

Now that we have looked at the components of the RF/DC system, let's talk a little bit about narrow band and spread spectrum modems. Sometimes called "repeaters," these modems receive a signal from a PDCD and "boost" the signal through amplification, sending the signal to the host STAMIS computer to update the data base in real-time. Narrow band transmissions are regulated by the Federal Communications Commission (FCC) and require a license for a specific frequency. Spread spectrum modems perform the same functions as the narrow band with the exception that licensing is not required, and the device scans a

range of frequencies until a clear, stable line is established. Of the two, narrow band provides greater security, with the spread providing greater flexibility.

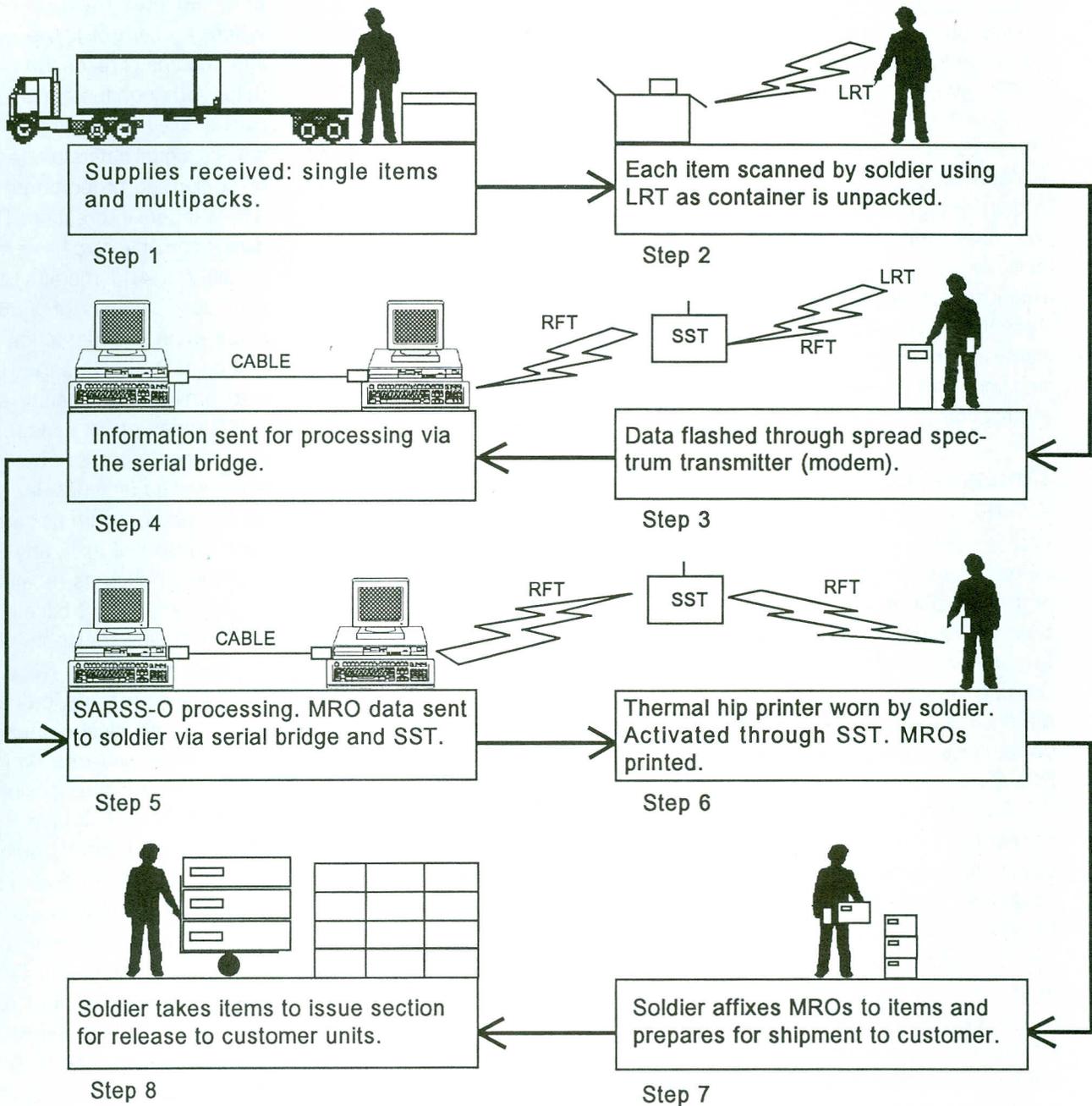
Moving Forward

Let's move forward to the next topic: the PCMCIA. The PCMCIA, a body of trade associations, consists of more than 300 member companies including manufacturers of semiconductors, connectors, peripherals and systems, as well as BIOS and software developers and related industries. PCMCIA has developed standards for the personal computer cards (PC cards). A PC card is a small, form-factor adapted for a personal computer (STAMIS system), personal communicator (PDCD) or other electronic device. PC cards are about the size and shape of a credit card. With so many notebook and hand-held computer systems, the search for smaller, lighter and more portable tools for information processing is generating innovation in the portable computer market. These innovations include displays, memory, power management and overall computer design and size. PC cards are a key technology for adding memory, storage and input and/or output (I/O) capabilities to portable systems.

PCMCIA standards describe the physical requirement, electrical specifications and software architecture for PC cards. The PCMCIA specifications define these three physical sizes of cards: Type I, Type II and Type III. All three types use the same 68-pin edge connector for attachment to the computer and differ only in thickness. The thicknesses for Type I, Type II and Type III are 3.3, 5.0 and 10.5 millimeters, respectively.

What are the benefits these cards provide? A Type I card is typically used for various types of memory enhancements, including RAM, FLASH memory, one-time programmable (OTP) memory, and electronically erasable programmable read only memory (EEPROM). Imag-

Model Direct Support Unit Receipt Processing



LEGEND:

LRT - Laser Radio Terminal
MRO - Materiel Release Order
RFT - Radio Frequency Transmission
SARSS-O - Standard Army Retail Supply System-Objective
SST - Spread Spectrum Transmitter

ine a hand-held PDCD with additional memory to store more inventory data without risking memory loss. For those who want memory enhancement capabilities without going through the upgrade hard disk and/or upgrade in model PC scenario (we're talking dollars and cents here), there's the Type II PC card.

The Type II PC card is twice the thickness used for memory enhancement or for I/O features that require a larger size, such as rotating mass storage devices (removable hard disk drives) and radio communication devices. Since Type I, Type II and Type III cards all use the same interface, the size of the chosen application depends on the miniaturization of the technology.

Convenient

These PC cards can be used with laptops, notebooks, palmtops, tablets, selected hand-held PDCDs and other portable computer systems. PC cards are a convenient alternative to pocket adapters and docking stations. PC cards can be used with any personal portable computer system equipped with a PCMCIA slot.

So what are the benefits of this PC card technology? The technology involves combination of PC card hardware, card service software and Socket Services software. (Socket Services is a BIOS level software interface that provides a way to access the PCMCIA sockets (slots) of a computer.) Socket Services identifies the number of sockets in a computer system and detects the insertion or removal of a PC card while the system is powered on. Socket Services, part of the PCMCIA specification that interfaces with card services, provides "plug-and-play" capability to portable computers. Once the software has been installed, it is possible to add and remove PC cards without powering off the system or open-

ing the covers of the personal computer system unit. Here's an example: It is possible to insert a modem PC card to access another computer system, download information into the portable computer's memory, remove the modem PC card, replace it with a FLASH PC card, and store the downloaded information — all which the portable computer is still powered on.

Hopefully, I've shown the flexibility PC cards provide and the potential of adding enhanced features into existing and emerging STAMIS systems. If you are still somewhat unsure about the application of this type of technology, read on. I will tie it all together at the end (which, after all this "tekkie talk," is mercifully near!).

The final technology I'd like to talk about is the optical memory card. The optical memory card (looks just like a credit card) is a recordable, wallet size, multimegabyte data storage card for storing, carrying and disseminating information. It's a new type of digital data product based on optical recording technology (the process of writing and reading with light), also used in producing music compact disks. The optical memory card consists of a wide, reflective optical recording stripe encapsulated between transparent, protective layers. So how does it work?

Microscopic

Information is stored digitally on the card in a binary code of "1" or "0" bits that are represented by either the presence or absence of physical "spots" on the recording stripe. These spots are microscopic in size — as small as 2.2 microns. (In case you are wondering just how small a micron is, think about this: the smallest size spot the human eye can see is about 20 microns.)

In typical use, the optical

memory card is written and read by an optical card reader/writer connected to a personal computer or host STAMIS system. The card is inserted into the reader/writer, where a beam of low-power laser light records or reads the data spots (bits). Although the optical memory card is only the size of a credit card, it has a digital data storage capacity of book-sized proportions. Here is where it gets interesting. The standard recordable card has a total data capacity of 4.11 megabytes and a user data capacity of 2.86 megabytes when error detection and correction (EDAC) is used. This little card provides a capacity equal to 1,200 typewritten pages! Now if you are not impressed by what you have read so far, consider this: the optical memory card has ample capacity to store virtually any digitized information such as receipts from wholesale, STAMIS baseline operating software, transportation control and movement documents, maintenance records, ordnance lot numbers, technical manuals, field manuals, or pictures, voice and music. Think of the possibilities in the areas of sustainment training, maintenance recordkeeping, and supply transaction tracking leading to increased in-transit visibility.

What about optical memory card security? The optical memory card is highly secure as a result of having nonvolatile and environmentally tolerant memory. Magnetic or electrostatic fields do not affect it. Although the card can be updated with new information, it is nonerasable, ensuring a cumulative data archive of all recorded data. For extra security, it can contain many nonerasable security features such as cryptography, access codes and digital photographs or fingerprints. Does the card work? Just ask the folks at Fort Hood, TX. In-theater receipts processing time has been

greatly reduced since the introduction of the optical memory card.

Hypothetical

So, what does all this new technology mean to you and me, the Logistics Warriors? The following is a hypothetical scenario:

A shipment is prepared at the depot for shipment to Fort Neverleave, NY. As each item is placed within the multipack (large box or container to ship large volumes of parts), the requestor's document number is transferred from the wholesale STAMIS database to an optical memory card reader/writer and written to an optical memory card. As each multipack is fully packed, the optical memory card with document numbers and transportation control and movement information goes on the outside of the container in a protective case. Each optical memory card contains "header information" that identifies where the multipack was loaded, total number of items, final destination, and date/time of departure. This data is "read" as each container is placed on a transportation platform (such as train, aircraft, truck or ship) by using a handheld PDCD with an optical memory card reader at the departure point. The data read by the PDCD is transferred to the shipment STAMIS (DAMMS-Department of the Army Movement Management System, for example) through RF/DC, immediately updating the receiving STAMIS and LIF (Logistics Intelligence File). Upon shipment arrival, the optical memory card is read into the supporting STAMIS (SARSS, for example). The optical memory card updates the incoming activity files (due-in shipments), establishing receipt of the shipment. As each multipack is off-loaded, the PDCD verifies receipt of the shipment (RF signal back to STAMIS database

matching document number with activity file data received from optical memory card) and directs central receiving point (CRP) personnel to place containers in designated DODAAC (Department of Defense activity address code) locations for shipment to either direct support units (DSUs) or supply support activities (SSAs). As each container is verified, the CRP STAMIS automatically produces and transmits the date of shipment arrival. Short shipments or shipment discrepancies are identified as each container is "read" and matched with the activity file. This gets reports of discrepancies back to the depot quickly.

Multipack Shipments

Then, the multipacks are shipped to the requesting unit and processed much the same way as the CRP. However, as each individual item is removed from the multipack, the PDCD will decode the individual bar code, match the item stock number, unit of issue, and document number with the activity file of the STAMIS establishing shipment receipt, and generate a materiel receipt acknowledgment document (D6S) back to wholesale.

Using radio frequency communications with PDCD now enables

storage personnel to process incoming shipments as they are off-loaded in real time. As the items are being processed at the DSU/SSA, what happens if the STAMIS software suddenly fails? Personnel immediately execute COOP (continuity of operations planning) by taking the PCMCIA (PC card) card with the STAMIS application software and loading the card onto a preselected backup hardware system. Within minutes, the system is back on line, with operators loading the most recent backup files. Data that is lost as a result of the system failure is quickly put back into the system by the PDCDs using radio frequency communications.

Now is all this possible? RF/DC is being implemented within the XVII Airborne Corps, Fort Bragg, NC. The optical memory card is being implemented at Fort Hood. The PCMCIA card is under study for eventual implementation. Among the immediate challenges are tying initiatives together and taking advantage of the technological advances making their way into the combat service support world. The use of these technologies as well as other technologies yet to be exploited will enable the Logistics Warrior to ensure superior combat service support well into the next century.



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40 Years of Sustaining and Protecting Soldiers

New rations and protective body armor are continuing priorities of the U.S. Army Natick Research, Development and Engineering Center. The Army's laboratory at the Natick, MA, site began 41 years ago as the Institute of Man. The mission is the same today: sustain and protect soldiers with state-of-the-art technology.

Leading up to the groundbreaking for an Army Quartermaster Research Laboratory in 1953 were years of military operations with equipment that did not work everywhere soldiers went. For example, between World War I and World War II, the national defense concept visualized military operations taking place mainly near or within the borders of the continental U.S. or in similar climatic areas. As a result, environments such as the jungle islands of the southwest Pacific, the wet-cold Aleutians and the sands of northern Africa severely tested existing equipment at the outbreak of World War II. Quartermaster leadership stressed the need for an organization to develop solutions to the problems of living and operating in extreme climates.

In September 1942, a Research and Development Branch was first established in the Office of the Quartermaster General.

The guiding principles remained the same at multiple sites in the Midwest and on the East Coast and later at the consolidated center in Massachusetts: research the impact of the battlefield upon the soldier and the limitations that the combat environment places on the soldier's capabilities. Then, develop the most efficient food, clothing and equipment systems.

Over the years, the center's name changed many times. Some still call the center the Quartermaster Labs, and some call it Natick Labs. Whatever the name, research efforts since the 1950s at the Natick center have evolved into a total systems concept called the 21st Century Land Warrior. This soldier system puts together rations, clothing, equipment, mobility, communications and weapons into a lethal force multiplier.

The following articles from the Natick center highlight just a few ongoing research programs in rations, clothing and equipment. Natick researchers discuss spin-offs from the Meals, Ready to Eat; future camouflage that changes color; prevention of "friendly fire" casualties; and clothing that cools the soldier at work.



MRE Spin-offs: Multi-faith Meals and Humanitarian Aid

With Meals, Ready to Eat (MREs), the military tries for foods that reflect preferences and tastes throughout the armed forces. MREs change yearly through field testing and incorporating new foods to replace less popular items. The two newest MRE "spin-offs" are the Multi-faith Meal (MFM) and the Humanitarian Daily Ration (HDR).

To increase MRE acceptability, the military developed the MFM for soldiers with religious dietary restrictions. Six new MFMs, some vegetarian, have been field tested. Pending Department of Defense approval, one or two MFMs will go into each case of MRE rations.

HDRs are another necessary outgrowth of the MRE. Over the last

few years, the MRE has been a humanitarian aid ration in various crisis situations around the world. Although the MRE performed well, the MRE was not designed as universally acceptable or culturally correct and was not intended for malnourished people. Also, the MRE contains non-food items such as flameless ration heaters and toilet paper that are not essential to prevent starvation.

In terms of the menu itself, 44 percent of the original MRE food products are still used. The HDRs require no special preparation before eating and can be delivered by airdrop.

Currently, six HDR menus are available with an average of 1,138 calories. All vegetarian, HDR meals

will sustain a person for one day. HDRs are specifically designed for malnourished people because the foods in the MRE are too "rich" for these populations. After a person has been malnourished over time, often the digestive system cannot handle a more substantial meal, thus the MRE might cause adverse reactions. The HDR costs \$3.95 and meets World Health Organization nutritional standards.

Awareness of cultural diversity led to the development of the MFM. Concern for global humanitarian efforts led to the development of a more cost-effective, universally acceptable humanitarian ration, the HDR.



Preventing 'Friendly Fire' Casualties

The U.S. military has long recognized the danger of fratricide in combat. Casualties are inevitable in war on both sides of the battle line. Less justifiable, however, is the accidental death of a soldier by so-called "friendly fire." Fratricide has been a problem for centuries. During *Operation Desert Shield/Storm* in Southwest Asia, the friendly fire casualty rate was 18 percent.

The U.S. Army continually tries to devise better ways to distinguish ground troops and weapons systems. These quick fixes include special infrared reflective tiles, small lights, luminescent tapes and other markers. The luminescent tapes, otherwise known as "cat's eyes," were the only standard military item available to ground troops during *Operation Desert Shield/Storm*. These luminescent tapes attach to the web band encircling the combat helmet. The "cat's eyes" are not a battle item and were originally designed for training exercises only. They were not very effective during the Persian Gulf war as a means of soldier identification.

The nature of the battlefield is changing to a fluid battlefield lacking easily identifiable sides. In future conflicts, forces will intermingle, leading the way to confusion and increased lethality on the modern battlefield. Traditional command and control measures are losing some effectiveness to advances in technology. The lethal range of high technology weapons exceeds the powers of even augmented human vision.

One technological advantage of today's U.S. military is the ability to fight at night. Depending on the various night vision devices, our soldiers have proven themselves capable of not only engaging, but defeating the enemy under cover of darkness. However, the resolution of these night vision devices is not

always good enough to distinguish friend from foe.

The high percentage of friendly fire casualties during *Operation Desert Storm* prompted the military to initiate a program to reduce the risk of friendly fire in future combat. The Army Combat Identification Program is now working to improve doctrine, training, leader development and organization, plus address new material development. The program is divided into three phases: near-, mid- and far-term. The program's goal is to improve situational awareness and target identification, thus reducing fratricide and increasing combat effectiveness.

Dismounted Soldier

The U.S. Army recently selected millimeter wave query/answer technology as the basis for its near-term target identification program. This program is called the Battlefield Combat Identification System. Initial development is for selected helicopters and ground vehicles, due to the ease of integration on these weapons platforms. However, millimeter wave technology is also being investigated for use by the dismounted soldier. The soldier as a weapon platform is very different than other weapon platforms such as vehicles or aircraft.

The soldier comes in all shapes and sizes and is strongly affected by additional equipment weight. Other important factors when dealing with the soldier include bulk and human safety. Dismounted soldiers often fight at short range, in built-up areas, in heavy foliage or in other confined spaces.

In combat identification, the following issues also need attention: compatibility with other combat identification systems, minimum weight and logistics burden to the soldier and integration with planned future systems for the sol-

dier, such as Land Warrior and 21st Century Land Warrior. Millimeter wave technology appears promising for soldier use if researchers can miniaturize the components.

Combat Identification for the Dismounted Soldier is part of the overall Army Combat Identification Program. Two work groups comprise the Combat Identification for the Dismounted Soldier Program. The first work group is the Fratricide Study Work Group. This group is analyzing soldier fratricide incidents, causes and potential solutions before recommending technical approaches. The group is constructing a data base from actual incidents and training simulations of fratricide. The second work group is the Combat Identification for the Dismounted Soldier. Reducing potential fratricides through target identification is the group's emphasis.

In the near-term, the Natick center is working with other key players to develop a lightweight device for the clothing and individual equipment systems that would protect against friendly vehicle and weapons platform fire. As technology matures, this device will not only allow soldiers to be interrogated, but also provide the soldier the capability of interrogating a target.

In the mid- to far-term, the combat identification program will use advanced target identification and situational awareness technologies that may be available in five or more years. The problem of fratricide will be difficult to overcome. The technical challenge lies in fielding a device that not only distinguishes friend from foe, but also does not disclose life-threatening information to the enemy in the chaos of battle. Maturing combat identification and battlefield awareness technologies will lift some of the fog of war.



Camouflage of the Future?

The most effective camouflage would allow a soldier to blend with the surroundings at all times, like a chameleon. Traditional camouflage fabrics attempt this through irregularly shaped patterns of carefully selected colors. The Army's current camouflage designs are based on an average of seasons and worldwide geographical regions. Camouflage techniques to protect the soldier from night vision and thermal image technology are currently under development at the U.S. Army Natick Research, Development and Engineering Center, Natick, MA. The ultimate goal is a soldier who is indistinguishable from the surroundings, regardless of the observers' location.

The Natick center's Integrated Camouflage Protection Team is considering commercially available thermochromic (heat sensitive) and photochromic (light sensitive) colorants. Both offer limited camouflage properties because they rely on environmental conditions for color changes to occur. With both materials, the uniform could adapt from day

to night or to subtle terrain changes. Although these technologies have been widely used commercially in novelty items, applying heat sensitive and light sensitive colorants to military uniforms requires certain performance criteria, such as color stability and durability. Continued research is necessary for a usable product.

Another possible approach is electrochromic (electrically stimulated) colorants. In this system the camouflage would change color according to data from the surrounding landscape. Ideally, miniaturized spectrophotometers would act as "cameras" gathering information from the surrounding terrain. That data would then be processed through a computer matrix effect that sends out the appropriate electrical signals and translates the information into a specific color system. An image of the soldier's background would then instantly appear on the uniform, thus creating an appropriate camouflage effect.

In another long-term effort, a group of Natick scientists are devel-

oping a biotechnology approach to camouflage uniforms. This approach, known as Dynamic Visual Camouflage (DVC), is based on active proteins. This may be the ultimate solution: DVC would allow a soldier's uniform to constantly change colors to blend with the surroundings.

The ultimate goal for DVC camouflage would be a soldier deployed in the woods to "match" the greens and browns, for example. If that same soldier moved to a wheat field, that same camouflage would pick up the orange, tans and browns of that environment. The soldier's DVC uniform would translate and transmit these new colors in seconds.

Drastic changes, such as a sudden snow storm requiring arctic white camouflage, will take more time to research. With technology advancing so quickly, soldiers in the future may blend in perfectly with their backgrounds. This chameleon ability will further increase the performance and survivability of the individual soldier.



Microclimate Cooling for the Soldier

The U.S. Army Natick Research, Development and Engineering Center in Natick, MA, is the Army's lead organization for clothing and individual equipment. The Natick center provides protective systems for the soldier against all threats on the modern battlefield.

Often the soldier must deal with multiple, coinciding threats such as ammunition fragments, environmental hazards, lasers and chemical agents. Soldiers on missions in hot environments require

protection against heat stress, which increases with the threat of chemical agents. Their uniforms, when worn in combination with body armor and other equipment, limit the body's ability to get relief from heat. Heat stress complications can range from heat cramps to heat stroke and even death, depending upon the environmental conditions, mission-oriented protection posture level, water consumption, work load and work duration. At moderate work rates, the

soldier's performance can be compromised in less than 60 minutes. The overall result is a weakened fighting force. One way to prevent heat casualties is using microclimate cooling (MCC). MCC refers to mechanically cooling the soldier within the confines of his uniform. MCC has reduced the risk of dehydration and greatly extended the time before the onset of heat stress, thereby acting as a force multiplier.

A memorandum of understanding among the Army, Navy and Air

Force recognizes the Natick center as the primary technical lead in the research and development of all Individual Microclimate Conditioning Systems (IMCS) for ground personnel and all IMCS worn by personnel who interface with ground and rotary-wing, vehicle-mounted microclimate conditioning units.

Since the late 1960s, the Natick center has led in bringing technology to work on the heat stress problem of the individual soldier. The Natick center developed the Microclimate Controlled (Thermalibrium) Protective Clothing System first as an alternative to the conventional uniforms of the era that relied on clothing in layers to provide heat regulation. The Thermalibrium system consisted of a combined protective helmet, body clothing with shoes and gloves, and a heat regulation device that was self-powered or powered from a vehicle. Forced ventilation of the suit cooled the soldier.

In the early 1980s, the Thermalibrium ensemble evolved into an ambient air cooling system called Protective Outfit, Toxicological, Microclimate Controlled. This ensemble provided a completely self-contained chemical-biological (CB) protective suit for explosive ordnance disposal (EOD) personnel working in CB-contaminated environments. A forced flow of filtered air went into the suit for body heat regulation and breathing. This suit represented a major step in demonstrating the benefit of providing MCC to the individual soldier.

With the growth of the chemical threat, the Army's need for MCC became more widespread. In gen-

eral, the principal goal of MCC is to extend the individual soldier's working time under specific conditions.

The U.S. Army Research Institute of Environmental Medicine (USARIEM), which is collocated at the Natick center, has collaborated with Natick since the early MCC efforts. The location of a cooling undergarment was assessed, using an instrumented copper mannequin to simulate human physiological conditions. After actual physiological and psychological testing with human subjects, the torso was identified as the optimum area for the cooling.

Cooling Air Vest

In 1985, a Combat Vehicle Crewman Microclimate Cooling Air Vest was developed and adopted for Army use. Currently fielded with the M1 A1 tank, the vest is being used with the developmental cooling system of the M9 armored combat earthmover. The vest is also the air distribution garment for the Air Force's Multiman Intermittent Cooling System (MICS). The MICS consists of an undergarment vest, weighing 1.25 pounds, that distributes chilled air supplied by the vehicle to the user's chest, back and neck. Its flexible hose has a quick connect/disconnect feature.

Two major MCC programs are currently in advanced development: the STEPO cooling system and the IMCS. Both systems are miniature vapor cycle chilled liquid cooling systems.

In early FY 93, an advanced technology demonstration of the Soldier Integrated Protective Ensemble (SIPE) was completed suc-

cessfully. SIPE, a modular, head-to-toe individual fighting system for the dismounted soldier, was designed to enhance combat effectiveness while providing balanced protection against multiple hazards. The major emphasis of Natick's current technology efforts is to support the cooling requirement of the 21st Century Land Warrior, the integrated soldier system of the future.

The advancements in microclimate cooling technology, and its application to personnel cooling devices, are quite significant. Just under five years ago, this technology was producing prototypes that weighed between 30 to 40 pounds. Cooling was limited to 160 watts, with work duration of less than 100 minutes. Today, 400 watts and 5 hours can be attained at weights below 20 pounds. Many jobs can now be completed that were once unachievable due to heat stress. Emergency response teams and toxic site crews can perform hours of continuous work in almost any environment while fully covered. Nuclear power plant and foundry workers, shipbuilders, welders and chemical plant maintenance personnel now have the means to avoid heat stress injury. Stock car drivers no longer have to contend with debilitating heat. Medical personnel have an alternative way to hold the symptoms of multiple sclerosis in check. Spin-offs from the Army's efforts in microclimate cooling will be widespread and will have positive impact in an array of public and private sector applications.



Class I, A Combat Multiplier

CPT Keith J. Sylvia

After another dusty steak and potatoes dinner, the 1st Battalion, 3d Field Artillery, 2d Armored Division, began 12 days of training at the National Training Center, Fort Irwin, CA. The training was rigorous and the days were long, but a good hot meal boosted soldier morale.

A hot meal is a distinctive combat multiplier and morale booster. Some leaders often fail to realize this and do not ensure their soldiers receive quality subsistence. A commander's primary focus is on the mission and training and not on Class I (rations) operations. Since tactical training scenarios normally last 10 to 12 days, leaders often select the easiest ration cycle, such as Meals, Ready to Eat (MREs) for breakfast and lunch and T-Rations for dinner. This ration cycle is easy to execute but ultimately degrades the morale of soldiers over an extended period. Maneuver commanders in *Operation Desert Storm* reflected in their after action reviews the debilitating effects that a pure MRE ration cycle had on their soldiers. Simply said, Class I operations affect the soldier's ability to complete the mission.

Commanders should take an active role in planning Class I support for their units. The following considerations will help commanders implement a quality field feeding plan:

- Understand the commander's intent and maneuver plan and its effects on ration cycles.
- Apply the factors of mission, enemy, troops, time, and terrain (METT-T) and troop-leading procedures to the planning process.
- Identify tentative times for A-Ration meals.
- Coordinate as far as possible in advance with support elements so they can meet A-Ration

meal requirements.

- Ensure serviceable food serving containers on hand to support an A-Ration Meal.
- Conduct quality checks during preparation of food and serving of meals.
- Establish standing operating procedures (SOPs) and checklists for Class I preparation, field ration break points, and logistics release points.
- Integrate the food service sergeant into training meetings and exercise planning sessions to provide and receive guidance on Class I.
- Support food service personnel and their mission.

The Army has taken proactive measures to improve food service operations in the field. The following doctrinal changes are in the process of being implemented Armywide.

Doctrinal Changes

- The Army's new field feeding policy is three meals per day, with one meal an A- or B-Ration depending on METT-T.
- The Chief of Staff, Army has directed the following new food service personnel authorizations:
 - An additional 66 warrant officer food advisor positions Armywide at division, armored cavalry regiment, and separate brigade levels.
 - An additional three cooks for each maneuver battalion.
 - Direct support artillery units will also receive additional cooks.
- Each lettered company will receive a kitchen company level field feeding-enhanced (KCLFF-

E) consisting of an M59 field range, small grill, food containers, ice chest and water cans. The prime mover is a M1038 high-mobility multipurpose wheeled vehicle (HMMWV) with trailer. The KCLFF-E provides the unit the on-site capability to prepare and serve one hot A- or B-Ration meal per day depending on METT-T.

The Army will be implementing the Unitized Group Ration (UGR) concept that provides units the capability and flexibility to prepare A-, B-, and T-Rations when the tactical mission allows. The UGR contains all the necessary ingredients to prepare a quality meal for 100 soldiers. UGRs are easy to transport and prepare, and reduce the workload for the food service section.

Providing consistent and quality Class I takes basic leadership skills and supervision. As leaders, we must ensure soldiers are fed "the right meal, at the right place, at the right time." Shakespeare said it best, "Give them great meals of beef and iron and steel, they will eat like wolves and fight like devils."



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Dining Facility Sanitation

CPT William E. Passalacqua

Hey, brand new Quartermaster lieutenant, ask a group of drill sergeants what the phrase "taking care of soldiers" means. Common responses will be "tough, realistic training," "conducting counseling sessions," or "providing sufficient supplies and serviceable equipment for training." Ask a drill sergeant at Fort McClellan, AL, and another response might be "a high state of cleanliness in the dining facility."

among U.S. Army Training and Doctrine Command (TRADOC) installations. As a company grade officer, you may easily be assigned the additional responsibility of food service officer.

What makes Fort McClellan stand out is the self-inspection and training program directed from the training brigade headquarters. The program was established to ensure that the government is doing its part to ward off foodborne illnesses and

focuses on government responsibilities in the food service contract. I recommend limiting class size to about 12 personnel. This class size allows a physical walk-through of the dining facility as a hands-on approach to clarify the DFAs' responsibilities. Also, each dining facility must have a copy of the brigade DFA standing operating procedure to explain DFA and DFA supervisor duties in detail.

Inspection results have become a bullet comment on officer and noncommissioned officer evaluation reports. Fortunately, I had the backing of a brigade commander and brigade command sergeant major who cared and energized others to care about sanitation measures.

While serving as the training brigade S4 and food service officer at Fort McClellan, I saw the benefit of an excellent dining facility sanitation program and its effect on soldiers' morale and welfare. As Quartermaster leaders, we must realize that dining facility cleanliness is a critical aspect of taking care of soldiers.

Fort McClellan operates three training battalion dining facilities under a management and food production service contract. The food service contractor manages the facility and food production. Dining facility attendants (DFAs), more commonly known as kitchen patrol (KP) personnel, perform the sanitation duties.

Drill sergeants perform the unpopular, yet critical, task of supervising the DFAs who are basic and advanced individual training soldiers. Many drill sergeants would prefer standing on a platform instructing or drilling troops, but pushing KPs and preventing food-related sickness among the ranks is just as important. Management and food production contracts are common

to control rodent and pest infestation. DFAs are primarily responsible for washing pots, pans, dishes, walls and floors; cleaning field feeding equipment; and sanitizing the dining rooms and latrines.

The weapons to prevent food poisoning are the combination of high sanitation measures, building and equipment maintenance, pest control treatment, inspections and command emphasis. Since the business of food service falls under the logistics field, we as logisticians must take the initiative.

The initial stage is requiring all drill sergeants assigned to a company to attend a mandatory KP class before performing DFA supervisor duties. Classes are conducted at battalion level by the brigade food service sergeant in military occupational specialty (MOS) 94B (food service specialist) for new drill sergeants and key leaders in the battalions. Instruction prepared from AR 30-1 (The Army Food Service Program) and TB Med 530 (Occupational and Environmental Health and Food Service Sanitation) fo-

The brigade food service sergeant performs unannounced sanitation inspections of each dining facility at least two times per week. He varies his inspection times anywhere between 0400 and 2100 to avoid a pattern of arrival. The sergeant first class grades 75 areas on a point scale broken down into personnel, pots and pans, dish washing area, field feeding equipment storage room, latrines, dining area and outside perimeter.

Recurring deficiencies are noted on the checklist and additional points deducted for each one. I was required to forward a copy of our inspection program and checklist to the food service contracting officer for review and subsequent approval by the director of contracting. This action ensured that the brigade's self-inspection program did not interfere with the food service contractor and violate the contract.

A summary of results from the weekly inspections of each battalion dining facility reveals the score and recurring deficiencies. After review, I often would write a few ob-

servations about the findings and submit the packet through the brigade command sergeant major to the brigade commander.

The inspection summary is also attached to the brigade S4 staff notes and reviewed at the brigade commander's weekly command and staff call. As the brigade S4, I stressed the areas for improvement, and the brigade commander always added his support. Needless to say, battalion commanders have a high interest in DFA duties and inspection results. The first look by the battalion commander will be at you, the battalion food service officer, to fix any unsatisfactory areas.

The emphasis on clean insulated food containers and the correct water temperature in third compartment sinks did not end after the weekly staff call. Each inspection grade during the quarter is projected and discussed at the brigade quarterly review and analysis briefing. This provides the commanders and food service officers with a snapshot of inspection results compared by battalions.

In addition to the daily inspections, the battalion dining facility is inspected during the brigade commander's semiannual command inspection (CI). Battalions have a requirement to frequently

inspect their assigned dining facility for cleanliness and sanitation using the same checklist approved for the brigade. Normally, this function is reserved for the battalion food service officer. Completed checklists must remain on file for one quarter. To deter any last-minute paper shuffles before CIs, the DFA supervisor on duty during the inspections must sign the inspection sheet.

Results of the CI will be formally announced at an out brief to the battalion leadership. As the food service officer, I would announce the dining facility results and pass along any merits warranted. My food service sergeant would address any major deficiencies noted. This forum was an excellent opportunity for the brigade commander to impress again the importance of dining facility cleanliness and concern for the health and welfare of the soldiers.

Results of this program at Fort McClellan's training brigade raised sanitation levels in each dining facility to the highest levels. Few deficiencies found during preventive medicine inspections fell into the training brigade areas of concern. Inspection results have become a bullet comment on officer and non-commissioned officer evaluation reports. Fortunately, I had the back-

ing of a brigade commander and brigade command sergeant major who cared and energized others to care about sanitation measures. I also served with an excellent brigade food service sergeant, a true professional who never closed his eyes to less than satisfactory standards.

As Quartermaster leaders we must lend our expertise and share the responsibility of clean dining facilities. The effort needs command emphasis and requires cooperation from all parties concerned. Prevention of foodborne illnesses is an ongoing task, but then again so is taking care of soldiers!



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Quartermaster Branch History Program

Throughout the ages, truly great military leaders have understood the importance of knowing history. "To be a successful soldier," General Patton once advised his West Point Cadet son, "you must know history." Indeed, before World War II, the study of military history was a significant part of the Army service school curriculum.

In the early 1920s, the Infantry School officer basic course contained 66 hours of critical study of selected campaigns. Advanced students received 91 hours of formal military history instruction. Students at the Artillery School received a similar amount of history.

With the start of World War II, most of the history instruction and other "educational" subjects were dropped from service school curricula to meet the urgent demand for quickly trained officers. The

study of military history never regained its prominence—until recent years.

In March 1983 the U.S. Army Training and Doctrine Command (TRADOC) Commander, General William R. Richardson, directed each of the service school commandants to create civilian Army historian positions in their personal staffs. The branch historian's duties include writing command history, developing a special historical documents collection to serve as the "corporate memory" of the branch, supporting military history instruction, acting as a focal point for infusion of military history into all areas of service school professional development curricula, and serving as the commandant's representative to the historical community. The Quartermaster School's historical office began operations in February 1984.

Supply Discipline Equals Supply Excellence

CPT Stephen K. McCullar

Many varying challenges face commanders at all levels on a daily basis. Volunteering for a challenge that may reflect unfavorably if performed poorly or receive undue attention if successful is frequently considered career suicide or just poor judgment. Regulations require commanders to take an active interest in supply management in their units. This interest consists of performing specific duties on a continuous basis and involves command and staff personnel alike. The Chief of Staff, Army, Supply Excellence Award (SEA) program provides the challenge. The Army Command Supply Discipline Program (CSDP) requires the command interest. While these two programs may seem dissimilar in scope, they are very much alike in the desired outcome. Both the SEA and the CSDP seek to ensure that commanders manage unit supply operations properly and place emphasis correctly.

Purposes

The CSDP's purposes are establishing supply discipline as a requirement, standardizing operations, making units more efficient, and eliminating repeat findings of substandard performance. Commanders can implement the program using existing resources, and the CSDP applies to all individuals whose position involves them with supply operations. The next higher headquarters has the responsibility for conducting quarterly evaluations, maintaining records on all findings, and ensuring correction of all shortcomings no later than a suspense date mutually agreed upon between the evaluators and the evaluated unit. At company level, the CSDP requires no additional recordkeeping other than recording these evaluations.

One basic concept of supply operations is conserving material so

that only the proper item in the necessary amount is used for a task. Supply discipline is the key to this concept. The CSDP addresses responsibilities of supervisory personnel, guidance on conducting evaluations, feedback for improving policy and procedures, and follow-ups for maintaining standards.

Commander's Aid

The CSDP acts as an aid to commanders so they may be more aware of supply conditions within their units. All responsible personnel should become familiar with established policy and enforce compliance. Commanders must demonstrate the personal interest necessary for an effective CSDP. Supervisors should use the program to police their own operations. One of the most effective means of meeting standards is to have an internal program practiced on a routine basis.

The CSDP evaluations tend to make the commander aware of what supply problems exist so the chain of command can take corrective action. Some finds of noncompliance may be due to circumstances beyond the control of the organization. In this case, the evaluators have the responsibility for elevating the discrepancy to the appropriate level. Remember, the purpose of an evaluation is only to determine whether or not an organization is meeting standards. The CSDP is not intended as an inspection program.

Appendix B, AR 710-2 (Supply Policy Below the Wholesale Level) sets out specified CSDP requirements. Most commanders are familiar with these requirements but approach them from an achieve-the-minimum viewpoint. Fewer commanders understand how the CSDP ties in with the SEA program. The CSDP standard is the minimum.

Exceeding the standard by any measure, whether in personnel training, activity organization, performance indicators or command emphasis, qualifies a unit for evaluation by local SEA personnel. There is no hidden secret for submitting qualifying units. If a commander determines an activity is ready to pursue recognition beyond other local units, a simple memorandum notifies the next higher logistical staff office of intent to compete.

The purpose of the SEA program is to single out extraordinarily effective organizational supply activities. The program has been in place since 1986, yet is largely misunderstood, if even known about. Much like its well-known counterpart, the Philip A. Connelly Award Program that recognizes excellence in dining facility management, the SEA program seeks out supply activities to recognize. Then the SEA program rewards groups and individuals who meet and exceed the standard.

Program objectives include enhancing the CSDP, increasing logistical readiness, improving property accountability, providing incentives and reducing waste. Interested personnel must remember that excellence does not mean perfection but that some subjective level of superiority is determined to set one activity apart from another. Because inspections tend to be viewed as approaching problem areas, noting shortcomings and informing higher headquarters of unit weaknesses, the SEA program makes a concentrated effort of pointing out that its evaluators are not inspectors.

Unit Strengths

Visits to units to judge qualification for competition and movement from one level to another are made strictly on an evaluation basis. SEA evaluations focus on unit

strengths, provide positive feedback, and advise activity personnel and the immediate commander only on recommendations for change.

The SEA program divides competing units into 6 categories and 10 levels.

- Category I, Level 1. Active Army table of organization and equipment (TOE) company, battery, troop, or detachment. Level 2. Active Army TOE battalion or squadron.
- Category II, Level 1. Active Army table of distribution and allowances (TDA) company, battery, troop, or detachment. Level 2. Active Army TDA battalion or squadron.
- Category III, Level 1. Army Reserve TOE company, battery, troop, or detachment. Level 2. U.S. Army Reserve TOE battalion or squadron.
- Category IV, Level 1. Army National Guard TOE company, battery, troop, or detachment. Level 2. Army National Guard TOE battalion or squadron.
- Category V, Level 1. Army National Guard TDA company, battery, troop, or detachment.
- Category VI, Level 1. U.S. Army Reserve TDA company, battery, troop or detachment.

Winners

Local SEA program personnel may initially evaluate a limitless number of organizations. At corps level and higher, evaluators designate a winner and a runner-up in each category. The winner continues to the next level of competition. Competition from one fiscal year commonly overlaps into the next. Units currently competing are not prevented from entering for the next year, regardless of the final outcome. Also, since the program only looks at organizational supply

operations, combat arms and combat support units stand as good a chance of excelling as combat service support organizations.

Evaluation begins with the unit's demonstrated ability to operate according to current regulations. Other evaluation criteria include the following:

- Accuracy of available property accountability records.
- Maintenance of property book and inventory records.
- Military occupational specialty (MOS)-qualified supply personnel assigned to and working in supply positions.
- Unit initiatives, leadership, attitudes and esprit de corps.
- Overall appearance.

Preparing a unit for competition does not have to involve a lot of extra time, extra stress and confusion. By continuing to operate at the level that qualified a unit for competition, an activity will maintain proficiency, continue to complete mandatory requirements and support the force. The most important and most obvious task is to correct shortcomings found during previous CSDP and SEA program evaluations. Correcting known problem areas, standardizing operations, and focusing on activity strengths are the keys to successful competition. Last-minute preparations should only involve area appearance.

On the Spot

Personnel undergoing evaluation may make on-the-spot corrections. If major problems surface, evaluators will elevate these findings up the chain of command immediately, eventually reaching the level capable of resolving the problems. Again, evaluators only notify the chain of command when serious problems exist, such as errors

detrimental to the unit's mission or the misuse of government property.

The rewards for meeting the standard in the CSDP and excelling in the SEA program involve commanders, unit logistical personnel, overseeing staff personnel, and the Quartermaster Corps in general. Initial success in the SEA program involves advancing to the next higher level of competition, individual awards for responsible personnel, mention in local publications, and an increasing sense of respect from others. Success at higher levels results in additional awards for personnel, trophies and plaques for unit display, and letters of recognition and commendation from high level commanders. Victory at Department of the Army level results in the unit being recognized in various Army publications.

The CSDP and the SEA program can produce tremendous returns in increased effectiveness and more accurate supply accountability. But the best means of ensuring supply discipline is to be proactive and not reactive in supply operations. Supply discipline cannot be maintained with infrequent emphasis. Commanders must devote constant interest. To effectively instill and maintain supply discipline, commanders and supervisors must strictly adhere to CSDP procedures and conduct supply discipline training for all subordinates.



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Standardization of Word Processing Software

CPT Bradley K. Bragg

The word "standardization" has different meanings in different situations. Within the Army, there may not be a clear understanding of automation standardization. Standardization of word processing software ultimately means that organizations use a single word processor software (program) for written requirements. The result is a more productive organization.

The Army has standardized software packages such as the Unit Level Logistics System (ULLS) and the Direct Support Unit Standard Supply System (DS4) that perform specific functions. However, the Army does not have definitive guidelines for standardization of word processor softwares.

I discovered as an assistant brigade S3 that using different word processing programs causes problems. My section used several software programs such as Enable, Multimate, Professional Write and Word Perfect. We published operations orders, memorandums, briefing charts and various other written requirements with six computers. Word processing was the section's largest function. We avoided problems by standardizing.

Standardization is not difficult. I often hear the comment, "Why do I need to learn a new system, when I already know and like this one?" This is a good question. The following are good reasons why standardization is important:

- The primary reason is to provide continuity for personnel on the system. Continuity means that time and resources are not lost through the transition of personnel. Example: Your clerk typist moved to Germany. Your commander tasks you for a copy of the last quarterly training guidance. As you search the

computer files and disks, you realize that your clerk used three word processors, each with different softwares. Your problem is first to find the file and then to find the program used. This does not sound difficult, but is. When you are searching directories and disks, you understand the difficulty.

- Standardization reduces the amount of time and paper spent on rough draft documents. When one program is used, all the editing, proofreading and printing can be done in less time. This reduces the amount of wasted paper.
- Standardization allows file merging on most programs. Word Perfect files, for example, can be added to other files to make one file with multiple documents. Merging is especially good for your unit standing operating procedures (SOPs) because SOPs can all be located on one document. Editing and printing one large document is faster than editing and printing 15 documents.
- Standardization advances electronic file transfers. Files can be transferred over telephone lines through local area networks. The intended destination receives the information much quicker. Transfer success, however, still relies on the sender and receiver using the same software.

Good reasons for standardization are not limited to my list. For instance, you could add that standardization saves money because of purchasing less paper and fewer software packages. The question remains, "How do I standardize to one system? Several options exist.

- Offices need enough "legal" software packages for each computer. Most government-bought software packages legally allow you to place programs on a number of computers. Check with your automation officer for what is available. Most organizations have Enable, Multimate or Professional Write. Word Perfect seems a current favorite for many Army organizations. The software is easy to use and performs various technical functions. For example, Word Perfect imports Harvard Graphics into word processing documents. I recommend that you standardize your software to Word Perfect. If it is not available, then use what you have. Remember, the key is to use only one program.
- Set a reasonable date for standardizing. Allow time for personnel to learn the system. This may involve some on-the-job training or outside agency instruction.
- Take secondary programs off the computer and monitor personnel to ensure they do not use old programs. The only true method to wean personnel from old programs is to take the old programs away.
- Convert recurring documents from the old program to the new. Two options exist. Retype the document or convert old files to operate on the new program. Retyping is long and arduous. Conversion is simple, but because the average user is not aware of this process, retyping occurs.

This leads me to my last topic: conversion. How do you convert files from one word processing pro-

gram to another? Multimate and Word Perfect, for example, have utilities which simplify this process. Multimate allows file conversion from old programs to either American Standard Code files (ASCII) or Multimate files. ASCII files are generic files written in hexadecimal code. ASCII files are virtually accepted by all word processing programs. Conversion from ASCII files requires minor editing, but editing is minimal compared to retyping the whole document. ASCII files benefit whatever system you convert.

I discussed the meaning of standardization and why it is important. I want to summarize the issue by emphasizing benefits to Quartermaster leaders and units. Standardization allows better control of or-

ganizing, publishing and filing documents. It promotes continuity and unity among units. Standardization is more efficient and easier to supervise with only one software program.



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Quartermaster Gallantry at Luzon

CPT Mark A. Olinger

As Quartermasters, we have a long and distinguished history dating to 16 June 1775 when the Second Continental Congress passed a resolution authorizing a Quartermaster General and deputy for the Continental Army. Throughout our history, Quartermasters have served at all levels of the Army in both peacetime and wartime. In all U.S. wars and armed conflicts, Quartermasters have joined our combat arms brethren in the risks associated with combat. Quartermasters have been called on to assume command of combat units and have commanded them successfully until relieved. COL Irvin Alexander was one such Quartermaster who was called upon to command an Infantry regiment in the opening days of World War II.

On 8 December 1941, Imperial Japanese forces launched an air attack against the Philippine Islands. By sunset, the majority of U.S. Army Forces in the Far East (USAFFE) air power had been destroyed and no longer posed a threat to the Imperial Japanese amphibious landings that began on 10 December. At the time of the Imperial Japanese attack, COL (then LTC) Irvin Alexander, Quartermaster Corps, was serving as the Assistant Quartermaster, USAFFE. He displayed continuous gallantry in action from 8 to 18 December.

During a period of continuous Imperial Japanese air attacks on Fort Stotsenberg, Luzon, Philippine Islands, COL Alexander displayed a courageous disregard for his own safety by ensuring that vital logistics missions were accomplished. While under repeated aerial bombardment on 13 December, COL Alexander personally directed the loading and departure of patients and personnel on a hospital train. At the risk of his own life on 18 December, he removed an unexploded bomb from a Quartermaster warehouse where it was endangering soldiers of the command. For this gallantry he was awarded the Silver Star Medal in General Orders Number 145, General Headquarters United States Army Forces, Pacific, dated 18 April 1946.

Shortly after those events in 1941, he assumed command of the 1st Infantry Regiment, 71st Division (Philip-

pine Army) on Bataan. The Philippine Army was a colonial creation that on 7 December 1941, consisted of 120,000 soldiers. They had limited training and were poorly equipped because the U.S. Congress had not approved the necessary funding for the defense of the Philippines. The U.S. Army forces in the Philippine Islands consisted of 19,000 U.S. soldiers and 12,000 Philippine Scouts. Most of these soldiers were assigned to the Philippine Division stationed at Fort McKinley, Luzon, Philippine Islands, or the 26th U.S. Cavalry Regiment (Philippine Scouts).

COL Alexander commanded the 1st Infantry Regiment (Philippine Army) until the surrender of Bataan on 9 April 1942. Regiments and divisions of the Philippine Army were either commanded by Americans or Filipinos, with American advisors who were expected to run the commands under the guise of giving advice. COL Alexander survived the Bataan Death March and spent the remainder of the war in various Imperial Japanese Prisoner of War Camps.

For his heroism, COL Alexander was further awarded the Distinguished Service Cross, Bronze Star Medal, Purple Heart with Oak Leaf Cluster and Combat Infantryman's Badge. He retired from the Army in 1950.



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Class VIII (Medical Supplies) Operations at JRTC

CPT Matt R. Scott

The 82d Airborne Division completed transitioning from functional to multifunctional support battalions 22 Oct 93 at Fort Bragg, NC. Then the 2d Brigade of the 82d Airborne Division completed a successful Joint Readiness Training Center (JRTC) rotation that marked the first time the division deployed with a multifunctional support battalion and a slice of the division medical operations center (DMOC).

Delivering timely and accurate Class VIII (medical supplies) to medical units at the JRTC is crucial to successfully treating and evacuating soldiers. The 82d Airborne Division relies on the division medical supply officer (DMSO) and the medical logisticians in the DMOC to plan and deliver Class VIII to medical units.

Planning and coordinating must take place at the unit's home station for successful Class VIII resupply and delivery at JRTC. I recommend the following actions to assist medical logistical planning for Class VIII operations before JRTC deployment.

To establish a Class VIII account at the medical department activity (MEDDAC), Fort Polk, LA, units must have a copy of assumption of command orders, a DA Form 1687 (Signature Card), and a copy of the Military Interdepartmental Purchase Request (MIPR). The MIPR states the amount of Class VIII allowed for purchase during a specified time period. The advance party to JRTC should include the medical logistics noncommissioned officer (NCO) from the DMSO. The medical logistics NCO can establish the Class VIII account with the hospital before soldiers arrive at North Fort Polk from home station.

JRTC has a Class VIII warehouse for use by the rotational unit. The unit must conduct an inventory of all medical assets and then sign for all Class VIII items. Also, the warehouse contains prerigged Containerized Delivery System (CDS) Class VIII chests. The advance party

should consist of at least two soldiers from DMSO to inventory and sign for the Class VIII warehouse.

The health services material officer (HSMO) in the DMOC should present a CDS Class VIII resupply plan to the support operations officer in the support battalion. The plan should include the amount of Class VIII in weight and cube.

Class VIII can be slingloaded as another means of transport. DMSO personnel should be either air assault qualified or at least experienced in slingload operations. The DMSO section can coordinate with aviation units to practice the successful rigging, loading and delivery of Class VIII. The DMSO should have sling sets assigned to their modification table of organization and equipment (MTOE).

Deployment

The 2d Brigade and 407th Forward Support Battalion (FSB) processed Class VIII requests through the 82d DMOC. The DMSO collocated with the DMOC received general support (GS) Class VIII from the 32d Medical Logistics (MEDLOG) Battalion Forward Distribution Team (FDT). The 32d MEDLOG Battalion FDT was collocated with the 5th Mobile Army Surgical Hospital (MASH) which permitted the timely receiving and issuing of Class VIII.

To save money, the division planned on reusing Class VIII items. This plan saved the division money and also allowed the participating medical units to return to Fort Bragg with adequate Class VIII to respond to real-world missions. All injured soldiers were evacuated through the forward support medical company (FSMC) to the 5th MASH. The 32d MEDLOG Battalion FDT collected all Class VIII items after treating the soldiers.

Class VIII was delivered by ambulance backhaul, helicopter slingload, and CDS. The 32d MEDLOG Battalion FDT put Class

VIII on ground ambulances going to the FSMC for patient evacuation. Class VIII slingload operations were valuable in providing the FSMC and the battalion aid stations (BASs) with timely Class VIII and medical equipment. Helicopters also delivered blood, packed red blood cells, and plasma so that the surgical squad at the FSMC could perform surgery. CDS of Class VIII delivered trauma, fluids, and splinting material to the FSMC.

CDS was planned and delivered during the first five days of the operation. Class VIII must be delivered to the riggers at least 18 hours before drop time. The DMOC delivered CDS bundles three days in advance to the first aerial delivery. CDS must be configured to meet a particular mission. The 82d Airborne Division uses three primary medical chests. Chest 1 contains fluids. Chest 2 contains field dressings. Chest 3 contains splinting material.

The JRTC provides a great opportunity to maximize training opportunities in medical resupply. Prior planning and coordination with key leaders enhance timely medical resupply to units. Class VIII resupply, often overshadowed by other logistics resupply operations, must be understood by all logisticians to effectively conserve the fighting strength.



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The Support Platoon Leader

LT Donald G. Herko

When the enemy presents an opportunity, speedily take advantage of it, anticipate him in seizing something he values and move in accordance with a date secretly fixed!

Sun Tzu
The Art of War

Logisticians must understand how leaders in the combat arms do business. The support platoon leader of a Mechanized Infantry Task Force is one of the most misunderstood leaders in the Army, even by soldiers in his own unit. One lieutenant controls Class I (rations), III (petroleum, oils and lubricants (POL)), IV (construction and barrier materiel), V (ammunition) and chemical decontamination for the task force. Our jobs as logisticians will become easier if we understand the support platoon leader and how to aid him in resupply operations.

The command structure of the support platoon is a unique blend of experience. The platoon leader is a combat soldier. This lieutenant has successfully led a rifle platoon in a maneuver company. The battalion commander selects him purely on potential. The support platoon leader might have been an executive officer of a maneuver company or have worked in the S4 section, but not always. The platoon sergeant is a sergeant first class and former truck master in a Transportation unit who must now rapidly learn every aspect of a combined arms task force and its combat service support (CSS) role.

Army doctrine has done little to help these two important CSS soldiers. The sum of doctrinal knowledge in FM 7-20 (The Infantry Battalion) and in FM 71-2 (The Tank and Mechanized Infantry Battalion Task Force) equals three pages each. Most text defines the command relationship between the platoon

leader and his rater. Each field manual has valid points for the task force executive officer, the task force S4 and the headquarters and headquarters company (HHC) commander to rate the platoon leader. Every former support platoon leader has a unique job based on doctrinal interpretation by the task force battalion commander and executive officer.

Commodity Managers

The support platoon of the Mechanized Infantry Task Force has several commodity managers. The first has the military occupational specialty (MOS) 88M (motor transport operator) and is a staff sergeant, transportation supervisor. He handles a section of five cargo heavy expanded mobile tactical trucks (HEMTTs) and is the unit's truck master. There is a POL supervisor, an MOS 77F (petroleum supply specialist) staff sergeant. This POL supervisor manages all Class III reports as well as leads a section of four fueler HEMTTs and one tank and pump unit (TPU) with a motor gasoline (MOGAS) trailer. The ammunition noncommissioned officer (NCO) is an MOS 11M (fighting vehicle infantryman) staff sergeant. He ensures that all cargo HEMTTs are properly loaded with Class V to support the task force. He must know the current task organization at all times.

Task organization is how the task force battalion commander distributes armor throughout the task force by trading Bradley fighting

vehicle Infantry platoons (mechanized platoons) with Armor or M1 tank platoons in the maneuver companies. This gives the commander greater flexibility to fight as a combined arms team.

The subsistence section supervisor must also know the task force's task organization at all times. This MOS 94B (food service specialist) sergeant first class must prepare Class I in a timely manner to support soldier needs. Also, the platoon leader controls and leads the task force decontamination specialist. This MOS 54B (chemical operations specialist) specialist-4 drives equipment for decontamination operations. These vehicles are the only organic decontamination systems in the brigade, to include the forward support battalion (FSB).

Each maneuver company has a support platoon squad as direct support for Classes III and V. An Infantry company has two cargo HEMTTs and one fueler HEMTT. An Armor company has two cargo and two fueler HEMTTs. These support squads follow their company from organic battalion formations to a task force organization within the brigade combat team. This gives each company commander a support element for improved resupply operations. A sergeant (E-5) leads each squad.

The enlisted soldiers of the support platoon are from the combat arms. In a mechanized Infantry battalion, the soldiers are MOS 11M. In an Armor battalion, they are MOS 19K (M1 armor crewman). This

gives the support elements intimate knowledge of the vehicles and weapons systems they support. The platoon's main transport system is the HEMTT. An Infantry battalion has 13 cargo and 8 fueler HEMTTs. An Armor battalion has 15 cargo and 12 fueler HEMTTs. Also, both organizations have a TPU with a trailer-mounted tank of MOGAS, one decontamination five-ton truck, and two cargo five-ton trucks. There is one authorized high-mobility multipurpose wheeled vehicle (HMMWV) for command and control.

Logistics packages (LOGPACs) resupply the task force daily. The LOGPACs are formed after guidance from the task force S4. The platoon leader working in the field trains within the brigade support area (BSA) assembles the LOGPAC convoy. Here, the platoon leader takes direction from the commander of the field trains, the HHC commander. The LOGPAC begins in the BSA and moves forward to the company trains at the edge of the forward line of troops (FLOT). Company supply sergeants operate a five-ton truck with a water trailer. They will fill the truck with a daily Class I and water resupply, critical Class II (general supplies) items (such as chemical suits, batteries or chemical lights), Class IX (repair parts) from the field train maintenance section, and mail. The platoon leader attaches his squads to the supply sergeant's squads to form the company LOGPAC.

Elements of the HHC have separate LOGPAC breaks. One is for the mortar platoon. It receives an entire HEMTT of ammunition, as well as fuel and other classes of supply. The scout platoon resupply plan is spelled out in the task force operations order (OPORD). The HHC first sergeant ensures resupply of these two separate platoons. The HHC will also form the LOGPAC break for the task force tactical operations center. The support platoon leader with the combat trains' LOGPAC forms the convoy and moves to a logistics release point

(LRP). This gives the support platoon leader a chance to discuss logistics with the task force S4. Here, all the separate LOGPAC elements split and move to their supported elements.

This is an oversimplified description of the LOGPAC system for general understanding. The estimated time for the complete operation is 9 to 11 hours, based on distances: 2 hours for preparation and convoy brief, 2 hours for driving time to FLOT, 2 to 3 hours for LOGPAC activities, 2 hours for movement from FLOT, and 1 hour for recovery. It takes the support platoon an additional three to four hours to receive Class III and V from the FSB. It takes one to two hours to form the Class V into company packages.

Class V Problems

Class V gives the support platoon more problems than any other. The ammunition basic load (ABL) is based on all task force weapons, plus pyrotechnic and demolition equipment. The ABL is divided into a combat load and a support platoon haul. The support platoon hauls the balance of the ABL to issue during LOGPAC times. The ABL supports the Class V needs of the task force until the combat sustainment rate (CSR) begins to flow from continental United States (CONUS) ports to the theater of operations.

This is where a problem lies. Based on weapons and ammunition availability, CSRs are formulated by the Theater Area Command (TAACOM) and CONUS.

Breaking down the entire CSR becomes very time-consuming. The FSB's ammunition transfer point (ATP) becomes very congested during hours of operation. Stake and platform trailers, HEMTTs and materials handling equipment drive in darkness to meet critical time schedules. Add several hundred short tons of Class V, and the ATP becomes a prized target for enemy artillery the longer it stays in operation.

LOGPACs pushed forward from the TAACOM and corps should

be based on the maneuver platoons. These packages would include all ammunition types to support direct fire weapons systems. The ammunition would be palletized and banded at a CONUS or TAACOM site. The CSR would be based on the MTOE of the units preparing to deploy to a conflict area.

Weapons systems also can be tailored to the specific region. Armor-piercing munitions are not needed, in mass quantities, in a conflict area with no enemy armor threat. Divisions can order packages for all maneuver platoons (Infantry, Armor and Cavalry) and cut down on volumes of paperwork.

Shipped Forward

The packages are then shipped forward to the ATPs for pickup by the support platoons. Packaged CSRs could support a mechanized platoon or an M1 tank platoon. A half package could be created for command vehicles such as the company commander and company executive officer vehicles. The task force battalion commander and S3 would receive a similar half package. Since all ammunition is in the same category (based on a rating of the explosive power and transportation capability), this does not violate safety regulations.

This concept will speed ammunition resupply throughout the theater of operations. The savings are immeasurable to the support battalions supporting the maneuver task forces at the FLOT, as well as the Cavalry squadrons forward of the FLOT. The time the FSB will have to operate an ATP will be cut in half. This means less exposure time for scarce CSS assets outside established perimeter defenses. The support battalion's ATP, by doctrine, is set up at the outer edge of the BSA near a division main supply route.

Packaging

Packaging is a way to move smaller quantities of different items to the same destination more efficiently. Ammunition at a TAACOM

site in large quantities starts to move forward in bulk. The closer ammunition gets to the front, the smaller the individual quantities of each type of ammunition. The concept originated with the movement of Class IV barrier materiel around the Combat Maneuver Training Center (CMTC) in Hohenfels, Germany. At CMTC, packages were created for minefields. A package contained all materials to construct a standard Army minefield. Antitank and anti-personnel mines, along with antihandling devices, were contained within a package. Many mistakes were avoided by this simplified process.

This process should be standardized for Armywide use in Class V. Also, this process could expand the packaging concept for the entire Class IV barrier materiel arena. A package created for breaching obstacles can be called a mobility package. It would contain demolitions to breach obstacles and items to mark the breach. A second package or series of packages could be used for countermobility: one for minefields, one for wire obstacles and a package of demolitions for

Engineers to disrupt road networks. The last set of packages would be for survival. These packages would contain materials to construct proper fighting positions, either crew-served or individual. The survivability packages would be very useful throughout the area of operations (AO) and not just in the task forces.

Class III will always be a challenge. Successful offensive operations create longer lines of resupply. The largest fuel consumer on the battlefield is the M1 tank. The vehicle can hold 504.75 gallons. At high idle, it burns fuel in 10 hours. A full HEMTT, with a 2,500-gallon capacity, can fill only five M1 tanks. An Armor battalion has 58 M1 tanks. An MTOE change giving the support platoon two or three additional fueler HEMTTs would give the platoon leader added flexibility. Support platoon leaders also support emergency fuel resupply wherever needed. It is important for POL managers and supervisors to understand the task organization of the supported units. Knowing the supported units helps in giving better support.

Understanding the task organization of the supported force is im-

portant for all CSS commodity managers and supervisors. The support platoon leader has been placed between the CSS elements and the supported force. His performance on the battlefield is the difference between the success or failure of the maneuver or combat arms task forces.

Quartermasters are the Logistics Warriors of the CSS community, and we must focus our combat power at the critical point on the battlefield. I recommend that our critical point of the battlefield be the brigade fight. My suggestions are for improvements in resupplying the brigade and the maneuver task forces.



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Quartermaster Wins the Distinguished Service Cross

Dr. Steven E. Anders

At the start of World War I, James F. Lavery signed up with the Quartermaster Corps as an enlisted soldier in his native New York City. He expected as soon as his training was over that he could join a "real unit" and see some action "Over There." However, the fortunes of war being what they are, PFC Lavery was sent not to France, but to the Far West: to a stateside Quartermaster outfit down around Nogales, AZ, on the Mexican border.

On 27 August 1918, hostile Mexican bandits raided across the line from Nogales in Sonora, Mexico, in a sharp, bitter attack on the American settlement. Several American residents fell wounded under the bandits' heavy fire. Braving this fire and

forgetful of his personal safety, PFC Lavery drove his truck through bandit lines time and again in successful attempts to rescue those wounded American citizens and bring them back to a position of safety. For his courage above and beyond the call of duty, he was awarded the Distinguished Service Cross.



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Task Force S4, Lessons Learned

CPT Jeffrey R. Price

The combat trains command post (CTCP) consisted of an M577 command post carrier filled with radios and littered with maps, overlays, and uneaten portions of Meals, Ready to Eat (MREs). The inside lights, except for one, were all burned out. The solitary illuminator cast an eerie, blue haze over the mapboard and the soldiers in the vehicle. A thick layer of dark brown German mud was on the floor, with piles of sunflower seed shells scattered haphazardly. It looked as if a hurricane had redesigned the interior. Just outside the vehicle, the driver was asleep on a pile of camouflage nets. I sat next to my noncommissioned officer in charge (NCOIC) with my hand microphone, wondering how long the current battle would continue.

We were on our fifth day in the maneuver box, or "BOX," at the Combat Maneuver Training Center (CMTC), Hohenfels, Germany. I was in the midst of my "baptism by fire" as the battalion S4 (logistics officer). Things were going very well, especially considering my prior experience as a logistical planner...which was none. My only qualifications until this point were as an Armor officer in the Quartermaster Branch Detail Program and a tank platoon leader. Since my platoon consumed a lot of supplies, I had always been a user with no experience in planning. The battalion commander thought being the S4 would be a good learning experience for me. The battalion operations officer (S3), on the other hand, must have thought otherwise. During our first orders' drill, he asked for a logistics estimate on fuel for the attack. My response, "We're going to need a lot of gas." Fortunately, my saving grace was the supply ser-

geant, my NCOIC. He understood the confusing world of supply. I knew what a tank battalion could do and that I should always keep my NCOIC at my side, especially after my encounter with the operations officer. During the two-week CMTC rotation, U.S. Army, Europe's (USAREUR's) answer to the National Training Center, I learned a great deal about logistics. Supply at the battalion level is simply bottom-of-the-food-chain logistics, often manual labor, usually unsophisticated but with a complex execution due to the various classes of supply that must be handled.

Understaffed

Many maneuver battalion S4 shops are tragically understaffed. They get lost in the shadow of the monstrous S3 operations conglomerate. Logisticians may find this difficult to believe since supplies and services are directly related to operational performance and the battalions' battlefield success. During my portion of a brief, I would hear, "Don't bore me with the details" or "S4, tell me what time it is, not how to build a clock." This is completely understandable since commanders have bigger concerns and only need to know that their staff has the details wired tightly.

My battalion executive officer (BN XO), giving me good advice, said: "At the beginning of each brief, you should say, 'Sir, we can logistically support this operation; then go into a short explanation of how.'" When I asked him what would happen if I ever said that we could not support an operation, he looked at me with a dead stare, saying, "You should have told ME that hours before the brief takes place."

During this period, I still didn't know what a logistician's estimate was, but I did understand its importance. My NCOIC taught me what the estimate entailed. We relied heavily on historical data. We began to save every order, matrix and overlay from every exercise. We started a filing system based on the mission in relation to the battalion battle tasks. From then on, my briefs always began with the phrase: "Sir, we can logistically support this fight, and here's how...." It became a point of pride with me that once the S4 shop had established its reputation, we became less and less a concern for the task force commander. When the support reaches that level, it becomes an even greater combat multiplier.

As the task force's multifunctional logistician, the S4 manages a maze of requests, reports and coordinations. Command, control and communications (C3) must become top priority to synchronize all the support players in the task force. As with all combat service support (CSS) elements, the S4 is usually understaffed and ill equipped. The typical tank battalion S4 shop has one officer, one senior NCO, and three soldiers. This section must operate the CTCP which plans and controls all battalion CSS operations. Assistance is provided by the battalion motor officer (BMO), support platoon leader, medical platoon leader (MED PLT LDR), adjutant, company first sergeants, command sergeants major (CSMs), and most of all, the headquarters and headquarters company (HHC) commander who, by doctrine, is the task force's logistical problem solver. However, the primary staff officer responsible for coordination of all CSS is the S4.

As a result, during my tenure, I used four techniques that greatly assisted in solving the C3 problems and coordination, execution difficulties. The four techniques are the Execution Matrix, CSS Rehearsals, Battletracking in the CTCP, and the modified Administration and Logistics (AD/LOG) Communications Net.

- **Execution Matrix:** A simple way to express orders to units. They are simple to mass reproduce, easy to read in a tactical environment, and progress as the battle progresses. A good execution can, and should, replace paragraph IV of an operations order (OPORD). The key is that all organic and operational control (OPCON) units must know how to read them. Tell your customers what they need to know to accomplish their mission. The fine details and all questions will be answered using the next technique.
- **CSS Rehearsals:** Just as the maneuver types, at a minimum, must rehearse actions on the objective, key CSS leaders must rehearse their most complex action, the logistics package (LOGPAC). The key CSS Leaders are BN XO, S4, CSM, BMO, MED PLT LDR, Support PLT LDR, all first sergeants, attached platoon sergeants, and the HHC commander. They should use the same sand table the maneuver leaders use. With their map and CSS execution matrix, all leaders walk through the operation. You should rehearse final resupply before mission execution, support during the mission to include emergency Class III (petroleum, oils and lubricants) and Class V (ammunition), reports required, collection points and first

LOGPAC after reorganization and consolidation, or change of mission. You must sell the task force commander on the idea to make rehearsal a priority for all concerned. At times, a rehearsal is not needed or there is not enough time, such as during a hasty attack or defense. However, rehearse when possible. The time you save in problem-solving during execution will be more than worth the time investment in the rehearsal.

- **Battletracking in the CTCP:** Doctrinally, the CTCP is the alternate tactical operations center (TOC) and must be prepared to control the battle. Battletracking is a means of control. It involves listening to the command network and placing small unit markers on the map with operational, intelligence, and combat support graphics overlays. Battletracking keeps the CTCP focused on the mission and is most helpful in anticipating needs of company/teams within the task force.

You will find that there will be a difference between what is reported as combat strength on the command net and combat loss on the AD/LOG net. Battletracking will help you find that reality. Battletracking accurately takes equipment, staff and practice. The first two requirements you will have little of, and the last takes some discipline. Communications equipment is at a premium. You must have one radio on battle command. I also prefer to have one on battalion operations and intelligence net.

These radios can be receivers only if you are short receiver-transmitters, since you will only be listening. Your CTCP must also have one soldier whose sole responsibility is to listen to the nets, move

the unit markers and keep status on combat power. Staffing is a problem. To solve this and other manpower deficits in the CTCP, look to the combat trains.

Accurate battletracking meant I always knew the status of the battalion. I knew what they needed and what I could anticipate for them. It made finding logistical answers easier when I knew the questions in advance.

- **Modified AD/LOG Communications Net:** A battalion has one logistics net for all supply, medical, maintenance, recovery, emergency requests and companies to use. To work effectively, more nets have to be allocated to the CSS assets of the battalion. This increases the communications security problems, but will dissipate overall use across several networks. Three additional frequencies should be allocated for CSS use. The medical platoon and battalion maintenance organization should have their own platoon nets. The support platoon can be allocated cross-leveled equipment and also have a platoon net. One FM net should be designated for use from combat to field trains to send reports. The original AD/LOG net should be used by company/teams, the battalion aid station and unit maintenance collection point proper to the combat trains. Your battalion signal officer may allocate spare frequencies from the signal operating instructions and even incorporate their use into the task force combat standing operating procedure. Mobile Subscriber Radio Telephone (MSRT), with attached UAX-7 facsimile (FAX) capability, can also be used between combat and field trains to increase coordination capability and speed.

During a recent rotation to the Combat Maneuver Training Center we used these techniques to great effectiveness. This allowed the

battalions' CSS elements fast reaction time, increased command and control and visibility over assets, flexibility and anticipation of

future requirements. This overall ability gave the task force better use of the ultimate combat multiplier: Logistics.



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Quartermasters in the Battle of the Bulge

Dr. Steven E. Anders

On the western flank of the Ardennes Forest, the little town of Gouvy straddled the rail line running from Bovigny to Bastogne. Early in the morning on 18 December 1944, the Germans broke through at St. Vith to the northeast—and the Battle of the Bulge was underway.

The American garrison at Gouvy was manned chiefly by Quartermaster truck drivers, clerks and laborers of the 89th Quartermaster Railhead Company who had set up a major ration dump in the area. As allied units, reeling from the German assault, streamed past them in ever-growing numbers heading for safety in the rear, the 89th prepared to evacuate. But it was too late.

By noon on the 18th, the telephone lines from the company to its corps headquarters went dead, and shortly thereafter sporadic machine-gun fire could be heard to the front and on the right flank of the Quartermaster unit's positions. The move to evacuate was immediately thwarted when lead elements discovered two burned-out vehicles blocking the only remaining road westward.

There was nothing to do but return to the blazing ration dump, put out the fires and take up defensive positions against the German tanks and infantry swarming around the area. Most of the Quartermasters spent the night in a string of hastily dug two-man foxholes.

At daybreak on the 19th, Quartermaster-led patrols cleared out some Germans who had slipped through the lines and were occupying two buildings. Although constantly under enemy fire, the men of the 89th Quartermaster Company never ceased issuing rations to combat elements that had broken off and made it to their perimeter.

One American light tank made it to the edge of the hamlet before being knocked out by enemy fire. Nevertheless, the beleaguered service troops managed to haul the disabled vehicle into the defensive circle and use this gun for supporting fire on one side of the line. In the meantime, an order from the commanding general of the 7th Armored Division came down, directing them to "Hold Gouvy at all costs!"

Heavy clashes continued throughout the day into the night on December 19, as the Germans tried again and again to penetrate the village—and reach the Allies' main supply route 10 miles beyond. It never happened.

A small contingent of tanks came up in support late in the afternoon on December 20. Even so, the men of the 89th had to tough it out for another 48 hours, while they passed off all their remaining rations supply to the 7th Armored Division and waited for orders to leave.

Those orders finally arrived at 0600 on December 22, when they were told by higher headquarters they had just five minutes to withdraw safely. A sizable force of German armor occupied the village just two hours later.

However, for two more days after their evacuation, the Quartermasters of the Gouvy garrison continued to function as infantrymen in coordination with American tanks in the area. They rode reconnaissance cars, cowboy style; flushed German raiding parties from hiding; and serviced the guns of light tanks.

On December 24 (Christmas Eve), the 89th Quartermaster Railhead Company reached First Army Headquarters. They had held out against German artillery fire, tank attacks and infantry sorties for four days. Although constantly under enemy fire, the men never ceased to issue rations to all units whose trucks were able to enter Gouvy, and most of them alternately passed out ration cans and small-arms fire.

While only 2 Americans sustained injuries in the 4-day engagement and 8 were reported missing, some 70 Germans were killed, 22 captured, and an unknown number were wounded. During that fateful week, as news of the great counteroffense reached the rest of the world, the brave soldiers of the 89th there in the thick of it earned their right to be called "Logistics Warriors."



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Drawing Down a Mechanized Infantry Company

CPT William M. Krahling

Drawdown is not a new concept in the Army. After each major conflict, the military reduces its forces. For the 2d Armor Division (Forward), drawing down began just seven months after redeploying from *Operation Desert Shield/Storm* in the Persian Gulf. Drawdown was purely a logistics challenge, incorporating all aspects of service support agencies. As the Executive Officer, Company B, 1st Battalion, 41st Infantry, I learned from every step of the United States Army, Europe (USAREUR) reduction of forces.

Hopefully, passing along my experiences will aid future commanders, staff officers and soldiers who must reduce the force. Although my background is in the European theater, the lessons learned relate Armywide. There are no technical manuals or field manuals for guidance. Most units draw down according to the ideas and policies of internal and outside agencies. Each mission is unique to the unit's location, the modification table of organization and equipment and disposition of commodity items. Drawdown compares to a training experience rather than a doctrinal exercise.

Marching Home

Just a few hours into the morning at Zaven, Germany, the officer leadership from the 3d Brigade, 2d Armor Division (Forward) was beginning the second day of the brigade's tactical operation without troops. A radio message instructed all observer controllers and players to move to the brigade assembly area. With the vehicles on line, the brigade commander gathered his leaders around him to hear: "We have just received our notice to start our drawdown sequence....3d Battalion, 66th Armor will immediately prepare to redeploy to home station to

start the drawing down sequence.... The cold war is over and 'Johnny is marching home.'"

Preparation is most important in any military operation. While you may not rehearse the actual drawdown, thorough preparation makes the process less painful. Drawdown is a series of pay-me-now, or pay-me-later tasks. Units sitting around for the initial months before becoming the drawdown priority will increase the difficulty of drawdown and, more importantly, waste precious time.

Drawdown has three important areas throughout the process. Accountability is the cornerstone. Maintenance permits drawing down. Personnel take you there. Neglecting any area will drastically affect the mission.

'Broke Toasters'

Account for every property book item. Also, account for everything in your area. Major end items and subcomponents are easily identified as tangible accountable items. Equipment found in the corners of storage areas and not identified as property book items will slow you down during turn-in. Identify the product for disposition and, if needed, reestablish accountability. Sometimes identification of an end item is a problem. Use the experience of the supply section and non-commissioned officer (NCO) leadership to identify "broke toasters" in the area. You must account for everything.

A good maintenance program will make or break a commander. A good maintenance program also means maintaining equipment at or near turn-in standards. Although the type of equipment and disposition will determine the final standards of the equipment, most items must meet U.S. Army operator and orga-

nizational maintenance standards. Also, the disposition to storage sites may mean additional requirements on the equipment.

Golden Team

A good maintenance team is worth its weight in gold. Commanders must ensure that subordinate maintenance officers maintain a good rapport between the operators and the organizational maintenance team. Cooperation between the two levels of maintenance develops a unified effort to quickly bring the equipment to turn-in standards. Ensure that the operator does a complete operator-level preventative maintenance checks and services (PMCS), then have the maintenance team chief have a technician follow up with an inspection.

Inactivating units complete a safety inspection on all equipment. Correct all noted safety deficiencies within the capabilities of the operator or the organizational maintenance. This includes the repair of all safety deficiencies. Have operational and organizational level maintenance done at the same time. Have the operator present during organizational level maintenance to assist the mechanic with items performed at operator level. Above all, teamwork instills good performance at all levels of maintenance.

You not only have to prepare the equipment for turn-in, but you also must prepare the soldiers for transition to a new duty station or civilian life. Take care of the soldiers. They will work long, hard days preparing the equipment and personnel for departure from the company. Tell them exactly what is going on in the company and get them involved in the timeline. Make your soldiers understand that doing the right thing will pay off during turn-in. Remember, everyone is leaving

about the same time. Normally, soldiers transition one or two per month. During drawdown, soldiers depart 20 or 30 at a time. With increased transition, commanders and first sergeants need to make an extra effort to take care of the soldiers and their families.

Overseas Questions

Commanders overseas answer many questions specific to USAREUR. How many privately owned vehicles (POVs) are in the company, and what is their disposition? Do they meet U.S. safety standards? Who needs to terminate economy quarters? How can we save soldiers from losing their security deposits? When should they cancel their utilities? How many privately owned weapons are registered? Also, what will soldiers do if weapons are not registered and they have to leave?

In addition to knowing these answers, household goods, pets, dependent visas, passports, children in school, immunization requirements, pregnant soldiers and wives must be considerations when organizing for mass departure. A good data base is extremely helpful as an organizational tool.

It sounds like a handful and it is. Good organization and knowing the answer to each question makes the difference between a smooth departure and a mass exodus.

This article gives a broad overview of planning the drawdown of a mechanized Infantry company.

The following are soldier sustainment issues that should not be forgotten:

- Continuing organized physical training (PT) during drawdown is critical for the good health of a unit. During drawdown are many long days filled with stress. Soldiers worry about the turn-in of their commodity area, as well as what is in store for their careers and their families. In overseas assignments where soldiers face deployment forward and where the drawdown impacts the most, PT is one way of taking care of soldiers. Their physical fitness will help in two ways: preparation for the semiannual requirement for a record PT test and relief from some of pressures involved with drawing down.
- Training should continue during drawdown. Training should shift from collective training to individual common skills. Commanders and first sergeants must focus on completing the common tasks testing (CTT) and sharpen individual military occupational skills (MOSs).
- Commanders must ensure sol-

diers leave trained and ready for their next duty assignment. This means a soldier should qualify on all individual training, such as weapons proficiency and qualification and CTT Testing. Commanders must stress NCO and officer professional development to discuss MOS and branch-specific training. Company commanders should continue or start military qualification skills training for subordinate officers. Do not let subordinate leaders and soldiers leave the unit handicapped because training stopped during drawdown.

Since today's Army entails drawing down the force, leaders at all levels must keep the lines of communication open. The elements of success mean a smooth transition of personnel and equipment between losing and gaining units, maintaining specified standards and keeping 100 percent accountability. This great logistical challenge will directly affect total Army readiness and capabilities for our force projection Army of tomorrow.



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Quartermaster Regimental Hall of Fame

Hall of Fame nomination packets for 1995 must be received by the Regimental Adjutant no later than 12 Nov 94. Warrant officers, noncommissioned officers and valorous enlisted soldiers who served during World War II are prime candidates for consideration during this anniversary period of that war. Forward packets to ATTN: REGIMENTAL ADJUTANT, ATSM-QMG, FORT LEE, VA 23801.

The Lone Logistics Officer

CPT Rebecca M. Freeze

My feelings of apprehension and excitement grew as I walked up the two flights of stairs to my new office. I was leaving the comfortable and supportive environment of the 1st Corps Support Command (COSCOM). As I approached the second floor, I saw the sign that read 18th Personnel and Administration Battalion. My stomach came to my throat as realization hit: there was no more turning to my fellow platoon leaders or battalion staff. The 18th was no longer part of 1st COSCOM.

There was only one logistics expert in the 18th, the S4. I was going to be the S4. Approaching the office, I saw a memorandum on the desk from the S3 shop tasking the S4 to provide toilet paper for the upcoming rifle range. Was my work cut out for me. The first mission was to convince the S3 shop that the only toilet paper the S4 had was a roll at home. This certainly was not 1st COSCOM.

This assignment is what I wanted, though. Even with the problems that lone logistics officers face, I wanted to be on my own. My experiences at 1st COSCOM taught me various aspects of logistics. As the executive officer for Headquarters and Headquarters Company (HHC), 1st COSCOM, during *Operation Desert Storm*, I had seen logisticians at their best. Of course, there were always the COSCOM phone numbers taped to my desk.

The challenges of dealing with unfamiliar equipment, unusual missions, and soldiers who are not skilled in logistical matters can seem overwhelming. Logistics officers can even find themselves fighting to prove that logistical planning is just as important as tactical planning. The problems of lone logistical officers are unique. With training, research and time, the rewards of the job surpass the challenges.

The first challenge is to understand the mission of the supported unit. How can you provide support to a unit if you do not know the support they need? In my case at the 18th, I could not even read my Officer Record Brief, let alone understand what a whole battalion of Adjutant General (AG) Corps soldiers could be doing.

Ask for Briefing

The company commanders can be a primary source of information. The commanders usually have a standard briefing for visiting dignitaries. Ask them to give it to you. Their briefing usually includes the information that a logistical planner needs, to include a mission statement. The briefing from the commanders or even an informal visit with them can provide vital details on the equipment and supply requirements unique to their organization. Most personnel can understand the importance of a weapon to the Army, but a laminating machine may not be that obvious. To a soldier whose job is making identification cards, that laminating machine is a mission-critical item.

Also, by understanding the unit's mission, you can anticipate supply requirements or understand unusual requests. In the 18th, for example, the battalion had to have monsters in the supply room eating the photocopy paper. When I considered the battalion's mission, I understood the high demand for paper. The battalion was making 50 copies of the promotion lists for every unit, board announcements, and other personnel actions. By studying the unit's mission statements, modification table of organization and equipment (MTOE) and mission-essential task list (METL), the lone logistics officer can gain a better understanding of the unit's

requirements and anticipate logistical needs.

Logistics training is another area often ignored in nonlogistical units. Do not assume that other branches of service receive the same amount of logistics training in their schools that you did. As the only logistics officer, you must teach them. Give the soldiers basic classes in supply accountability and responsibility, the Command Supply Discipline Program, reports of survey, and hand receipt procedures. Most of the hand receipt holders find the class on reports of survey interesting. By teaching them the dos and don'ts of the supply system, you ultimately make your job easier.

Training the supply personnel is also important. Often these soldiers are neglected when military occupational specialty (MOS) training is planned. They are such a small percentage of the battalion that they are quickly forgotten in all of the excitement of training. As the only logistics officer, you must look out for them. Consolidating supply training at your level is one way to ensure that the supply soldiers are given a chance to train in their MOS. This training time also helps to keep the soldiers at the S4 section current on company-level procedures and gives the supply sergeants a forum for exchanging information.

Ensuring that the supply soldiers are given proper, realistic training during field exercises is also the sole logistics officer's responsibility. During field exercises, the unit practices its wartime mission. However, because the unit is only out for a short period of time and does not need supplies or because the supporting units are not out in the field, the supply personnel often are left out.

When the 18th went to the field, the AG soldiers had a substan-

tial amount of scenario play to practice their wartime mission, but the low-density MOSs did not participate. The supply soldiers usually ended up on guard duty. To counter this weak spot, the S4 shop came up with logistical scenarios for the supply soldiers to work out. This served two purposes. First, it helped train the supply soldiers on what they could expect during a real deployment. Second, the scenario play also showed the company commanders what their Quartermaster soldiers must do during real deployments.

Proving the value of logistical planning will occupy some of your time as the lone logistics officer. Unfortunately, many other branches, especially the combat arms, tend to ignore logistical planning when pre-

paring for field training. You must be involved with the planning process. Point out to the planners what Rommel realized too late, "... the battle is fought and decided by Quartermasters before the shooting begins."

As the only logistics officer in a unit, you should concentrate on understanding your unit's mission, training the soldiers on supply pro-

cedures, and incorporating logistical planning in the decision-making process. In spite of the hectic times and adverse conditions, being the only logistics officer is wonderful. You get an opportunity to see the other branches of service in action and to see the combined arms idea work. You get to share your knowledge and experience with others because you are the expert.



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Quartermasters Hand Over French Town to Infantry

Dr. Steven E. Anders

When, late in July 1944, elements of Patton's Thundering Third knifed through the Nazi defenses around Avranches and rocketed east and south in the historic slashes that doomed the Wehrmacht, trucks of the 514th Quartermaster Group, under COL Theodore J. Krokus, were charged with keeping up the vital flow of gasoline, rations and replacements that the roaring Armor and its slugging Infantry running mates needed to crush Hitler's forces. COL Krokus had some 50 Quartermaster truck companies to do the job. From Avranches to the Siegfried Line these Logistics Warriors worked around the clock, came under heavy enemy fire repeatedly, took casualties and literally fought their way with the Infantry.

For several weeks, until the supporting Infantry units had completed mopping up behind the Armor in Brittany, Quartermaster truckers had to make their long, dangerous supply runs in total darkness with a small escort of tanks to help them back and forth on their nightly dashes through enemy-infested territory. Practically all the drivers pointed proudly at bullet holes in the cabs or windshields of their vehicles.

Thus, no one was surprised to learn that the "Fighting Quartermasters" of the 514th took their

turn at liberating some French towns along the way. Two Quartermasters, MAJ Charles Ketterman and T/5 Ernest Jenkins, with the 35th Infantry, entered the important town of Chateaudun on the road to Paris. They believed it had already been liberated.

A hail of machine-gun fire told them otherwise. Armed only with a .45 pistol and an '03 rifle, the major and his driver staged an eight-hour war of their own, during which they killed three Germans, wounded several more, and knocked out a gun position. The Quartermasters scared the entire garrison, except diehards, into evacuating the town and then went in to capture those 15 diehards!

That day the two Logistics Warriors were the toast of the 35th Infantry, and of General Patton himself. "Old Blood-and-Guts" thought enough of this incident to award both of them the Silver Star.



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Operation Provide Promise: Field Office Commodities Flow

CPT Jordan S. Chroman

From the sparkling coast to the rolling foothills to the jagged mountain peaks, the former Yugoslavia is a country at war. Countless factions are fighting over land rights, ideals, politics and religion in what was once a united country. Many people no longer have homes and live in refugee centers. Others try to eke out a living in their once-thriving neighborhoods. Still others live as squatters. Although plenty of legitimate businesses survive in the former Yugoslavia, the black market is thriving. Bearing this in mind, over 4.1 million people rely almost entirely on the United Nations and other humanitarian organizations for food, clothing and other necessities.

Enter: the organization of the United Nations High Commissioner for Refugees (UNHCR). The mission: to feed, provide medical care, protect human rights and care for refugees, persons living in the United Nations Protection Areas (UNPAs), and people who are otherwise unable to care for themselves fully.

In the former Yugoslavia (the newly reformed countries of Croatia, Slovenia, Bosnia-Herzegovina, Serbia and Montenegro, and the two regions Kosovo and Vojvodina), over 600 local and international staff are employed by the UNHCR. The UNHCR is just one of the many United Nations organizations headquartered in Geneva, Switzerland, and staffed by international workers from around the world. In addition to the UNHCR's international staff, many personnel work within the UNHCR structure from other organizations such as the U.S. military, the Office of Development and Assistance (ODA) (a British governmental assistance organization), the Norwegian Refugee Council, the British military, and the Danish military.

The UNHCR operation in the former Yugoslavia has headquarters in Zagreb, Croatia, with field offices in Zagreb, Metcovic, Banja Luka, Sarajevo and other locations scattered throughout the region. The UNHCR structure loosely compares to an Army unit. The UNHCR headquarters functions much as a separate brigade's headquarters, with the field offices acting as semiautonomous battalions.

The Zagreb Field Office has 23 UNHCR personnel with over 80 other personnel assigned "OPCON" (operational control) to the operation. Zagreb Field Office's main missions are the following:

- To plan and direct the reception, storage and delivery of supplies in all categories.
- To operate five major warehouses.
- To maintain and manage all supplies in over 150,000 square feet of storage space.
- To operate all airport operations, including the shipment of supplies and personnel.
- To manage the 14 international convoy teams (over 90 trucks).
- To interface with governmental and nongovernmental organizations to acquire and distribute supplies.
- To track all commodities and provide information worldwide by the automated Commodity Tracking System (CTS).

The commodities flow starts when a governmental (U.S., Canadian or Japanese, for example) or nongovernmental (World Food Program or World Health Organization, for example) organization donates items. Donations vary widely. Just a few items in the current warehouse stockage are beans, seeds, burial materials, flour, dried figs,

sanitary napkins, high protein biscuits, stoves, and roofing material. Each specific donation gets a "PO number." This number allows the field office to segregate one donation from another of like items. This is vital. Because of the many factions in the area, many organizations stipulate exactly where their donations are to go. Many times an organization will donate food only to a specific group, such as Muslims in the Bihac pocket, and at other times to a geographic region, such as Bosnia or Croatia.

After donation, items are delivered to the Zagreb Field Office's warehouses by air, truck or rail. The Zagreb Field Office has over 150,000 square feet of covered storage space alone. The warehouses are continually rotating stock and normally deal with a very high volume of both incoming and outgoing supplies. Donations are usually palletized at the warehouse for ease and flexibility during storage and transportation. Items are recorded on the automated CTS, a computerized program that tracks type, description (to include the PO number), individual weight, location, unit of issue, and summaries of stock balances. Numerous agencies, military planning cells, and other organizations throughout the world use these stockage figures.

Items are warehoused and prepared for shipment either by truck or air, based on stipulated monthly requirements or when a special need arises. Warehouses can configure and load items for shipment almost immediately after notification and approval. Reaction time is practically instant. The Zagreb Field Office has three international driving teams, with a combined total of over 90 trucks that deliver supplies throughout the region. The driving teams are sponsored by the British

government, the Norwegian Refugee Council, and the Danish Refugee Council. The truck drivers are civilians who contract to drive for six months at a time in the former Yugoslavia.

The Zagreb Field Office plans and coordinates an average of over 35 convoys throughout the country each week. The drivers constantly place themselves in harm's way by delivering goods into war areas. Although the trucks are painted with United Nations markings, this does not always ensure immunity for either the vehicles or the drivers. Also, drivers are not allowed to carry weapons into these "hot spots" and often have to clear as many as 11 checkpoints of the various military factions on a single convoy. At times convoys are unable to reach their final destination and have to return, unload, upload and start the process all over again.

Airlift operations run by the Zagreb Field Office operate much the same as the truck convoys. The Zagreb Field Office has played a major part in the humanitarian airlift to Sarajevo. Unfortunately, the aircraft flying on humanitarian missions at times are targeted by hostile factions. Bullet holes in aircraft flying on UNHCR missions are not uncommon.

Once at their destination, relief items are offloaded at distribution centers and given to needy persons. In April 1994, UNHCR delivered over 24,472 metric tons of food and non-

food items to regions in Bosnia and Herzegovina alone.

The UNHCR employees and "OPCON" personnel deserve the credit for making this fast-paced, humanitarian effort work. Without their tireless efforts and plain hard work, literally millions of people would go without food and the other basic necessities. As with all wars, this one too will end. People here will be refugees in what was once their country no longer. Until then the UNHCR will continue to help persons in need.



CPT Jordan S. Chroman is a Distinguished Military Graduate of the University of California, Berkeley. He has served with the 3d Battalion, 12th Special Forces Group (Airborne), the 407th Supply and Transportation Battalion, 82d Airborne Division, and the 29th Area Support Group. He graduated from numerous military schools, including the Quartermaster Officer Basic and Advanced Courses, Airborne, Jumpmaster, Rigger, Pathfinder, and the Joint Airdrop Inspectors Course. He is currently Chief, Zagreb Field Office, with United Nations forces in the former Yugoslavia.

Quartermasters Cut Off in South Pacific

Dr. Steven E. Anders

When the Japanese landed a sudden counterattack on the town of Palo, about 12 miles south of Tacloban on Leyte, early in 1945, the 24th Division's Quartermaster Company found itself in the thick of the fighting during World War II.

The Japanese objective was to take Palo and destroy the trucks and Quartermaster supplies stored there. The men were sorting supplies in a flimsy wooden building when they heard firing a few blocks to the south. Then the enemy, disguised as local Filipinos, set up a machine gun in front of the building and opened fire on a nearby Infantry regimental command post. The Japanese had infiltrated in force.

Not wanting to draw enemy fire into their supply dump, the 24th Division Quartermasters held their own fire while going into position for action. A few seconds later they heard a noise in the nearby motor pool and smelled gasoline. The Japanese who had penetrated their perimeter were setting fire to the Class III (petroleum, oils and lubricants) supplies and the trucks.

PVT James A. Denoff of Cedar Bluff, VA, grabbed a blanket and ran outside through the enemy fire toward a flaming truck. A Japanese soldier blocked his path, but Denoff clubbed him to death and reached the truck, where he smothered the fire with his blanket. Then he administered first aid to two other mem-

bers of the company who had been wounded while defending the motor pool.

PFC Theodore C. Sharpe of Philadelphia, PA, left the building with Denoff and opened fire on Japanese machine gunners. He killed one and forced the others to flee. Then Sharpe volunteered to accompany the commander of the nearby regiment, who had left his command post without a guard, across a bridge near the building. On the way, Sharpe killed his second enemy soldier.

At the bridge they were joined by PVT Wladyslaw E. Swarter, another Quartermaster soldier. Swarter rescued a wounded GI on the river bank. After dragging him to safety, Swarter single-handedly killed an enemy sniper before returning to cover the regimental commander and his escort until they could get across the bridge.

These three Logistics Warriors - Privates Denoff, Sharpe, and Swarter - show just how important it is for Quartermasters to be *tactically* as well as *technically* proficient in combat.



Dr. Steven E. Anders is the Quartermaster Corps Historian, U.S. Army Quartermaster Center and School, Fort Lee, Virginia.

The Straw That's Breaking the Quartermaster's Back

Michael L. Davis

Remember those movies when you were a kid and the treasure chest was dug up, opened, and was topped to the brim with gold coins? Then, two husky individuals would reach down, pick up that large chest and carry the treasure to their ship. So much for the movies.

Now, let's look at reality. Even if those two individuals used proper lifting techniques, the bottom of the two-by-two chest would have probably fallen out. Those two would have suffered back injuries or something worse. What the movie makers forgot (and something we all tend to forget) is that the weight of an object can be deceiving. The gold coins in that two-foot-square chest would have weighed slightly over 1,200 pounds.

WARNING: Weight of Equipment and Supplies Can Be Just As Deceptive in the Real World.

Lifting and moving equipment and supplies are jobs that Quartermaster soldiers do every day. Whether in garrison, in the field or at home, every soldier, no matter what rank, has to perform these functions at some time. The job is important. The job must be done. Our problem is that we lift and move incorrectly almost all the time. Without thinking about what we are doing, we end up injuring ourselves and others. Let's just look at a few Quartermaster accidents and injuries.

EXAMPLE 1: I Can Do It.

During annual training, a sergeant was performing his assigned cooking duties. The sergeant was injured while moving kitchen equipment and lifting and moving the water storage trailer without assistance. The sergeant was in such pain that he could not continue working and had to be taken to the hospital for treatment.

EXAMPLE 2: Hurry Up, and Let's Get This Done.

Two specialists were performing recovery on the mobile kitchen trailer (MKT). They tried to remove the MKT from the prime mover without putting down the MKT trailer stand. One soldier lost his footing and dropped the trailer tongue. The soldier not only received a bad back injury, but also fractured three toes. Medical costs to repair the foot injury exceeded \$18,000. The cost of the back injury, to both the soldier and the Army, will not be known for a long time.

EXAMPLE 3: You Only Need One Strong Back.

By himself, a sergeant was loading equipment and supplies into an M35A2. He noticed slight pain afterward. The next day he was not able to get out of bed. He had to go to the hospital. Not getting help cost the Army over \$14,000 in the sergeant's medical costs and a lot of pain and suffering for the soldier.

EXAMPLE 4: You Can See Who Has the Muscles.

Two sergeants and a specialist thought they had enough muscle power to return a general purpose (GP) medium tent to storage after cleaning. After lifting and then putting the tent down, two soldiers had to take the third to the hospital because of a back injury.

EXAMPLE 5: Rests, Who Needs Rests?

Instead of resting now and then, a soldier decided to work continuously when shoveling snow. The next day the soldier reported to sick call because of lower back pain.

EXAMPLE 6: The One That Got Away...

A soldier was detailed to buff the company bay area. Not only was the equipment not in proper working condition, but the soldier also did not know how to operate it. When the buffer started going in the wrong direction, the soldier panicked. He forgot to let go and tried to yank the buffer in the correct direction. His efforts put him in the hospital for a few days, and he still suffers from back pain today.

EXAMPLE 7: Do As I Say, Not As I Do.

A unit was scheduled for a night move to relocate to another bivouac site. The sergeant first class in charge gave a safety briefing to section personnel on getting help when lifting equipment.

Later he loaded a large ice chest onto the back of a five-ton truck without help. When back pain started, he was rushed from the field to the hospital because of the injury.

EXAMPLE 8: Now Let's Do This As A Team.

While establishing a tactical bivouac site at night, several soldiers were ordered to move a GP medium tent down a small hill to a site for assembly. No one seemed to be in charge. While moving the tent, one soldier was knocked down. The tent dropped on him,

and then he was trampled by the other soldiers on the work detail. The soldier had a severe back injury. Hospital costs alone exceeded \$13,000.

EXAMPLE 9: What You Can't See Won't Hurt You.

A sergeant with retirement plans after 20 years of hard work for the Army was receiving the final medical examination when the doctor found damage to the soldier's lower back. The injury was diagnosed as a cumulative trauma disorder caused from 20 years of repeated lifting and bending and twisting of the lower back. The injury was severe enough for the sergeant to have major surgery. The soldier then was placed on medical hold, delaying retirement plans.

EXAMPLE 10: Over There...

Personnel were moving heavy machine parts while clearing out a warehouse at an overseas base during a special operation.

A soldier who did not seek help with moving some parts ended up with a back injury. The injury was so severe that the soldier had to be evacuated to the U.S. for treatment.

Moving equipment and supplies accounts for 10 percent of all Army accidents and 11-15 percent of all Quartermaster accidents every year. Most are caused by soldiers using improper lifting procedures. The majority of these accidents result in back injuries, either noticed at the time or not identified until much later in the soldier's career.

Simple Rules To Live By

All personnel can help reduce back injuries by following a few simple rules to save the Army a lot of money and save the soldier pain and suffering.

- Leaders should include proper lifting procedures in safety briefings.
- Leaders need to correct improper procedures whenever observed.
- Leaders need to follow all the rules themselves.
- Leaders must ensure supervision of personnel.
- All soldiers need to correct improper procedures and follow the correct procedures themselves.
- All soldiers must know the correct manual lifting methods (squat method and stoop-back method).
- Supervisors must not allow soldiers to lift more than they are capable and must not allow soldiers to carry a load heavier than can be managed with ease. Leaders must ensure that personnel rest during heavier lifting.
- Leaders must require personnel to help each other when lifting equipment and supplies.
- Leaders must make personnel aware that the macho "I can lift anything" attitude often leads to injury.
- Leaders must make personnel aware that the back injuries may not be found out until a long time afterward.
- Soldiers must bend from the hips and knees, not just from the waist; carry heavy objects close to the body; avoid sudden movements; move slowly and deliberately; and must not carry unbalanced loads.

Remember, anything can be moved, without injury to the soldier or damage to the equipment, with a little planning and teamwork.



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Quartermaster Professional Bulletin Objectives:

- Reinforce the training base.
- Reinforce skills.
- Introduce new concepts.
- Demonstrate the "how to."
- Provide a medium for professional dialogue.
- Stimulate professionalism.
- Encourage study and innovative thought.
- Provide a forum for commandants to communicate to the field.



PROFESSIONAL READINGS

The Professional Readings section of the *Quartermaster Professional Bulletin* encourages the professional development of all Quartermasters. Titles are selected from the Quartermaster School Professional Reading List and the current Department of the Army Contemporary Military Reading List, as well as other notable sources. Short reviews from the field are always welcome.

Pure Logistics

George C. Thorpe, National Defense University Press: Washington, D.C., 1986.

Thorpe examines logistics theory, its scope and function as part of the science of war. He broadly outlines logistical organization with emphasis on combined logistics, using as examples Napoleon in Russia, Sherman's Atlanta Campaign and the Prussian Army in France. This edition, reprinted from the original 1917 edition, is one of the earliest books to emphasize the codependence of logistical functions.

For Want of a Nail: The Impact on War of Logistics and Communications

Kenneth Mackey, Brassey's (UK), Inc.: New York, 1989.

The author attempts to show how logistics thinking and logistics services have developed over the past 150 years. Mackey uses historical accounts to show how armies have been defeated by their failure to plan for logistical support and communications. He also cautions against sacrificing the "tail" in favor of the "tooth" when planning defense.

Nineteen Stars

Edgar F. Puryear, Jr., Coinier Publishing Ltd.: New York, 1971.

This book seeks to provide a description of leadership and outline the qualities needed for success in the military. Puryear examines the leadership styles of Generals of the Army George C. Marshall, Douglas MacArthur, Dwight D. Eisenhower and George S. Patton, Jr. He spent over 10 years interviewing and corresponding with over 3,000 men who served as subordinates, contemporaries and senior officers of these officers during World War II and presents an interesting portrait of leadership.

Battle for the Falklands

Max Hastings and Simon Jenkins, Norton Press: New York, 1983.

Authors give an in-depth look at the political and operational aspects of the Falklands War. They discuss the history of the Falklands and events leading up to the Argentina invasion. One of the authors traveled with the British fleet during the deployment and operation to retake the island. The other covered the political ramifications of the war in Britain.

The Training of Officers

Martin Van Creveld, Macmillan, Inc., New York: 1990.

Creveld gives a good overview, as well as critique, of the way commissioned officers are prepared for middle and senior command positions. He starts in the earliest times and progresses through the 19th and 20th centuries. He ends with a fairly detailed examination of the present U.S. system and some practical recommendations to improve the officer corps.

Common Sense Training

LTG (Ret.) USA Arthur S. Collins, Jr., Presido Press: California, 1978.

Collins addresses a new generation of leaders. He emphasizes that training is the number one business of a peacetime army that has suffered great neglect. He shows how the senior commander sets the tone on training. This book focuses on all levels of the chain of command, from the civilian secretaries who influence the quality of the soldier to the noncommissioned officer who is involved in most of the Army training.



Civilian Supply and Services Personnel



The following is an update of the status of the Supply Management Career Program (CP-13).

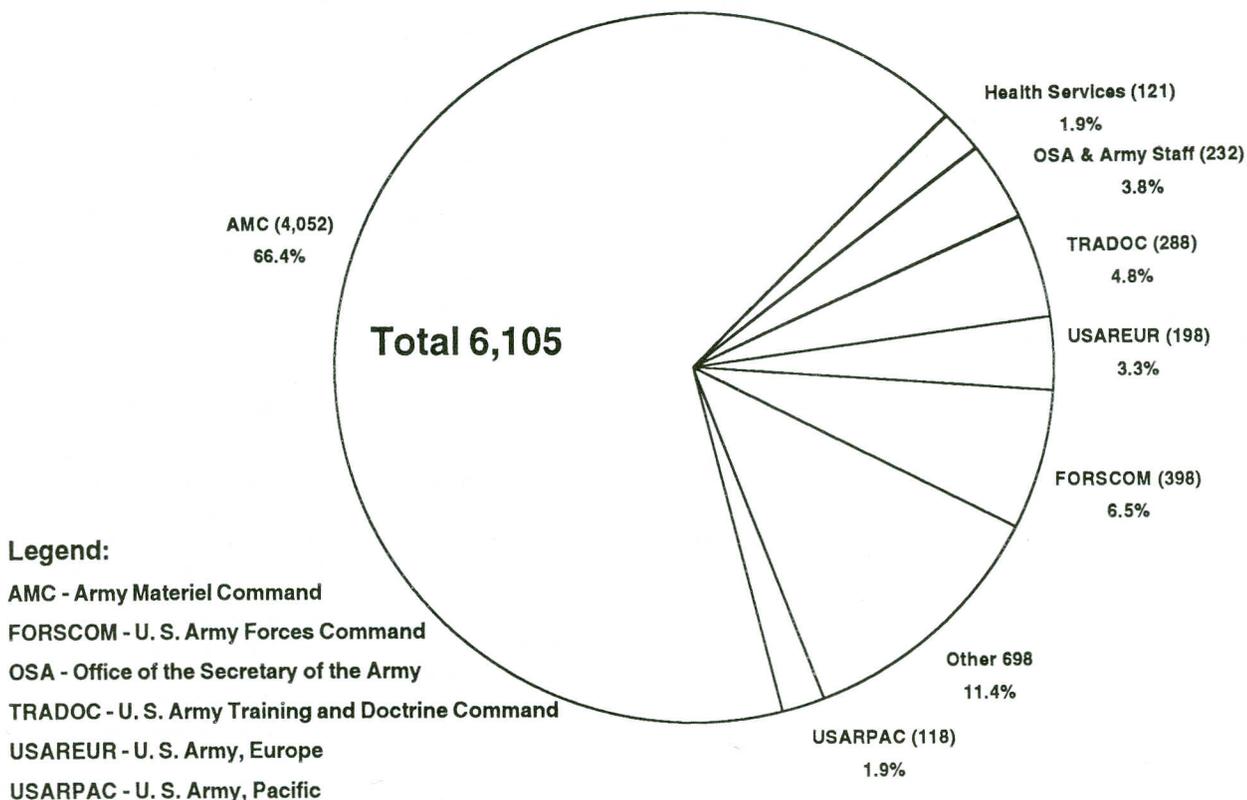
With the promotion of LTG Leon E. Salomon and his reassignment as Commander, Army Materiel Command, LTG Johnnie E. Wilson became the Deputy Chief of Staff for Logistics of the U.S. Army. Among other duties, he serves as the Functional Chief for the Supply Management Career Program. During a Long Term Training assignment of Ms. Billie Turmenne, William P. Neal, Director of the Army's Strategic Logistics Agency (SLA), was selected to serve as the Functional Chief Representative for CP-13. The mailing address is Director, U.S. Army Strategic Logistics Agency, ATTN: LOSA-ZA, 5001 Eisenhower Avenue, Alexandria, Va 22333- 5001.

The most current figures for Army civilians registered in CP- 13 show a total of 6,105 careerists, with 4,052 or over 66 percent assigned to the Army Mate-

riel Command. This is a reduction of approximately 6.4 percent in the number of registrants since July 1993. In the minority breakdown of CP-13 registrants, there has been little change in the distribution since July 1993.

Among the Supply Management Career Program personnel who have attended or are currently attending a Long Term Training program, there were no nominees for FY 94 for the Industrial College of the Armed Forces, Army War College, or the Supply Management Professional Enhancement Program. Information on how to apply for these or any other centrally administered training opportunities is in the Catalog of Civilian Training, Education and Professional Development Opportunities, published by U.S. Total Army Personnel Command (PERSCOM). Phone Tom Kershaw at the Civilian Proponency Office for CP-13, DSN 284-4496 or Commercial (703) 274-4496.

Supply Management Career Program
Supply Management Career Program Major Command Stratification





Activation of a National Guard Round-Out Unit

CPT Donald Hamby

Part of the Army National Guard (ARNG) peacetime mission is helping local communities in times of need. In wartime, the ARNG plays a key role in national defense. When the President of the United States calls the ARNG to active duty, these Reserve Component soldiers make up a large part of the total combat force. An ARNG round-out brigade is assigned an active duty division as the ARNG round-out brigade's parent unit. During activation to *Operation Desert Shield/Storm*, I was the detachment commander of the 1-108th Armor, 48th Brigade. Some critical areas for successful activation of an ARNG round-out brigade are a good mobilization plan, an updated alert roster and current inventory control procedures.

My battalion's standing operating procedure (SOP) requires an up-to-date unit mobilization plan for emergency or activation, as in any guard unit. One problem during activation was total disregard for the current mobilization plan. New guidance for mobilization came from Second Army. I only used the part of the plan that detailed how to feed my soldiers before deploying to our host unit. My plan was to arrange contract meals with a local restaurant. With the original mobilization plan disregarded, I had no idea how to deploy my unit to Fort Stewart, GA.

The mobilization of more than 4,000 soldiers took on a life of its own. Every mobilization plan has a directive or alert notification. You can imagine our surprise when the initial alert notification came out on national television. My full-time training noncommissioned officer (NCO) could not perform his daily duties because soldiers constantly called with questions about the activation. At this time, no one had received any official notification or information. I received official notification of activation one week after the news media reports.

The commander should be notified through proper military channels before the news media, so he can implement the alert roster in the mobilization plan. In my case, alert roster procedures were not properly adhered to. This caused too much unnecessary confusion.

As with any new incoming commander, organizational and installation property inventories should be top priority. Property accountability is a must for a commander. During our activation, however, this was ignored. Once at Fort Stewart, I turned my company over to the headquarters and headquarters company (HHC) commander. I was reassigned as the battalion signal officer. The HHC commander was directed to sign for the detachment property without an organizational inventory. The HHC commander did have a computer printout of his equipment. Considering that the detachment was a part of the HHC, the commander was familiar with the equipment. However, he should have had the opportunity to conduct an inventory.

What a nightmare this became for the HHC commander. Some detachment equipment was on a train

headed for the National Training Center, and some was in a warehouse stacked alongside other companies' equipment. A proper inventory was impossible. As the outgoing commander, having no inventory was great for me. However, no incoming commander should have to sign for a company or equipment without a proper inventory.

An actual inventory was eventually taken after our return from *Operation Desert Shield/Storm*. Unfortunately, the inventory was too late. Equipment accountability had become a real problem. During the deployment, items were being issued without hand receipts by the supply sergeants, who should have known better (or at least some commanders thought so). I know of one commander faced with the problems of a survey resulting from improper procedures that will cost him over \$3,000. To help stop problems, commanders stressed the importance of hand receipts to their supply sergeants. A good supply sergeant is worth his weight in gold. If your supply sergeant does not meet the standards, I strongly suggest you replace him before it's too late.

I have just touched the surface of the problems during our activation. First, know the mobilization plan thoroughly. Then, have alternative plans for your company within your limits as a company commander if the original plans are disregarded.

Second, keep your alert roster up to date at all times and prepare for news networks to know about your alert before you do. Make sure you and your first sergeant have a handle on the alert roster. Without a correct alert roster, a commander could quickly lose control of the company.

Third, I cannot describe the importance of property accountability to a commander during deployment. Unless you have plenty of money, keep control of your equipment.

With all the military cutbacks, the future role of the ARNG will be even more demanding. The Reserve Component adds up to a large part of the total combat force. Military requirements will not allow us to miss the next war. As a commander, you must always be prepared or your soldiers will suffer more than you.



CPT Donald Hamby has a degree in drafting and design from Dalton College, Dalton, Georgia. Before receiving his commission through Officer Candidate School from the state of Georgia, he attended medical training at Fort Sam Houston, Texas. He is also a graduate of the Armor Officer Basic Course, Quartermaster Officer Advanced Course, M1 Tank Commander's Course, TOW (tube-launched, optically tracked, wire-guided missile) Trainer Course, and Training, Assessment and Counseling (TAC) Officer Course. His previous assignments include Medical Platoon Leader, Support Platoon Leader, and Company Executive Officer of Headquarters and Headquarters Company (HHC), 1-108th Armor; Medical Platoon Leader and Assistant Brigade S3, HHC, 48th Armor Brigade; and Detachment Commander and Battalion Signal Officer, HHC, 1-108th Armor.



Branch Detail Officers Bring New Dimension to Logistics

CPT James D. Costigan

Did you get a booming start on your military career in Field Artillery? Were you tracking a successful Armor career before joining the Quartermaster Corps? Branch detail officers are a vital asset to the combat service support (CSS) branches. They initially gain technical, tactical and leadership experiences in combat arms branches before transferring to a CSS branch. Although the branch detail program is not new to the Army, it was recently revised to help structure the current force.

Officers branch-detailed into the Quartermaster Corps come from combat arms and combat support branches. According to the Office of the Quartermaster General at Fort Lee, VA, the Quartermaster Corps can expect 20 to 30 percent of its lieutenants to be branch-detailed. Beginning FY 90, these officers received two-year assignments to branches with shortages in lieutenants. Lieutenant shortages primarily occur in combat arms units. Combat arms branches require many lieutenants to fill combat platoon leader positions. These branches traditionally have fewer captain positions available. In combat service and CSS branches, there is a greater need for officers in the ranks of captain and above.

Selection Process

The selection process for branch-detailed officers from Reserve Officers' Training Corps (ROTC) and the annual accession boards coincide. Cadets from the U.S. Army Military Academy at West Point, NY, receive accessions before ROTC cadets, and participation in the branch detail program is strictly voluntary. Officer candidates do not participate in this program, so they can concentrate on their continuing educational needs. Most branch detailees are volunteers from ROTC. The selection and branching board details officers based on individual requests and the goals provided by the Officer Professional Management Department. The goals for FY 94 accessions for straight Quartermaster officers will decline by 31 lieutenants and branch detail accessions will rise by 21 lieutenants.

When a branch detail officer completes one year of service, the detail branch will forward all personnel files to the basic branch assignments officer. Transferring files early ensures sufficient time to enroll the officer in a Branch Qualification Course (BQC). The Quartermaster BQC is a four-week course at the U.S.

Army Quartermaster Center and School. The Quartermaster BQC is a temporary duty and return status assignment. The course provides an intense introduction to Army logistics operations. In FY 92 and FY 93, there were five Quartermaster BQC classes with 181 graduates. There are four Quartermaster BQC classes in FY 94 for an anticipated 140 officers. The Quartermaster BQC prepares officers for logistics-related jobs at their current installations.

After about two years in a logistics-related job, the officer will attend the Combined Logistics Officer Advanced Course (CLOAC). CLOAC is the U.S. Army Training and Doctrine Command's premier officer advanced course. The course is held at the Army Logistics Management College and is a 21-week permanent change of station to Fort Lee, VA. CLOAC trains Quartermaster, Ordnance, Medical Service Corps, Transportation, and Aviation supply officers to become multifunctional logisticians. Phase one of CLOAC provides instruction in common unit-level subjects to develop captains and senior first lieutenants for positions as company commanders. Phase two is a five-week temporary duty assignment to the five branch schools to learn branch-specific duties. The final phase brings the students back together at Fort Lee to continue training as multifunctional staff officers.

CLOAC graduates are trained to support the mission of combat units. Branch detailees who successfully complete CLOAC are more sensitive to the needs of a combat unit than those officers who are pure Quartermaster. They have a fuller understanding of the urgency for quick responses to logistics requirements. Branch detail officers quickly compensate for their lack of knowledge of logistics and perform to the standard. In the two pilot CLOAC classes, six branch detail officers were in the top 20 percent of their graduating classes. Two of these six officers were honor graduates.

Concerns

Branch detail officers are meeting the standards in the classroom, but they have expressed some concerns. The primary concern is that senior raters in the field use them to round out the middle and lower portion of their senior rater profiles. They are also concerned that their peers who remain in combat arms branches are placed in the demanding leadership positions. These are valid concerns for detailed officers. In times of tightening budgets and forced reductions, there is little room for error in an officer's career. Fortunately, the annual promotion selection boards do not reflect these concerns. Branch detail officers are

being selected for promotions at the same rate or ahead of their Quartermaster-pure counterparts. For FY 89, the total selection percentage for the Quartermaster branch was 77 percent. The detailed officer selection rate was 79 percent. This trend continued through the FY 93 Lieutenant Retention/Captain Selection Board. Of the officers not selected for promotion or retention in FY 93, 31.4 percent were branch detail and 68.6 percent were pure Quartermaster officers.

Branch detail officers can do many things to enhance their transition from combat arms to combat service support. Self-development is a critical element in the process. The officer should begin a systematic familiarization with the regulations concerning logistics. Pursuing logistic-related organizational assignments is another career-enhancing option. Senior Quartermaster officers suggest pursuing leadership roles in divisional logistics units. Senior leadership continues to stress the importance of performing each assigned position well. Branch detail officers armed with this information will continue to take the Quartermaster Corps by storm.

CPT James D. Costigan is a graduate of the Combined Logistics Officer Advanced Course at the U.S. Army Logistics and Management College, Fort Lee, Virginia. He also is a graduate of the Quartermaster Petroleum Officer Course, Air Defense Artillery Officer Basic Course, and Quartermaster Branch Qualification Course. He has a bachelor of arts degree in biology from the University of Northern Iowa. He has served with A Battery, 4-1 Air Defense Artillery Battalion (BN), Muenchweiler, Germany; and with Headquarters and Headquarters Detachment, 84th Ordnance BN, Muenchweiler, Germany.

Things I Wish I Had known as a Lieutenant

CPT Benjamin E. Henderson

As a cadet at the University of Wisconsin, I often wondered what being a platoon leader is like. On my first tour in Hawaii, I was a platoon leader, property book officer and company commander. Through these positions and deployments, I learned many valuable lessons as a leader:

- **Set the Example:** Leaders on and off duty are under a microscope. Our soldiers know we are not perfect, but we must strive for perfection in everything we do. If we expect our soldiers to do physical training (PT), we must do PT. If we expect our soldiers to perform preventive maintenance checks and services (PMCS), we get our hands dirty and educate them on how to do PMCS properly. If we expect our soldiers to do something, we must be able to do it ourselves. The poorest example was an officer who briefed his soldiers on a Friday night on drinking and driving and later was arrested for driving while intoxicated.

- **PT:** PT does the body good. A leader may not be the fastest runner, able to do the most push-ups or sit-ups, but must be able to hang with the soldiers. In PT, be one of the soldiers, score in the top 10 percent during the Army physical readiness test (APRT), and learn to enjoy PT. Physical conditioning involves the whole body: mental, physical and spiritual. Leaders must be able to lead their soldiers in PT just as in war.
- **Code of Ethics:** Leaders must have a set of rules to live by. No matter what happens, we must not violate them or let anyone force us to violate them. The Army and its leadership tests soldiers every day, but leaders must be strong and not compromise their principles. There are “politicians” who compromise their principles. My recommendation is to stay away from “politicians.” If you are ever faced with violating your personal code, ask yourself: “Can I live with myself if I do this?”
- **Awards:** Everyone in the Army wants recognition for a job well done. To place a ribbon on your chest or an award on the wall is great, but this does not always happen. Leaders soon find out they must settle for knowing they did a good job instead of receiving an award. Do not concern yourself with receiving awards, but take care of your subordinates. This ultimately earns you respect and support from your junior leaders. Our mission is not to earn awards, but to defend our land and Constitution against enemies foreign and domestic.
- **Mentors:** Every leader needs a superior to consult for advice. When choosing a mentor, choose someone who is trustworthy, senior-ranking, same branch if possible, and willing to tell you the “real” truth. It is not necessary to have a mentor, but it helps to talk to someone who has experienced what you go through.
- **Inspect the Little Things:** We constantly learn from everything we do in the Army. To improve our unit we “must” check the little things. When inspecting our soldiers’ rooms, for example, inspect the refrigerator for cleanliness. If we fail to check the little things as leaders, the enemy will not. Leaders must inspect, but not micromanage.
- **I Quit:** These two words together make up the worst statement a leader can say. No matter how tough it may get, NEVER QUIT! Once you quit, you lose a part of yourself. Every goal may not be obtained, but by quitting you will never reach them.
- **Mission Versus Soldiers:** Mission First, Soldiers Always. A leader will succeed by determining the balance between mission and soldiers. In some instances we have to place more emphasis on the mission and others on soldiers. In most cases, soldiers will give 100 percent if they know their leaders will take care of them.

- **Taking Care of Soldiers:** Leaders must take care of soldiers who come from a wide variety of cultures. Do not baby-sit your soldiers, but teach them how to take responsibility for their actions.
- **Treatment of Soldiers:** Treat soldiers as you want to be treated. Leaders must remember that soldiers help make you who you are as a leader.
- **Family Time:** It is very important to spend quality time with your family. Leaders who make the Army their family and forget about their real family may lose them. Take time to treat your spouse to lunch, watch your children participate in school functions or pick them up from school. Most Army children talk to their parents approximately 15 minutes a day. Do not wish you had spent quality time with your family and find out later it is too late.
- **Leave:** Take leave. The Army gives us 30 days leave a year. It is not a sign of weakness and the unit will not cease to exist if leaders take leave. Leave helps us spend time with our family and friends. It also reenergizes us to regain our focus to be more effective and efficient leaders.

As leaders we have very important jobs because we shape the lives and destinies of soldiers. It takes someone special to be an Army leader. If you do not enjoy it, get out of the business. Give 100 percent and lead by example.

CPT Benjamin E. Henderson is a graduate of the University of Wisconsin, Platteville. He has completed the Quartermaster Basic and Advanced Courses, Junior Maintenance Course, and Airborne and Air Assault Schools. He has held positions as Platoon Leader for Class IX, Class II, packaged Class III and Class VII supplies; Battalion Property Book Officer; and Company Commander for the 45th Support Group in Hawaii. He currently is Supply and Services Officer for the Assistant Chief of Staff, G4 (Logistics), at the Joint Readiness Training Center, Fort Chaffee, Arkansas, and at Fort Polk, Louisiana.

White House Fellows Program, 1995

The President's Commission on White House Fellows annually selects promising citizens from all sectors, including the medical professions, business, the military, the arts and the academic community, to serve as White House Fellows. White House Fellows serve for a one-year period in positions such as special assistant on the White House staff or at different Cabinet-level agencies, for example the Department of Education, Department of Defense and State Department.

The President's Commission on White House Fellows has established U.S. citizenship as the only eligibility requirement for participation. This is NOT waivable. Army applicants must meet the following additional criteria: be eligible to participate according to AR 621-7 (Acceptance of Fellowships, Scholarships, or Grants), have no adverse actions

pending, be branch qualified, meet height and weight standards of AR 600-9 (The Army Weight Control Program), and have a strong potential for continued service and promotion. Officers competing for the White House Fellowship are not eligible to compete for other Army-sponsored fellowships or scholarships at the same time. Officers must request permission from their appropriate career branch in writing.

Completed applications must arrive at the White House Commission not later than 1 Dec 94. The commission will make the final selection of fellows in June 1995.

Congressional Fellowship Program, 1995

Each year the American Political Science Association (APSA) selects two to three active duty Army officers for the Congressional Fellows Program. These officers serve as Congressional Fellows, normally serving in Congress for a one-year period, to gain working knowledge of the legislative branch. A three-year utilization assignment follows the fellowship.

- General prerequisites for applying include the following:
- Meet criteria of AR 621-7 (Acceptance of Fellowships, Scholarships, or Grants).
- Rank as a major or lieutenant colonel.
- Show a strong interest in the legislative process and public affairs.
- Cannot compete for any other Army-sponsored program.
- Be available for utilization assignment immediately following fellowship (AR 621-7, paragraph 2-20).
- Attain military education level (MEL) 4 (resident/nonresident).
- Have demonstrated potential for continued service and promotion.

Interested Army officers should submit their "request to compete," according to AR 621-7, to their career branch, U.S. Total Army Personnel Command (PERSCOM).

A PERSCOM board will meet in February 1995 to select three Army candidates for nomination to APSA. The APSA will make the final selection in May 1995. The fellowship year will start in September 1995.

Olmsted Scholarship

The U.S. military leaders come into contact with citizens and military leaders of many nations because of the U.S. leadership role in the world today. Relationships between nations require considering many political, economic and military factors. It is not enough to know one's own strengths, weaknesses and general characteristics. The solutions of difficulties between nations require a knowledge and depth of

understanding of the particular nations involved. The theme for the Olmsted Scholarship program might well be "Know Your Neighbor." The purpose of creating the Olmsted Scholarship program is the conviction that the greatest leaders must be broadly educated.

The Olmsted Scholarship program involves military officers and their families immersing themselves in a foreign culture while the officer studies a foreign language for two years overseas. Olmsted scholars are expected to become familiar with the institutions, characteristics, customs and people of host nations. Scholars are expected to travel extensively and acquire a familiarity with the host countries.

After the officer completes two years at the foreign university, the officer has the opportunity to attend the Command and General Staff College (CGSC), if selected, and return to a troop assignment for field grade qualification.

Previous Olmsted Scholars include Major General Stan Genega, Director of Civil Works, Office of the Chief of Engineers, Washington, DC; Colonel Bruce Scott, Executive Assistant to Vice Chairman of the Joint Chiefs of Staff; Colonel Michael Deegan, Commander, 3d Brigade, 24th Infantry (Mechanized), Fort Benning, GA; and Colonel John Abizaid, Commander, 1st Brigade, 82d Airborne Division, Fort Bragg, NC.

Officers interested in an Olmsted Scholarship should contact their career branch for nomination information. The PERSCOM Nomination Board will meet in January 1995. The Olmsted Foundation Board will make the final selection in April 1995.

Quartermaster Officer Professional Development

As the Army continues to draw down, we at the Quartermaster Branch, U.S. Army Total Personnel command (PERSCOM), would like to update all officers about some new changes, developments and trends in the assignment and professional development arenas.

Lieutenants Assignment Officer

CPT Regina J. Hamilton

Recently, there has been much discussion about the Combat Arms Branch Detail Program. This program takes combat service support officers and places them in combat arms units. Then the branch detail officers will return to the Quartermaster Branch with their combat arms experience. Many branch detail officers are concerned that their involvement in the program puts them at a disadvantage for promotion. This is incorrect. The results of the last captains board showed that the promotion rate for Quartermaster branch detail officers were significantly better than officers who were straight Quartermaster.

1994 Promotion Board

The results of the 1994 Captains Board should be available in November 1994.

Captains Assignment Officer

CPT LeRoy Stockland

The next reduction in force (RIF) board is tentatively scheduled for February 1995 to consider YG 86 and possibly YG 87 captains with less than 14 years active federal service (AFS). I am currently assessing all files belonging to officers in these year groups. We will probably start calling officers at risk for RIF in November 1994.

1994 Promotion Board

The results of the 1994 Major's board should be ready in August/September 1994. A detailed statistical layout will be available.

FY 95 PERSCOM Army Acquisition Candidate Accession Board (PACAB)

The PACAB will tentatively convene 3 Oct 94 to consider eligible officers for accession into the Army Acquisition Corps (AAC). The primary year group in consideration is YG 87. To be eligible, officers must have a baccalaureate degree, college transcript, Graduate Management Aptitude Test/Graduate Record Examination (GMAT/GRE) scores, be branch qualified, and be a graduate of an advanced course. To apply, submit an official copy of transcripts, a copy of GMAT/GRE scores and a memo volunteering for accession into the AAC. Requests for board consideration must arrive at the U.S. Army Total Personnel Command (PERSCOM) by 12 Sep 94. The PERSCOM point of contact for the FY 95 PACAB is MAJ Delaney, AAC, DSN 221-6354.

Joint Domicile

The Quartermaster Corps readily supports the Joint Married Army Couples Program (JMACP), whenever possible. Joint domicile is a JMACP provision. Officers are assigned to the same geographical area so a common household can be established. Currently, the personnel assignments arena has many demands. In some cases, this affects joint domicile.

Requests for reassignment to join or accompany a spouse will be considered when the couple is enrolled in the JMACP, and there is Officer Distribution Plan (ODP) support for both members in the same area. Applicants must serve a minimum of 12 months before reassignment for joint domicile purposes. Soldiers who have served more than 12 months, but less than 24 months time on station may be permissively reassigned at no cost to the government within the continental U.S. (CONUS) or within an overseas area. Requests for reassignment from CONUS to overseas or vice versa are not authorized with less than 24 months time on station.

Majors Assignment Officer

MAJ Michael J. Sullivan

Branch qualification for majors is currently under revision in DA Pamphlet 600-3 (Commissioned Officer Professional Development and Utilization). The draft version of DA Pamphlet 600-3 expands the limits of branch qualification for all Quartermaster majors. If all goes well, this draft should be approved before FY 95.

The following are the new, expanded standards for majors:

- Majors should serve in at least one but preferably two of the following types of positions:
 - Battalion/group/division support command (DISCOM)/brigade support/logistics operations officer or S3.
 - Battalion executive officer.
 - 04 level commander.
 - Division, installation or corps logistics staff officer such as deputy/assistant G4 and materiel management center (MMC) assignments.
 - Theater Army Area Command/Corps Support Command/DISCOM/group operations/logistics officer.
 - Brigade/group S4.
 - Defense Logistics Agency, Department of the Army, Army Materiel Command, Major Army Command staff logistics officer.
 - Joint assignment.
 - Service school instructor.
 - Functional Area 90 positions as listed above.
- Command and General Staff College (CGSC) is extremely important. Complete CGSC or its equivalent before the lieutenant colonel board or be in the resident course at the time of the board.
- Additional qualifying criteria include a successful assignment as a battalion/group/DISCOM/brigade executive officer (XO), S3, support or logistics operations officer; Corps MMC deputy/XO, MMC chief/commander; or officer conducting the exercise (OCE) at a maneuver training center all enhance your potential for future commands.
- Quartermaster officers continue to serve in a number of multifaceted positions worldwide. The expanded branch-qualifying positions allow Quartermasters to benefit from this experience. These positions will be recognized by future boards.

Lieutenant Colonels Assignment Officer

MAJ Charles J. Toomey

Since March 1994, I've talked with most Quartermaster lieutenant colonels and promotable majors. If we have not spoken, take the time to pick up the phone and let me know of your career aspirations. I'll let you

know Quartermaster requirements, and, hopefully, the two will merge. DSN 221- 8119/8123 or FAX 221-2506.

Battalion Command

Congratulations to all battalion command selectees and alternates in an extremely competitive field. I'll be working with each primary over the next few months to lock in report dates and precommand courses (PCC). Generally speaking, very few will be prepositioned unless rotating out of a tour on schedule. Quartermasters in joint assignments must complete a minimum of 22 months to receive full joint tour credit. You'll have to be flexible when considering PCC dates. Quartermaster branch will be given a quota for each course in FY 95. Not all will get first choice.

Command Boards

The Colonel, Army Competitive Category Board is scheduled for 16 Aug - 9 Sep 94. Information about zones of consideration, officer evaluation report (OER) "through dates," memorandums to the board president and eligibility requirements are in a PERSCOM message dated 041650ZMAY 94. The LTC Combat Service Support Command Board is tentatively scheduled for 29 Nov -16 Dec 94. The LTC Selective Early Retirement Board is tentatively scheduled for 1-18 Nov 94. Scrub your file early, and update your photograph. Your military personnel office (MILPO) can update your Officer Record Brief (ORB). Request a copy of your microfiche and ORB by FAXing a request to DSN 221-0742 or writing to US TAPC, ATTN: TAPC-MSR-S, 200 Stovall Street, Alexandria, VA 22332-0444.

LTC Branch Qualifications

Lastly, I thought it would be interesting to publish the following new LTC branch qualification requirements according to DA Pamphlet 600-3 (draft):

- Should serve in at least two of the following types of positions:
 - Battalion Command - Command of a battalion table of organization and equipment/table of distribution and allowances (TOE/TDA) or its equivalent.
 - Joint assignment.
 - Wholesale assignment.
 - Staff assignment: division, installation Directorate of Logistics, corps, MACOM, Department of the Army or joint staff, such as G4/J4.
 - Service school assignment such as the U.S. Army Quartermaster Center and School and the CGSC.
 - Functional Area 90 (logistician program) coded position.
- Advanced degree is beneficial.
- Senior Service College military education level 1 (MEL 1).

- Additional qualifying criteria. Successful assignment as a battalion commander; division MMC/corps MMC commander/chief; brigade/division support command XO; division/corps/corps support command (COSCOM) G4 enhances an officer's selection consideration for future commands.

Future Readiness Officer

CPT Jerry Chastain

The following article was prepared by the Functional Area Management and Development Division, PERSCOM. The article stresses that an Army officer's career "normally" consists of training and utilization in an officer's basic branch and functional area. The article highlights the importance of having a functional area in a period when the Army is downsizing.

Hey!! What's the Story on This Functional Area Stuff?

When is the last time you checked your Officer Record Brief? If you are a YG 88 or older officer, you should have either a functional area designation under the Career Field Information box and an "X" in the Dual box of the Career Track or no entry in either functional area box under career field information, and an "X" in the Single box of the Career Track. If you are among those unfortunate few who does not fit into one of the above groups of officers, then "Uncle Sam Needs You" to sign up for the Army's special career insurance plan . . . otherwise known as the "Whole Life Plan" in the Army officer development process.

Under the Officer Personnel Management System (OPMS) that was further refined by the Leader Development Action Plan of 1988, all commissioned officers will be designated a functional area in the fifth year of service. That means that all of us are expected to have a functional area designation. Of course, there are exceptions, especially in branches identified as shortage branches such as Engineer, Signal Corps, and Military Intelligence where selected officers are permitted to single track in their basic branch to meet Army requirements.

As is sometimes the case, some of you might think: "If I sign up for functional area training and assignments, I may be taking myself out of the hunt for promotion and command." In reality, officers who perform well in their branch and functional area are no less competitive for promotion and command. Also, being qualified in a functional area offers many benefits. As the Army downsizes and many TOE units are taken off the books, officers who want to fulfill a career need to have other skills when not out in those increasingly limited "muddy boot" jobs. Most functional area requirements in the Army come with op-

portunities for fully funded master and doctorate degrees. The picture is even brighter when you consider that skills acquired on the functional area side of a career can translate to very marketable credentials in the civilian world. It is essentially a two-for-one deal. More importantly, the Army has increasing requirements for officers with functional area skills and experience.

As with any insurance plan, the Army's "Whole Life Plan" has various policy options, functional areas. To figure out how to get the most from your investment, you need to understand the various options. Some functional areas such as 39 (psychological operations and civil affairs) and 48 (foreign area officer) provide extensive language training, a master's degree in international studies, and the opportunity to live in a country and experience the culture firsthand. For those with strong desires to manage budgets and resources, there is Functional Area 45 (comptroller). Training includes getting a master's degree through Syracuse University in New York. There are even fully funded degrees available through Harvard University, Cambridge, MA. Perhaps you find satisfaction in working in news and information. Functional Area 46 (public affairs) officers have opportunities for advanced civil schooling in broadcasting at Marshall University, Huntington, WV, and training with major corporations such as the Turner Broadcasting System (TBS). If you are mathematically oriented, Functional Area 49 (operations research systems analysis) may be an option for you. There are extensive opportunities for advanced degrees in operations research. Functional Area 53 (systems automation) officers receive extensive training and assignments in hardware and software engineering as well as automation management. Advanced civil schooling degrees in computer sciences are supplemented by a wide variety of courses taught at the Computer Science School at Fort Benjamin Harrison, IN.

Dynamic Options

Other functional areas, though more militarily oriented, provide dynamic options under the Army's career insurance plan. Officers assigned to Functional Area 41 (personnel programs management) can expect worldwide assignments in positions from brigade through Headquarters, Department of the Army level, developing and executing personnel resources policies. Functional Area 50 (combat development) officers receive training and assignments centering on developing and documenting the Army force structure. For officers interested in nuclear weapons operations and research, Functional Area 52 (nuclear weapons) provides opportunities for advanced degrees in nuclear physics, nuclear chemistry or engineering physics followed by assignments at national- and theater-level planning and policy organizations. Functional Area 54 (operations, plans and training) offic-

ers develop combat operations at the tactical, operational and strategic levels. Also, they establish combined arms doctrine, policy and priorities for the Army. Functional Area 90 (logistician) is a relatively new functional area limited to Ordnance, Quartermaster, Transportation, Medical Service Corps and Aviation officers. This functional area has training and assignments focused on planning and directing multiple logistics operations. As you can see, all functional area career fields give you inroads to training and experience, many applicable in both the military and civilian worlds.

When should you start looking at your "career insurance" plan options? The best time is before your fifth year of commissioned service when you will receive a packet from PERSCOM asking you to select a functional area designation. Besides reading DA Pamphlet 600-3 to get basic facts, talk to officers serving in a functional area assignment, call your branch assignment officer, or call one of the functional area assignment managers at DSN 221-3119. They have extensive knowledge about the functional area they manage and will gladly discuss schooling, training and assignments. The key factors which ultimately determine your functional area are your overall manner of performance (MOP), college academic discipline, language aptitude, and college grade point average.

Under OPMS, dual-tracked officers will serve alternating tours in their basic branch and functional area. Though this is not always possible, it is important that you get started on the right foot. The first order of business in your functional area involves initial training. That training should take place as soon as possible after you complete company/battery/troop command. Make a point of calling your functional area assignment manager about training at least six months before completing command. The sooner you start your functional area training, which may include civilian and/or military schooling, the greater flexibility you will have in completing the training, serving an initial functional area assignment and returning to your basic branch to continue branch-qualifying assignments. The goal is to remain proficient in both your basic branch and functional area.

If you already have a functional area and want to change, we can make that happen as long as it makes sense and supports the needs of the Army. However, we ask that you do not apply for a change to your functional area for at least 24 months after receiving it. This allows you to check it out first. Submit your request to change your functional area to your assignment manager who will then process it through the Functional Area Assignments Branch, in the Officer Personnel Management Directorate (OPMD), for a vote. Again, the needs of the Army as well as ensuring the change complements your academic and professional experience are key.

The functional area "stuff" is here to stay. As the Army downsizes, you need to participate in the Army's "Whole Life Plan." This allows you to acquire high-demand skills that support Army requirements and pursue your own personal/professional needs. The functional area piece of the plan has many benefits which you need to explore early in your career. Under OPMS you get training and experience in your basic branch and a functional area. Because the Army has many requirements for officers to fill challenging positions of responsibility in functional area assignments, we are committed to producing officers with marketable functional area skills that complement the training and experiences received in your basic branch. Do not miss the opportunity to buy into this life insurance plan.

Warrant Officer Newsletter

The Warrant Officer Division of the U.S. Total Army Personnel Command (PERSCOM) provides information to warrant officers, their commanders and personnel managers in a periodic *Warrant Officer Newsletter*. For further information on how to receive this publication, contact Commander, PERSCOM, ATTN: TAPC-OPW, 200 Stovall Street, Alexandria, VA 22332-0420. Telephone DSN 221-7843 or Commercial (703) 325-7843.

Degree Completion Program

Active duty warrant officers are now eligible to obtain a baccalaureate degree under the Degree Completion Program (DCP).

Application procedures are detailed in AR 621-1 (Training of Military Personnel at Civilian Institutions). Officers interested in applying must meet the following prerequisites:

- Have a minimum of three years of continuous Active Warrant Officer Service (AWOS).
- Be in a Regular Army (RA) or voluntary indefinite (VI) status.
- Possess a high-quality performance record.
- If RA, must enter civilian school program before attaining 26 years of AWOS.
- If other than Regular Army (OTRA), must enter civilian school programs before attaining 16 years of active federal service (AFS).
- Be able to fulfill the active duty service obligation incurred for attending schooling before reaching a mandatory release date.
- Be able to complete the degree program in less than 18 months.

Use the following guidelines to complete your application. Ensure the application (original) is complete and signed. Does it contain the following?

- Your application, either a memorandum (according to AR 621-1, Chapter 5) or DA Form 1618-R (in the back of AR 621-1).

- Commander's endorsement (field grade officer or above).
- Statement agreeing to active duty service obligation (ADSO) (AR 621-1, Chapter 5).
- Letter of acceptance from the university (must be on university letterhead) which has explicit start and end dates (day/month/year), degree to be awarded, discipline, and course curriculum.
- Transcripts.
- A DA form 209 card with your return address on it (to verify receipt of your application).
- Ensure your application is received at least five months before your projected start date.
- Select a university at your current installation or installation of your next permanent change of station.
- Ensure your academic workload is according to AR 621-1, Table 2-1.

Warrant Officer Career Center Update

The Warrant Officer Career Center (WOCC) continues fulfilling its charter as the executive agent for warrant officer professional development. The WOCC lost its provisional status on 1 Oct 93 and is now an active unit with tenant status at Fort Rucker, AL. The 1st Warrant Officer Company exercises command and control for staff and faculty, all assigned students, and the Warrant Officer Candidate School. The WOCC graduated and appointed 964 new warrant officers during FY 93 and expects to train about 1,100 warrant officer candidates in FY 94.

Phase I, Warrant Officer Advanced Course (WOAC), the nonresident course has over 1,500 enrollees. Any warrant officer who reaches six years of warrant officer service after 1 Oct 93 will be enrolled in this course.

The first two classes of the Warrant Officer Staff Course, for CW3 (promotable) received favorable remarks. The last Master Warrant Officer Course was conducted in August 1993, and the first Warrant Officer Senior Staff Course for CW4 (promotable) conducted in January 1994 was also well received.

Also, the center remains busy with projects other than resident training. The WOCC is the lead agency for military qualification standards (MQS) for warrant officers. In partnership with the U.S. Army Total Personnel Command (PERSCOM), the center is updating DA Pamphlet 600-11 (Warrant Officer Leader Development).

Key phone numbers at WOCC are DSN prefix 558-XXXX or Commercial prefix: (205) 255-XXXX:

Director/Commandant/Operations - 3157
Advanced Studies (WOSC/WOSSC) - 3379
Distributive Training - 9538

WOAC Phase 1

The Warrant Officer Advanced Course (WOAC) Phase I is a distributive education course designed to

reinforce and update previous training, experience, skills and knowledge and is a prerequisite to attending the proponent-directed, resident Phase II.

The Warrant Officer Career Center (WOCC) automatically enrolls all Active Component CW2s with 72 months of warrant officer service (WOS) and Reserve Component CW2s with 60 months of WOS. Active and Reserve Component officers with more than 72 and 60 months WOS, respectively, on 1 Oct 93 are exempt from the Phase I requirement. Enrollees have approximately 2 years to complete the 12 modules.

About 1,500 officers are enrolled at this time. However, many boxes of instructional material have been returned for lack of an appropriate mailing address. Officers must ensure that the address on their Officer Record Brief (ORB) is accurate. It is especially important for those stationed overseas to ensure unit numbers are accurate to reduce the volume of returned material.

Warrant Officers Pursuing Bachelor's and Master's Degrees

Many Officer Record Briefs (ORBs) for warrant officers indicate the completion of a particular degree when, in fact, the officer is only pursuing the degree. The large number of records reflecting this category demands correction to ensure fairness when files appear before selection boards.

When looking over an ORB, the reviewer can make an assumption that benefits the officer when the ORB reflects a master's degree and the wrong civilian education level (CEL) code. The benefit of the doubt goes to the officer because of inherent problems with errors on the ORB.

After reviewing the problem, the only correct course of action is to delete all ORB entries for officers who are pursuing a bachelor's or master's degree. Officers who have completed degree requirements should submit transcripts to their career managers to make ORB entries. Officers wishing to relay their current civilian education status to selection boards should communicate with the president of the board according to the particular board announcement.

Military personnel offices (MILPOs) are advised to enter codes for degrees only with course completion certification available. Records will be purged periodically to correct wrong entries.

Panama Tour Lengths

Tour lengths for officers on assignment to Panama have been affected by the implementation of the Panama Canal Treaty. As the U.S. decreases its presence in Central America and organizations are either deactivated or returned to the continental U.S., tour length is determined from the unit of assignment.

Some tours may be as short as 24 months accompanied and 12 months unaccompanied. To determine how long a soldier will remain in Panama, contact the personnel services company to confirm the tour length associated with a specific unit of assignment.

Early Retirement Program

FY 95 will continue as a year of reshaping for the Army and the Quartermaster Corps. The Quartermaster Corps will share in downsizing as Quartermaster authorizations are reduced worldwide. To achieve required end strength goals, the Army will primarily use the FY 95 early retirement program. The purpose of the early retirement program is to provide a tempo-

rary management tool to reshape the Army. This authority will be used to retire soldiers whose skills are excess to the Army's short- and long-term needs. Not an entitlement, early retirement will only be offered to soldiers who meet strict eligibility requirements outlined in MILPER Message NR 94-200. Your local military personnel office (MILPO) has copies of the MILPER message. Only a few Quartermaster military occupational specialties are in the early retirement program. Soldiers should check with their MILPO or call the Quartermaster Branch at the U.S. Army Total Personnel Command (PERSCOM) for a listing of Quartermaster specialties and grades in the FY 95 early retirement program.

Master Sergeant (MSG) Selection Board Results

Quartermaster Corps selections were slightly below the Army average in most statistical categories in results from the MSG selection board published 13 May 94. The one exception to this general rule was military occupational specialty (MOS) 92A (automated logistical specialist). This MOS experienced a banner year performance in both primary and secondary zone selections.

The unusually high selection rates are most likely a result of personnel shortages at the master sergeant level created when MOS 76Z (MSG) was split into 92A and 92Y during the 92A consolidation effort. Most soldiers who held the 76Z MOS were former 76Ys and reclassified to 92Y. This left a significant shortage of 92As to fill the required authorizations. Involuntary reclassifications from 92Y to 92A of some soldiers and this promotion selection list should fill the shortage of 92A master sergeants.

Other Quartermaster MOSs were not as fortunate. The 43M (fabric repair specialist) and 57F (mortuary affairs specialist) MOSs were both "shut out" during the selection process. The 92Y (unit supply specialist) MOS, usually a promotion bright spot, was reduced to only a 6.8 percent selection rate.

The following table depicts how Quartermaster MOSs performed overall and the Army averages:

CMF	MOS	PRIMARY ZONE			SECONDARY ZONE			TOTALS		
		ELIG	#SEL	%SEL	ELIG	#SEL	%SEL	CONS	#SEL	%SEL
77	77F	134	13	9.7	33	2	6.1	167	15	9
	77L	2	0	0	7	0	0	9	0	0
	77W	16	2	12.5	17	0	0	33	2	6.1
	CMF TOTAL	152	15	9.9	57	2	3.5	209	17	8.1
92	43E	40	2	5	15	0	0	55	2	3.6
	43M	1	0	0	0	0	0	1	0	0
	57E	23	2	8.7	1	0	0	24	2	8.3
	57F	16	0	0	10	0	0	26	0	0
	92A	188	170	90.4	379	133	35.1	567	303	53.4
	92Y	603	53	8.8	320	10	3.1	923	63	6.8
	CMF TOTAL	871	227	26.1	725	143	19.7	1,596	370	23.2
94	94B	637	67	10.5	186	6	3.2	823	73	8.9
	CMF TOTAL	637	67	10.5	186	6	3.2	823	73	8.9
QM TOTALS		1,660	309	18.6	968	151	15.6	2,628	460	17.5
ARMY TOTALS		17,132	4,034	23.5	6,255	573	9.2	23,387	4,607	19.7

TRADOC Works to Field 'Varsity Uniforms'

Soldiers graduating from advanced individual training and one-station unit training will soon be issued "varsity" uniforms and selected equipment to keep throughout their Army careers.

"Allowing soldiers to keep essential field clothing and equipment, the varsity game suit, instead of turning it in each time they change duty stations, will instill pride of ownership and enhance the soldiers' readiness and professionalism," said LTC Margaret Bahnsen, Chief, Soldier Support Division (SSD) for the U.S. Army Training and Doctrine Command's (TRADOC's) Deputy Chief of Staff for Combat Development (DCSCD).

Part of DCSCD's mission is determining requirements and product improvements for clothing and individual equipment (CIE). As user representative, SSD ensures soldiers' CIE protects them in all environments and gives them capabilities to perform their jobs.

Several types of nuclear, biological and chemical (NBC) uniforms are being evaluated. They will provide alternate means of protection. New gloves for the NBC uniform will be less bulky and more flexible. A soldier can handle a weapon or a computer with these gloves. An undergarment to protect against chemical agents was recently approved for production.

SSD represents the user on the Department of Defense (DOD) Standardization Working Group (SWG) with members of all military services. SWG members evaluate all clothing and textile items for potential joint service use. All suggestions for improvements to uniforms or equipment come through SSD for evaluation. A soldier recently suggested a fix for the elastic bands that hold camouflage covers on helmets. The band frequently slips off. His solution was to attach Velcro tabs to hold the band in place. That innovation is now being considered for all soldiers.

Another SSD responsibility is overseeing the Soldier Enhancement Program, a Congressionally mandated initiative to acquire items that are commercially available. There are 72 items currently being investigated under SEP. One that was recently approved is a "neck gaiter" for cold weather. Similar to a dickie, a gaiter keeps a skier's neck warm. It is pulled on over the head. The rolled material can also be pulled up to cover the head, leaving the face exposed.

Improvements to the Class A and Class B uniforms also come under SSD. A new woman's shirt designed to be worn tucked in with either uniform is now in production. In the interest of standardization,

SSD is trying to have one style of woman's shirt for both the Air Force and the Army. If adopted, only the colors will be different.

Civilian Job Training for Military Personnel

Military personnel being separated because of downsizing may be able to train for jobs with the states of Georgia and Alabama through a unique Army Career and Alumni Program (ACAP) Southern Region initiative.

Job training includes medical fields, truck driving, electronics, police and mortician work. The program is funded under the Job Training Partnership Act overseen by the U.S. Department of Labor (USDOL) in cooperation with the state of Georgia. ACAP trains people to look for work, but it does not find jobs for them. Colleges and universities, trade schools and commercial training schools provide the training.

When the state of Georgia contracts with a school, for example, the state has to agree to provide job placement, not just job search assistance. The goal is to have a job for a soldier no later than 90 days after separation. ACAP Southern Region and the Georgia Labor Department try to arrange training for completion by the time soldiers are separated. In the initial phase of the program, 155 soldiers enrolled, 151 completed the training and 130 were placed in jobs.

The target audience is soldiers at Fort Benning and other military installations in Georgia and Alabama. However, other military personnel around the country may apply. Those who apply must be planning to reside in Georgia or Alabama after completing the training. Tuition, books and supplies are paid. Georgia Department of Labor officials select individuals for the program. Personnel have to show evidence they are leaving military service because of downsizing. The best proof is the No. 4 copy of DD Form 214 (Certificate of Release or Discharge From Active Duty). Personnel who retired because of their retention control point are also eligible for the program. Those who separate with payments from Voluntary Separation Incentive or Special Separation Benefit may also apply.

Personnel interested in the program may call Ted Craig, ACAP Southern Region Director, or Rochelle Bautista, ACAP Job Retraining Project Officer, at DSN 835-4892/4902 or (706) 545-4892/4902. FAX materials to DSN 835-7642 or (706) 545-7642.

Craig says ACAP organizations at installations in other states should be able to make similar arrange-

ments with the USDL and state labor departments. ACAP officials who want details may also call him or Bautista.

Changes to Officer Education System

A U.S. Army Training and Doctrine Command (TRADOC) team has recommended changes in the Officer Education System to include officer accession policies, precommissioning military training and the Combined Arms Services and Staff School (CAS3).

The study was done by a process action team (PAT) chartered by General Frederick M. Franks, Jr., TRADOC commander. It is one of several teams concentrating on different TRADOC mission areas to help reengineer the command. Army downsizing and reductions in resources have caused TRADOC to change in order to continue performing its functions for the Army.

The PAT included five officers and a civilian. The officers represented various professional branches. One savings proposal calls for conducting precommissioning military training at one location. Currently, the Reserve Officers' Training Corps (ROTC) has the largest precommissioning training program. Cadets go through the training each summer at Fort Bragg, NC, and Fort Lewis, WA. The U.S. Military Academy at West Point, NY, and Officer Candidate School (OCS) at Fort Benning, GA, may also be able to use the new single site. No single site has been chosen.

West Point, ROTC and OCS are the primary sources for new Army officers. West Point and OCS essentially have constant annual quotas of new officers, while the ROTC output is adjusted as the demand rises and falls. It takes ROTC four years to recruit and bring cadets into the program, and then commission them. If the PAT's suggestion is adopted, ROTC, along with West Point, will have stable output goals and OCS will "flex" to meet changing needs. OCS can react to changes with about a year's notice with relatively minor, less expensive changes to meet increased accessions needs.

One of the most successful active duty officer training programs has been CAS3. However, commanders and graduates both want the course earlier in officers' development cycles. Now, officers attend the course between the six- and nine-year point of commissioned service. Before going to CAS3, officers attend their branch's advanced course and generally complete a staff officer assignment before receiving company-level commands. In this sequence, CAS3 training occurs too late.

To adjust the staff assignment-CAS3 sequencing issue, the PAT proposed bringing those two institutional periods — officer advanced course and CAS3 — closer together. A study is currently underway to see if the school at Leavenworth, KS, can handle increased class loads that would result in offering CAS3 earlier in officers' careers.

If the Army leadership adopts the new ideas, the earliest they can be implemented will be fiscal year 1995. What will not change is the essence of officer training. The system's success will continue to rely on small group instruction, field training exercises and relevant performance-oriented, hands-on training.

Think SMARTer

Think SMARTer, don't work harder. Participate in the SMART suggestion program. Save the Army money and increase effectiveness. There may be money in it for you, too.

The Supply and Maintenance Assessment and Review Team (SMART) is chartered by the U.S. Army Deputy Chief of Staff for Logistics (DCSLOG) to collect and review new and innovative ideas for improving our logistics system and to get those ideas in the hands of the proper proponent agency for evaluation. The SMART program is governed by AR 5-17 (The Army Ideas for Excellence Program). The U.S. Army Combined Arms Support Command (CASCOM), Fort Lee, VA, serves as the management focal point and the U.S. Army Training and Doctrine Command's (TRADOC's) executive agent for the SMART program.

SMART works with the proponent agencies to validate, help improve and streamline the way we do business in the logistics and maintenance arena. Anyone in the Army community is eligible to submit ideas that will help reduce the logistical burdens at unit and direct support levels. Logistics-related ideas with worldwide Army potential can be submitted, either handwritten or typed. Suggestions must state the full problem, include references to the publication and/or equipment involved and explain the proposed solution.

Include as much detail and background information as possible. If ideas are adopted, active Army, Army National Guard, U.S. Army Reserve personnel as well as Department of Army civilians are eligible for cash awards. Adopted ideas are saving millions of dollars in reduced operational support costs. Since recording its first initiative in 1982, the SMART program has received over 12,800 initiatives and recommended over 1,750 for adoption. Total Army savings exceed \$165,683,000 with cash awards to suggesters of more than \$724,168. DA Pamphlet 738-750 (Maintenance Update) explains the policy and procedures used by SMART and lists a summary of SMART messages to the field to announce changes to regulations or procedures. SMART messages allow unit commanders to implement changes without delay. For further information, telephone Robert M. Anderson at DSN 687-2406.

Joint Service Field Water Quality

The Department of Defense designated the Army as executive agent for land-based water resources in

1983. A primary duty was establishing a Water Resources Management Action Group (WRMAG). Joint water support issues are coordinated and resolved at WRMAG's annual meetings. After the November 1993 meeting, the Army Environmental Hygiene Agency established Technical Bulletin-Medical 577 (TB MED 577) (Occupational and Environmental Health, Sanitary Control and Surveillance of Field Water Supplies) as a joint service standard. TB MED 577 currently provides preventive medicine guidance to Army military and civilian personnel concerned with the location, production, sanitary control and surveillance of field water supplies on land.

In June 1994, a working group met to develop a strategy for development and publication of a joint service standard. Army, Navy, Air Force and Marine representatives attended the meeting at Aberdeen Proving Ground, MD. An outline for a proposed joint manual came from the meeting. The outline will be staffed through all services for approval before beginning detailed work on the manual.

Petroleum and Water Field Questions

Previously, the Training Developments Division of the Petroleum and Water Department (PWD) answered questions from the field. With the transfer of PWD's training development mission to the U.S. Army Combined Arms Support Command, Fort Lee, VA, PWD is publishing the following points of contact (POCs) for field inquiries: Chief, Advanced Petroleum and Water Division - CPT Jean L. Gaslin, DSN 687-2407, Commercial (804) 734-2407; Chief, Basic Petroleum Logistics Division - CPT John E. Malapit, DSN 687-2701, Commercial (804) 734-2701; Chief, Laboratory Training Division - Kizer Paulk, DSN 687-1382, Commercial (804) 734-1382; Chief, Water Training Division - David L. Bruen, DSN 687-2980, Commercial (804) 734-2980.

Environmental Guide, Fuel Terminals

The Petroleum and Water Department (PWD) at the U.S. Army Quartermaster Center and School, Fort Lee, VA, frequently receives requests from the field for help in developing standing operating procedures (SOPs) for preventing or responding to fuel spills. The office of the Assistant Chief of Staff for Installation Management at Department of the Army reports that more than \$5 million in punitive and stipulated fines have been assessed against Army installations by state and federal environmental regulators since 1 Jan 93.

The PWD has just received the Defense Fuel Supply Center's (DFSC's) *Environmental Guide, Fuel Terminals* prepared for all Department of Defense (DOD) petroleum, oils and lubricants (POL) facilities. This guide includes general information about major envi-

ronmental requirements, emergency procedures, a regulatory summary and checklists. It provides a concise overview of key considerations in fuel spills, wastewater discharges, air emissions, hazardous wastes, underground storage tanks, underground pipelines, and DFSC support. Points of contact for this guide are Bill Middleton and Wayne Barnum, DSN 284-6989 or Commercial (703) 274-6989.

New SARSS-0 Training

The Logistics Training Department, U.S. Army Quartermaster Center and School, Fort Lee, VA, began the Standard Army Retail Supply System-Objective (SARSS-O) level 1 and SARSS 2A automation training in officer, warrant officer, and 92A (automated logistical specialist) noncommissioned officer (NCO) resident courses of instruction 1 May 94.

Each course of instruction has the following:

Course	SARSS 1 Hours	SARSS 2A Hours
Quartermaster Officer Basic	32	8
Quartermaster Officer Advanced Supply and Services Management	32	23
Combined Logistical Officers Advanced	32	23
Officer Basic Course Branch Qualification	4	4
Warrant Officer 920B Advanced	32	48
Warrant Officer 920B Basic 92A Advanced	73	18
Noncommissioned Officer	60	27
92A Basic Noncommissioned Officer	60	27

The department also plans to implement SARSS-O level 1 training in the 92A10 advanced individual training course during 1st Quarter, FY 95.

92A Transition Training Availability

The U.S. Army Quartermaster Center and School, Fort Lee, VA, has developed the following transition training plan to assist soldiers qualifying for the 92A (automated logistical specialist) military occupational specialty (MOS). The following are four separate categories in this transition training plan:

- Supplemental Training: The 92A Supplemental Training Package was designed using existing Army Correspondence Course Programs (ACCPs) and Training Extension Courses (TECs). This material is for familiarization purposes only and DOES NOT REMOVE the Y2 designator. With the fielding of the 92A ACCPs and the Reserve Component 3 (RC3)/Troop School Package, the

Supplemental Training Package will no longer be needed. However, until supplies are depleted, a soldier may request the 92A Supplemental Training Package by completing DA Form 145 (Army Correspondence Course Enrollment Application). The soldier's current MOS, with the old MOS in parenthesis, and skill level must be entered in blocks 2 and 16. The request should be sent to the Army Institute for Professional Development, U.S. Army Training Support Center (ATSC), Newport News, VA 23628-0001.

- Reserve/Troop School Training: The 244-hour 92A10 RC3/Troop School Package is currently being distributed. It contains both paper-based training and automated training. It WILL REMOVE the Y2 designator. Limited quantities of the RC3/Troop School Package are also available to the Active Component. A TRADOC/FORSCOM Form 322R must be prepared to receive the package. The completed form can be FAXed to ATSC at 1-804- 878-3288.
- Exportable Training: The 30-, 40- and 50-level subcourses are now available for enrollment. The 10/20-level subcourses will be available the end of 4th Quarter, FY 94. Only the 10/20-level 92A10 course WILL REMOVE the Y2 designator. This is because the 30-, 40- and 50-level subcourses primarily provide management techniques and do not address the technical aspects in depth. This training is applicable to both Active and Reserve Component soldiers.
- Resident Training: Attendance at either the Active Component or Reserve Component 92A Advanced Noncommissioned Officer Course (ANCOC) or Basic Noncommissioned Officer Course (BNCOC) REMOVES the Y2 designator. For the Reserve Component, this includes training conducted at the U.S. Armed Forces Schools and Regional Training Sites (RTS) using the RC3/Troop School Package.

For additional information, contact Lewis Thayer at DSN 687-3473 or Ann Spencer at DSN 687-3587.

92A Training Update

On 27 Apr 93, the U.S. Army Quartermaster Center and School, Fort Lee, VA, graduated the pilot class of 23 students from the newly created 92A10 advanced individual training (AIT) courses. When the course for military occupational specialty (MOS) 92A (automated logistical specialist) started, it consisted of 13 weeks, 1 day of training. It has since been reduced to 12 weeks, 2 days. This reduction did not eliminate any critical tasks, but removed redundant training.

Subjects taught in the 92A10 course cover the manual operations at organizational level dealing with prescribed load list (PLL) and The Army Maintenance Management System (TAMMS) procedures. The students progress to the Unit Level Logistics System (ULLS) to learn about automated PLL/TAMMS procedures. They then are exposed to procedures used at the direct support unit level. This consists of understanding DS4 input and output documentation and the procedures used to provide supply support using the Tactical Army Combat Service Support Computer System/Standard Army Retail Supply System (TACCS/SARSS). The instruction also includes the receipt, storage and issue of supplies. This includes the use of LOGMARS and the application of proper care and preservation procedures. The 92A10 student also receives training on how to provide subsistence support to the Army's Field Feeding System.

All work in the 92A10 course emphasizes hands-on training. The 63 hours of ULLS and 54 hours of SARSS training are spent operating the computer terminals that support these systems. A model warehouse is used to train LOGMARS. To reinforce the training, there is a 36-hour Logistics Warrior Field Training Exercise where students practice tasks taught in the classroom. The 92A10 course also has a 32-hour, end-of-course, comprehensive, practical exercise.

Since April 1993, the following numbers of soldiers have been enrolled in/graduated from 92A MOS training:

	Regular Army	U.S. Army Reserve	Army National Guard	International	Total
92A10	2,194/1,538	861/638	703/622	22/19	3,780/2,817
92A30	497/373	14/12	37/31	0/0	584/416
92A40	200/173	8/5	34/29	0/0	242/207

Please send your comments about 92A training needs to Commander, U.S. Army Quartermaster Center and School, ATTN: ATSM-LTD-ST, Fort Lee, VA 23801-5039.

Health and Comfort Pack (HCP)

The HCPs replace the Ration Supplement Sundries Pack (RSSP) Type I and Type II used during *Operation Desert Shield/Storm*. The Type I, general purpose, HCP provides necessary items for 10 individuals for 30 days. The new packs are less expensive and easier to handle than the Type I RSSPs which served 100 soldiers for one day. The new pack has 10 individual bags of everyday use items (one per individual) plus an accessory pack for "as required" replacement of broken or lost items. The Type II, female supplement, serves 10 females for one cycle. It has individually wrapped bulk-packed feminine hygiene items plus a few accessory items.

Directory – Points of Contact

U.S. Army Quartermaster Center

Fort Lee DSN prefixes: 687/539
Commercial prefixes: (804) 734/765-XXXX

The Quartermaster General MG Robert K. Guest	(ATSM-CG) 43458	Petroleum and Water LTC Michael D. Hunt	(ATSM-PWD) 46658
Assistant Commandant COL Carl H. Freeman	(ATSM-AC) 43759	Army Center of Excellence, Subsistence LTC Glen E. Horn	(ATSM-CES) 46647
Deputy Assistant Commandant - Future COL Thomas C. Hill	(ATSM-FD) 46686	Mortuary Affairs Center Tom D. Bourlier (Acting)	(ATSM-MA) 43831
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Chief, Office of the Quartermaster General David O. Lee (Acting)	(ATSM-QMG) 44237	49th Quartermaster Group (Petroleum) COL Larry W. Matthews	(AFFL-GC) 46026
Command Sergeant Major CSM Ricky A. Vernon	(ATSM-CSM) 43248	Noncommissioned Officer Academy CSM Norbert L. Schouviller	(ATSM-SGA) 52221
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Airborne and Field Services LTC William G. Mason	(ATSM-ABN-FS) 45370	United States Army National Guard 1-800-258-9440	(ATSM-RC)
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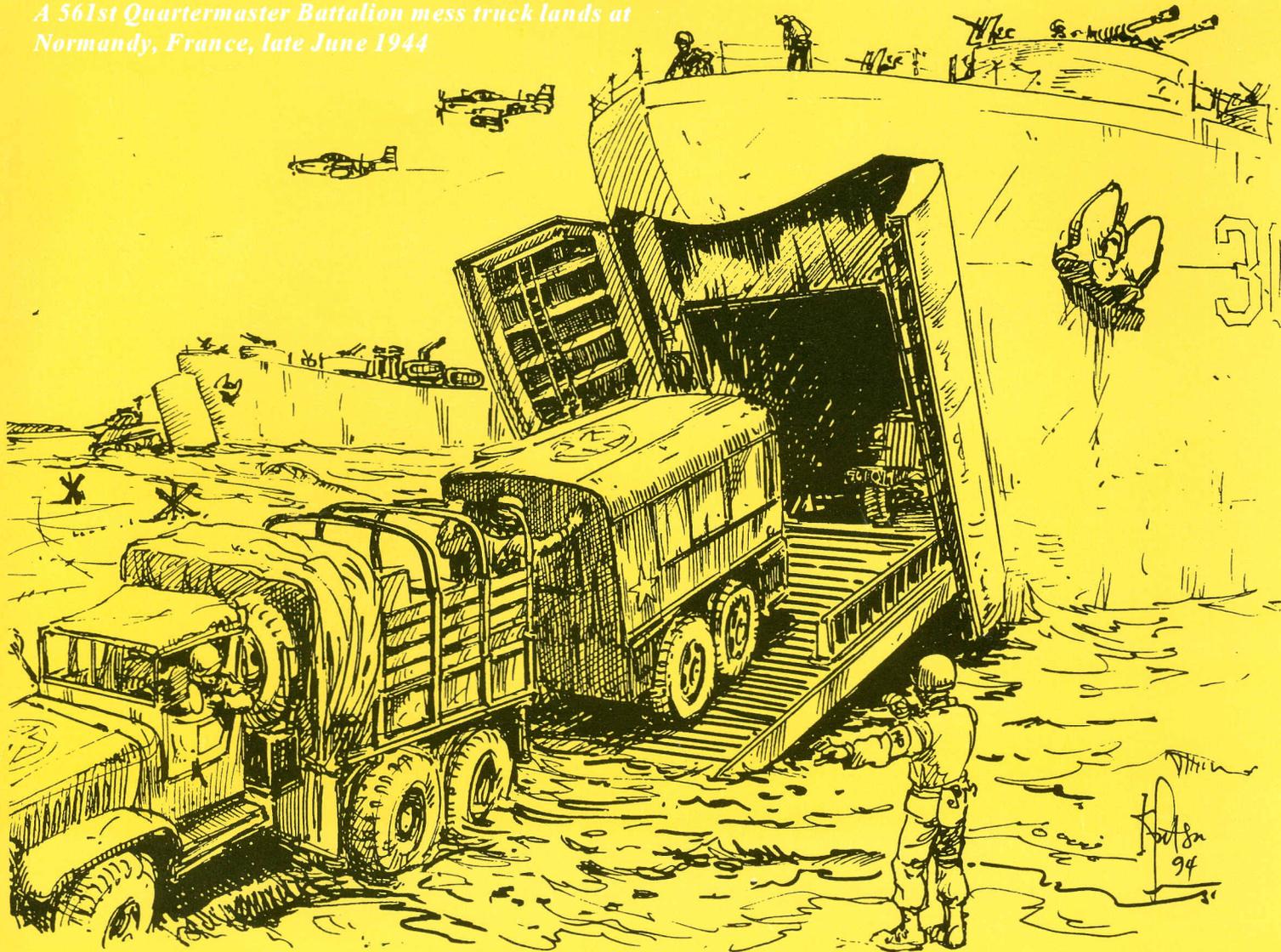
QUARTERMASTER HOTLINE:

The Quartermaster HOTLINE collects immediate feedback from the field on issues such as doctrine, training, personnel proponency, and Quartermaster equipment development with a 24-hour telephone answering service. The Directorate of Evaluation and Standardization records incoming calls after normal duty hours and responds to the caller the next duty day. DSN: 687-3767, Commercial: (804) 734-3767. Collect calls cannot be accepted.

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A 561st Quartermaster Battalion mess truck lands at Normandy, France, late June 1944



561st Supply and Service Battalion

Constituted 11 February 1943 in the Army of the United States as the 561st Quartermaster Service Battalion

Activated 19 March 1943 at Fort Dix, New Jersey

Battalion broken up 20 September 1943 and its elements reorganized and redesignated as follows:

Headquarters and Headquarters Detachment as Headquarters and Headquarters Detachment, 561st Quartermaster Battalion

(Companies A, B, C, and D as the 3212th, 3213th, 3214th and 3215th Quartermaster Service Companies, respectively - hereafter separate lineages)

Headquarters and Headquarters Detachment, 561st Quartermaster Battalion, inactivated 25 June 1946 in France

Redesignated 28 March 1967 as Headquarters and Headquarters Company, 561st Supply and Service Battalion and allocated to the Regular Army

Activated 25 April 1967 at Fort Campbell, Kentucky

Reorganized and redesignated 21 June 1973 as Headquarters and Headquarters Detachment, 561st Maintenance Battalion

Reorganized and redesignated 21 April 1978 as Headquarters and Headquarters Company, 561st Supply and Service Battalion

DEPARTMENT OF THE ARMY
U.S. ARMY QUARTERMASTER CENTER
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ATTN: ATSM-QMG-B
FORT LEE, VIRGINIA 23801-5032

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