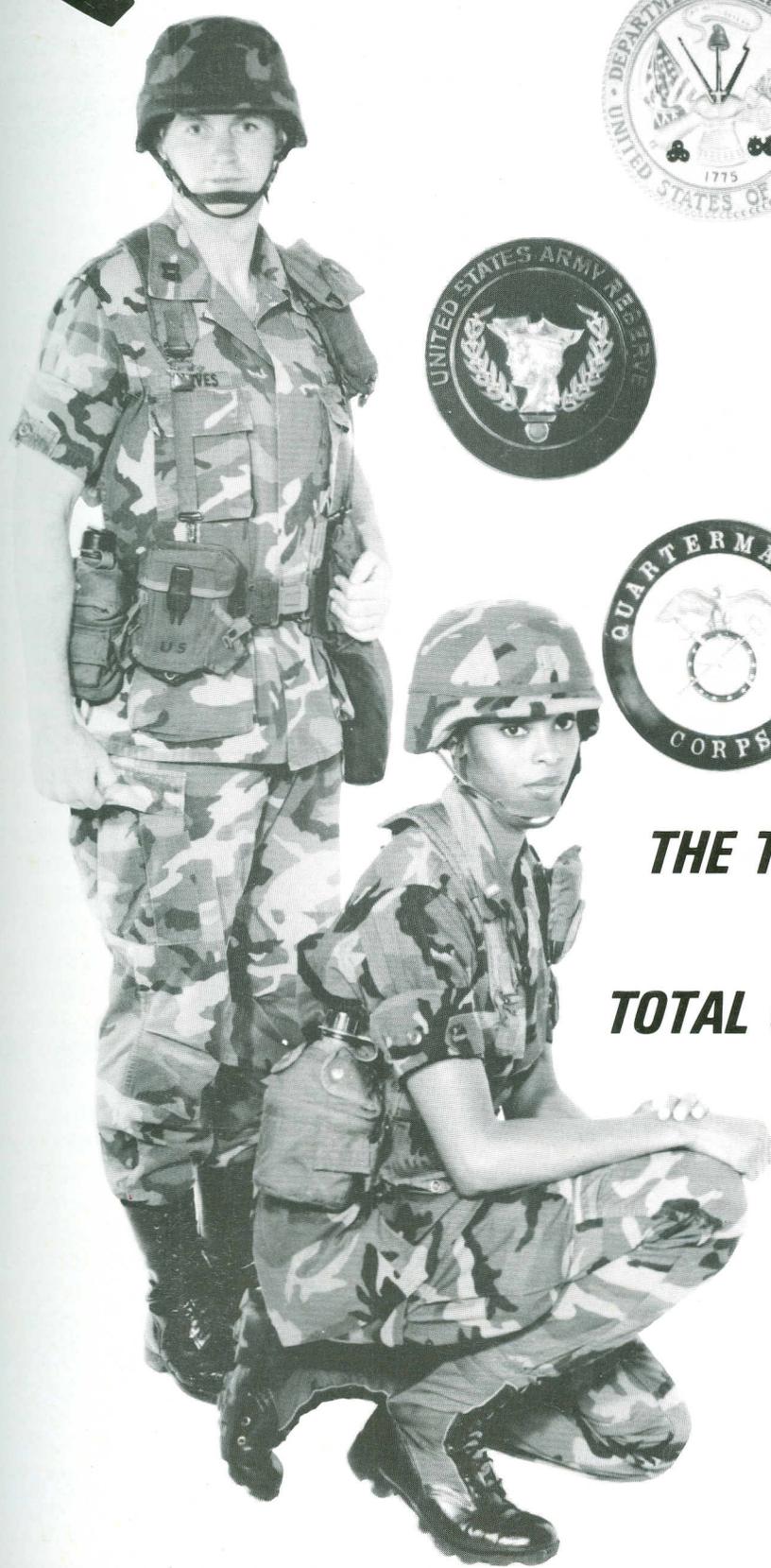


Quartermaster

PROFESSIONAL BULLETIN
SPRING 1990

PB10-90-1



**THE TOTAL ARMY
MEANS
TOTAL COMMITMENT**



U.S. ARMY QUARTERMASTER CORPS



Sustainer of Armies Since 1775

THE QUARTERMASTER GENERAL

Brigadier General Paul J. Vanderploog

EDITOR-IN-CHIEF

LTC John E. Dawley, Jr.

MANAGING EDITOR

CPT Randolph B. Sapp

EDITOR

Linda B. Kines

ASSISTANT EDITOR

Delthea A. Holmes

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

By order of the Secretary of the Army:

CARL E. VUONO
General, United States Army
Chief of Staff

Official:

WILLIAM J. MEEHAN II
Brigadier General, United States Army
The Adjutant General

Distribution: Special

The QUARTERMASTER PROFESSIONAL BULLETIN (ISSN 0896-9795) is published quarterly by the U.S. Army Quartermaster Center and School (PROV), Fort Lee, Virginia. This publication presents professional information, but the views expressed herein are those of the authors, not the Department of Defense or its elements. The content does not necessarily reflect the official U.S. Army position and does not change or supersede any information in other official U.S. Army publications. Use of news items constitutes neither affirmation of their accuracy nor product endorsement. The QUARTERMASTER PROFESSIONAL BULLETIN reserves the right to edit material to meet space constraints. Use of the third person pronoun "he" and any of its forms is intended to include both masculine and feminine genders. All photographs are official U.S. Army photos unless otherwise accredited. CREDIT: "So You Want To Go To College?" by MW4 J.W. Davis originally appeared in the October-December 1989 issue of *Warrant Officer News*, published by the Warrant Officer Division of the U.S. Army Personnel Command (PERSCOM), Alexandria, VA.

CORRESPONDENCE: Articles for use in future editions are invited. Submit comments about published articles and suggestions for future editions to: Editor, QUARTERMASTER PROFESSIONAL BULLETIN, U.S. ARMY QUARTERMASTER CENTER AND SCHOOL (PROV), ATTN: ATSM-ACZ-PB, Fort Lee, VA 23801-5032. Telephone AUTOVON 687-4741, Commercial (804) 734-4741. Local clearance of manuscripts should be obtained prior to submission.

DISTRIBUTION: Approved for public release. Distribution is unlimited.

POSTMASTER: Official postage paid at Petersburg, Virginia 23804-9998.

Quartermaster

PROFESSIONAL BULLETIN

SPECIAL FEATURE - RESERVE COMPONENTS

TOTAL COMMITMENT	
Brigadier General Paul J. Vanderploog	2
FORGING THE TOTAL FORCE: AN OVERVIEW OF RESERVE MOBILIZATION AND INTEGRATION	
LT Stephen D. Loughnane	3
QUARTERMASTERS IN THE RESERVE COMPONENTS	
LTC Leslie Carlow	7
A QUARTERMASTER OFFICER'S CAREER IN THE ARMY RESERVE COMPONENTS	
LTC Mark A. Williams	9
TRANSFERRING TO THE RESERVE COMPONENTS	
LTC Gerald J. Connors, Jr.	13
THE INDIVIDUAL MOBILIZATION AUGMENTEE	
MAJ Donald H. Lewis MAJ Ira S. Naiditch	16
THOUGHTS ON BEING AN IMA	
John Greaves	17
ARMY NATIONAL GUARD'S ROLE AFTER HURRICANE HUGO: ST. CROIX	
MAJ David Saylor MAJ William Erwin	18

GENERAL ARTICLES

SUPPLYING LOW INTENSITY CONFLICT: NATHANAEL GREENE'S SOUTHERN CAMPAIGN OF 1781	
LT Raymond W. Lemaster	20
SUSTAINMENT DURING LOW INTENSITY CONFLICT: THE 7TH INFANTRY DIVISION (LIGHT) IN OPERATION NIMROD DANCER, PANAMA, MAY 1989-DECEMBER 1989	
CPT John E. Malapit	24
REAL WORLD TRAINING: QUARTERMASTER OFFICER BASIC COURSE 89-14	
LT April Caron LT Deirdre Lint	29
SUPPORTING THE FORCE... 'IN THE SINAI WITH THE 1ST U.S. SUPPORT BATTALION'	
LTC James M. Colvin, Jr. CPT Michael D. Houle	32
A TACTICAL EVACUATION OF THE BRIGADE SUPPORT AREA	
CPT Kevin Lee	35
CLEANING THE SWORD	
CPT Charles F. Moore	39
SAFETY SAVES SOLDIERS: DO YOU CARE ENOUGH?	
LTC George C. Knapp, Jr.	44
INDEX 1989	47

FYI - FOR YOUR INFORMATION

TRAINING AND DOCTRINE	51
EVALUATION AND STANDARDIZATION	52
AIRBORNE AND FIELD SERVICES	53
SUPPLY AND PROFESSIONAL DEVELOPMENT	54
PETROLEUM AND WATER	54
GRAVES REGISTRATION	55
ARMY CENTER OF EXCELLENCE, SUBSISTENCE	57
COMBAT DEVELOPMENTS	59

CAREER NOTES

ARMY ACQUISITION CORPS ESTABLISHED	60
SO YOU WANT TO GO TO COLLEGE?	
MW4 J.W. Davis	61
ARMY/AMERICAN COUNCIL ON EDUCATION REGISTRY TRANSCRIPT SYSTEM	62
COMBINED ARMS AND SERVICES STAFF SCHOOL	63
MENTORSHIP--A COORDINATED EFFORT	
CW4 Leslie Craig CW4 Lee Marion	64



TOTAL COMMITMENT

Brigadier General Paul J. Vanderploog

On the threshold of the 21st Century, the United States is confronted by a world in the throes of basic and unprecedented change. Change on a grand scale has become the constant. While some threats to our security appear to be abating, other complex and extremely dangerous challenges are emerging. These include terrorism, trafficking of illicit drugs, proliferation of sophisticated weaponry in potentially hostile developing nations, and regional instability that threatens peaceful coexistence. Of course, all these threats provide unique challenges to the Quartermaster Corps as we support the U.S. Army.

Now, as in the past, Active and Reserve Component Quartermasters must evolve to meet these challenges. The Reserve Components' role in the total force has been steadily enlarged over the past decade as demands on the U.S. Army increased while resources became more constrained. Changing national priorities will likely result in a smaller Active Army; and, as reductions occur, the U.S. Army Reserve and Army National Guard will increase in significance. However, there are strong indications that if the Active Component is reduced further in size, reductions in the Reserve Components can also be expected over time. The potential problem exists that in an effort to maximize warfighting capability within the Reserve Components there is a high probability for further cuts in combat service support. The end result would be the debilitation of the Total Army support capability. We must ensure that the Active Component maintains adequate sustainment capability to meet the needs of contingency forces. Equally critical is the requirement for our Reserve Components to retain adequate capability in their reinforcement and contingency operation roles.

Currently, the Reserve Components make up approximately one-half of the combat forces, almost two-thirds of the combat support/combat service support forces, and comprise 70 percent of the total deployable force. Make no mistake about it, with 74 percent of the units and 58 percent of the soldiers within the Quartermaster Corps serving in the Reserve Components -- their role will be key on future battlefields.

Over the past several years, we have witnessed rapid growth in personnel and equipment as the Reserve Components have assumed an increasing share of the Total Army mission. The rapid growth has leveled off, and emphasis has been shifted to fine-tuning the Reserve Components through better

organization, better planning, and more effective training. The current fiscal situation and the changing environment make for some notable challenges. Probably most significant are the complex and demanding training requirements within the Reserve Components. Quartermaster Reserve Component units typically have 38 to 45 days available for training each year. This includes time dedicated to travel, equipment preparation, administration, maintenance, and inspection. Active counterparts plan for about 200 days of training. This comparison alone points to the challenge for the Reserve Component unit commanders to maintain the proficiency within the units. Additional challenges to training include modernization, force restructuring, and high personnel turnover.

In a broader sense, the greatest challenge may be the fact that the entire Reserve Component mission is in transition. Recently, U.S. Army planning changes, while retaining forward deployed forces as first priority, have upgraded contingency forces as second priority and lowered reinforcing forces as third priority. With the decision to place greater reliance on the Reserve Components, deployment of a U.S. Army contingency force in a crisis situation will most likely include Reserve Component soldiers. To further enlarge and more prolonged the military operation, the greater the involvement of Reserve Component Quartermasters and other Reserve Component support personnel, such as logistics and medical personnel. No longer can Army Reserve Component soldiers be viewed as distant cousins of Active Component soldiers. They are full partners who must serve as effectively as their Active Component counterparts.

General Carl E. Vuono, Chief of Staff, U.S. Army, sees the need for our Army of the future to be more versatile, deployable, and lethal. Soldiers in the U.S. Army Reserve and Army National Guard will be key to making that vision a reality. It will require the commitment by the Active Component to enhance the future readiness of the Reserve Components. For our Quartermaster soldiers in the Reserve Components, the U.S. Army's transition period will require unprecedented commitment. As our missions diversify and resources alter, flexibility and creativity will be essential.

BG Paul J. Vanderploog is the U.S. Army Quartermaster General.

FORGING THE TOTAL FORCE:

AN OVERVIEW OF RESERVE MOBILIZATION AND INTEGRATION

LT Stephen D. Loughnane

As his wife climbed up the stairs to check on the children, John settled into his recliner and watched the 11 o'clock news. A correspondent reviewed the latest events in Central America: "The situation in Central America continues to deteriorate. The government of Honduras has placed its military on full alert in response to border violations by the Nicaraguans. Meanwhile, the Nicaraguan ambassador claims that Honduras, acting as an agent of the United States, plans on invading Nicaragua. Let's switch now to our Washington bureau."

With a yawn, John picked himself up from his chair and retired for the evening. At 0430, he received a telephone call from his battalion commander. He learned that the President, in support of the Honduran government, had authorized calling up 200,000 soldiers. John's Reserve Component unit, part of a roundout brigade designated for the 24th Infantry Division (Mechanized), must now execute its wartime mission.

Historically, the U.S. citizenry has preferred a small professional army supplemented by a large reserve force. In response to the demise of communism in Eastern Europe as well as the U.S. budget deficit, the size of the Active Army will probably be reduced. Conversely, the Reserve Components will assume many of the missions formerly performed by active units.

Currently, 53 percent of our military manpower is concentrated in the Reserve Components (U.S. Army Reserve and the Army National Guard). Furthermore, Reserve Components account for 62 percent of our service support units. The projected active force reduction will place more pressure on those Reserve units to sustain,

maintain, and resupply the total force.

Integrating the Reserve Components with the Active Army requires extensive planning and communication. Because of this detailed planning, many Reserve units know what organization they will support, where they will ultimately deploy, and how they will fight the battle. To understand how the total force comes together, let's briefly review the mobilization process. First, we will consider the mobilization options. Next, we will focus on how a Reserve unit activates. Finally, affiliation and CAPSTONE programs which designate Reserve units to complement Active Army forces will be described. (The CAPSTONE program aligns Reserve Component units with Active Army units in case of mobilization for war.) When possible, let's direct our attention to combat service support (CSS) units.

In the U.S., the use of military force remains a political decision. The authority to order mobilization of military forces resides with the President and/or the Congress. The level of the mobilization will depend on the magnitude and type of emergency or threat. With the advice of the Joint Chiefs of Staff, the Secretary of Defense will recommend to the President a level of mobilization to meet the contingency. After reviewing the considerations and requirements for military force, the elected officials will select the mobilization level (Figure 1).

The President and Congress have the following options:

- Selective mobilization.
- Presidential call-up of 200,000 selected reservists.
- Partial mobilization.

- Full mobilization.
- Total mobilization.

Our leaders may choose selective mobilization to counter domestic emergencies. Natural disasters such as hurricanes and earthquakes, civil unrest, or special missions such as support to the Drug Enforcement Agency may each warrant selective mobilization. For example, Reserve CSS units may activate to support units involved in fighting forest fires. In most cases, a state will activate National Guard units to respond to domestic emergencies. Without declaring a national emergency, the President may augment the active forces by activating up to 200,000 reservists for no more than 90 days.

A partial mobilization activates up to one million members of the ready reserve for up to 24 months. This mobilization will usually support a contingency mission or war plan under a declaration of national emergency. The Congress or the President may authorize partial mobilization.

Full mobilization requires Congressional passage of a public law or joint resolution declaring war or national emergency. It requires activation of all Reserve Component units and all Individual Ready Reserve (IRR) members.

During total mobilization, the Armed Forces expand through organization of new units. Mobilization also extends to industry as companies prepare for war production to sustain the larger force. Consider how the U.S. pursued total mobilization during World War II. The military added divisions to the force structure while industry shifted to production of tanks, airplanes, and other essential items.

After our leaders set national security goals, joint strategic military planners develop the forces needed to overcome military threats. For example, if during the first 10 days of war U.S. Army Europe needed four divisions to meet the threat, these requirements would be reflected in the Secretary of Defense's mobilization recommendation.

The theater commander's operations plan (OPLAN) will indicate the force requirements and the use of these assets. A Time Phased Force Development Data (TPFDD) computer file supports the OPLAN by specifying the types of units and equipment required to accomplish the mission. Based on the TPFDD, a Time Phased Force Deployment List (TPFDL) is developed. The TPFDL identifies the continental United States (CONUS) based forces (Reserve Components and Active Army) to be deployed and specifies their priority of arrival in the theater to support the

OPLAN. Essentially, the TPFDL links deployment planning to mobilization planning.

The Army Mobilization and Operations Planning System (AMOPS) provides the blueprint for expanding the Army to meet the requirements of the TPFDL. In six volumes, AMOPS III - The Army Mobilization and Deployment Planning Guidance, provides valuable information on the activation of Reserve units and their integration into the Active Components. AMOPS also includes the Army Mobilization Plan which contains the mobilization plans for Headquarters, Department of the Army (HQDA), and the major commands. Of these, the U.S. Army Forces Command (FORSCOM) plan proves to be the most significant. The AMOPS directs FORSCOM to prepare and, on order, execute plans to mobilize U.S. Army Reserve units. This FORSCOM Mobilization Plan provides guidance for all Reserve units.

In particular, the FORSCOM Mobilization and Deployment Planning System (FORMDEPS), Volume III (Mobilization and Deployment Planning) proves to be invaluable because it contains the Reserve Component Unit Commander Handbook. This document describes how the units will activate. It lists the actions that the units must complete during each phase of mobilization.

If national security interests require activation of the Reserve Component, units will execute the following five phases:

- Phase I - Preparatory: During the preparatory phase, the unit continues to train on mission-essential tasks. However, the commander must also prepare soldiers for entry into federal service. Ideally, all financial and administrative problems should be resolved during the preparatory phase. Additionally, phases two through five must be coordinated.

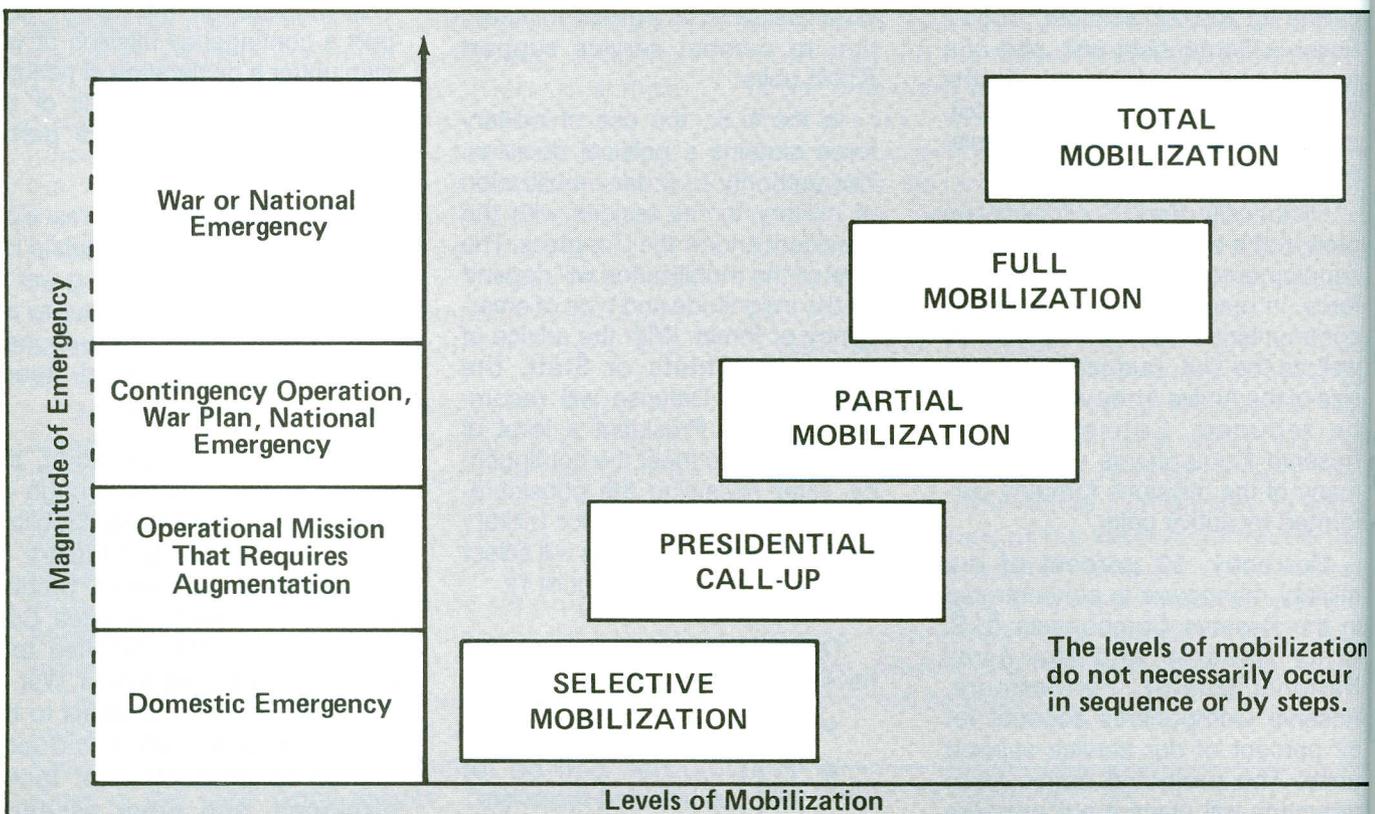


Figure 1.

- Phase II - Alert. The alert phase begins with a warning order to prepare for activation and ends when the unit enters active federal service. Many actions take place during the alert. For example, the unit initiates a recall roster, inventories its property, and identifies advance party members.
- Phase III - Mobilization at Home Station. The unit begins mobilization at the home station following activation. Concurrently, the advance party would move to the mobilization station. At the home station, soldiers will verify their personnel, financial, and medical records. In addition, they would prepare for movement to the mobilization station.
- Phase IV - Movement to the Mobilization Station. Phase IV begins when the unit departs its home station and ends when the entire unit arrives at the mobilization station. For each movement, logisticians should consider the transportation requirements. Rarely will transportation units be available. In actuality, they may have already deployed to their mobilization stations. Consequently, many units must plan on contracting for civilian transportation.
- Phase V - Operational Readiness Improvement. Operational readiness improvement starts on the unit's arrival at the mobilization station. During this phase, the unit will be evaluated on its operational readiness. The evaluation will determine whether the unit needs additional training and resources before deployment. Because of time constraints the unit must attain and

demonstrate proficiency as soon as possible.

As indicated, mobilization requires execution of many tasks simultaneously. However, many units do not rehearse the tasks performed during activation. With their limited time, they concentrate on crew training, individual skills training, and a myriad of other tasks required by the Army.

With this in mind, First Army conducted a 17-day mobilization field training exercise called Operation Golden Thrust. Conducted in October 1987, Operation Golden Thrust tested mobilization doctrine from Phase II (Alert), through Phase

can be corrected during Phase I (Preparatory).

Exercises such as Blazing Trails 87 have provided Reserve units with the opportunity to correct Phase I deficiencies and prepare for movement to an overseas theater. Blazing Trails 87 was part of a three-phased effort to build a 30-mile, two-lane road in north central Honduras. Active, Reserve, and Honduran soldiers participated in the construction of the road.

In 1987, the 108th Support Battalion of the Illinois Army National Guard provided the logistic support element (LSE) for the exercise. The unit had operational control over

CAPSTONE designates planning and training associations for Reserve and Active units based on their projected mission and theater.

V (Operational Readiness Improvement). For this exercise, 115 Reserve units of all branches, 13 state area commands (state headquarters), 12 mobilization stations, and 11 mobilization assistance teams participated.

First Army sought to evaluate mobilization plans, policies, procedures; movement of equipment to the mobilization station; mobilization station support of the unit; and the First Army's mobilization assistance team's planning and validation process.

According to the after action report, "Operation Golden Thrust provided the required stress and realism for which it was designed. The most important and pleasing results are that we have the collective ability to prepare units for mobilization and mobilize the force, even under adverse conditions, and make effective use of unit training time and equipment." As desired, the exercise identified problems, particularly with personnel records maintenance. However, these items

transportation, food service operations, water purification, laundry and bath facilities, and maintenance. With a force of 180 soldiers, this LSE assumed responsibility for over 1,000 major items.

The deployment to Honduras provided the 108th Support Battalion the opportunity to train on unit activation. Following its preparation phase, the unit deployed by rail to Mobile, AL. From Mobile, the unit's equipment moved by ship to Puerres Cortez, Honduras. As part of the 416th Task Force, the unit finally established its operations at Oso Grande, Honduras.

Headquarters, Fourth Army also gained experience in coordinating the 108th Support Battalion's preparation for overseas movement. Overall, the value of these overseas deployments lies not only in the skill training the soldiers receive, but also in the planning directed toward activation and mobilization.

We have briefly reviewed how reserve units mobilize. Remember

PEACETIME STRUCTURE

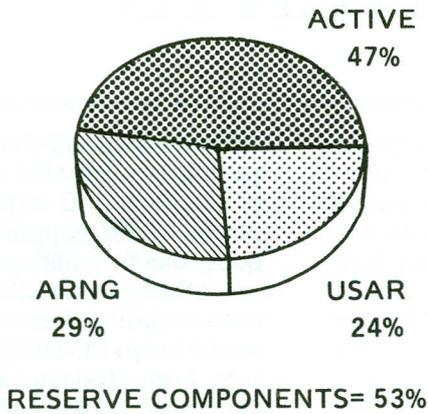


Figure 1.

DEPLOYING FORCES

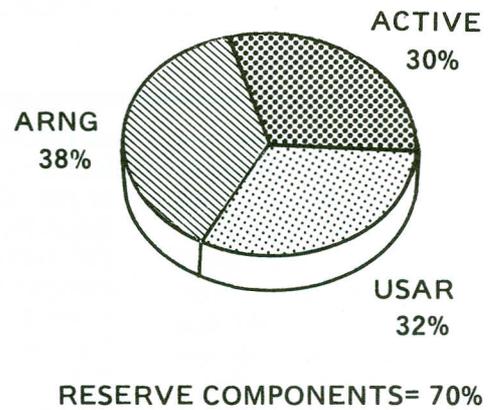


Figure 2.

COMBAT FORCES

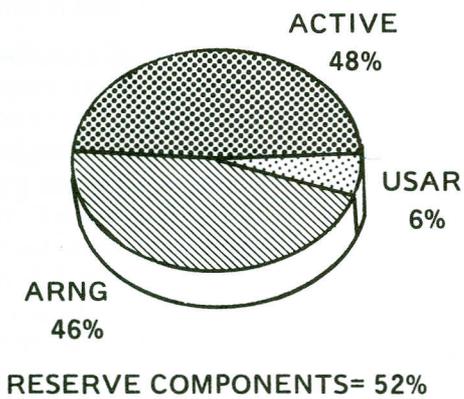


Figure 3.

CS/CSS FORCES

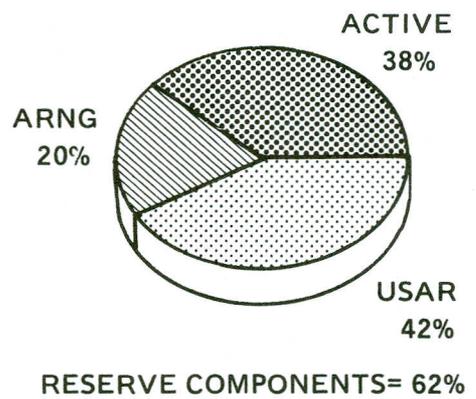


Figure 4.

QUARTERMASTER UNITS

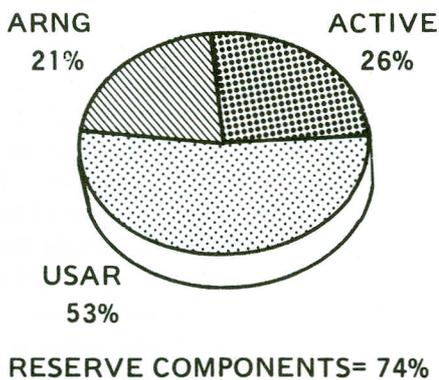


Figure 5.

QUARTERMASTER PERSONNEL

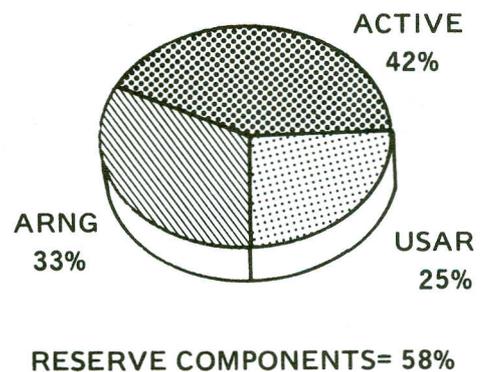


Figure 6.

A QUARtermaster OFFICER'S CAREER IN THE ARMY RESERVE COMPONENTS

LTC Mark A. Williams

Most Quartermaster units are in the Reserve Components (RC), the U.S. Army Reserve (USAR), and Army National Guard (ARNG). This requires a need to understand the path for career advancement and job success that the RC officer has taken.

This career information also is important to the Active Component (AC) officer for two reasons:

- Understanding career progression and training requirements may give an insight to the training of the RC officer. This is the same soldier you may support or who may support you upon mobilization.
- All Quartermaster officers do not remain on active duty for 20-plus years. An understanding of what the RC is and how it functions may help you plan and define your options.

A major difference in career planning between the RC officer and an AC contemporary is that each RC officer is personally responsible for qualifications and career management. In other words, no one calls and says that it's time for you to take command of a company or it's time to go to school. If you wait, the call may never come.

RC EDUCATION

The educational pyramid for the RC officer is similar to the AC officer (Figure 1). However, the Officer Basic Course (OBC) is the only required resident course. All other courses have a U.S. Army Reserve Forces (USARF) school or Army Correspondence Course Program (ACCP) equivalent. Combined Arms and Service Staff School (CAS³) is not currently required for professional development education (PDE), but there are indications

that it will be. The RC version of the course is in test stages.

A major difference between the AC and the RC is the way the components manage the school tour. The AC officer usually goes to school between assignments. The RC officer does not have that option. The unit's mission and the individual's responsibilities in the unit do not stop during school. Temporary duty (TDY) enroute is not the usual alternative: it is normally TDY and return. This is true for all schools whether a two-week course or the nine-month Command General Staff College (CGSC). Time off for school is not always available from a civilian employer or recognized by an employer as important to your advancement.

RC OBLIGATION

These are the two groups of officers within the RC:

- The obligated officer is a soldier who has not yet completed an initial eight-year statutory obligation. See Army Regulation (AR) 135-91 (Service Obligations, Methods of Fulfillment, Participation Requirements, and Enforcement Procedures). The obligated officer may be mandatorily assigned to a USAR unit within 50 miles from home. There is no requirement that this assignment be a Quartermaster unit. Therefore, the possibility of having the right assignment at the right time is a function of excellent individual planning and an effective civilian job search (luck). This obligation can be satisfied in the following ways:

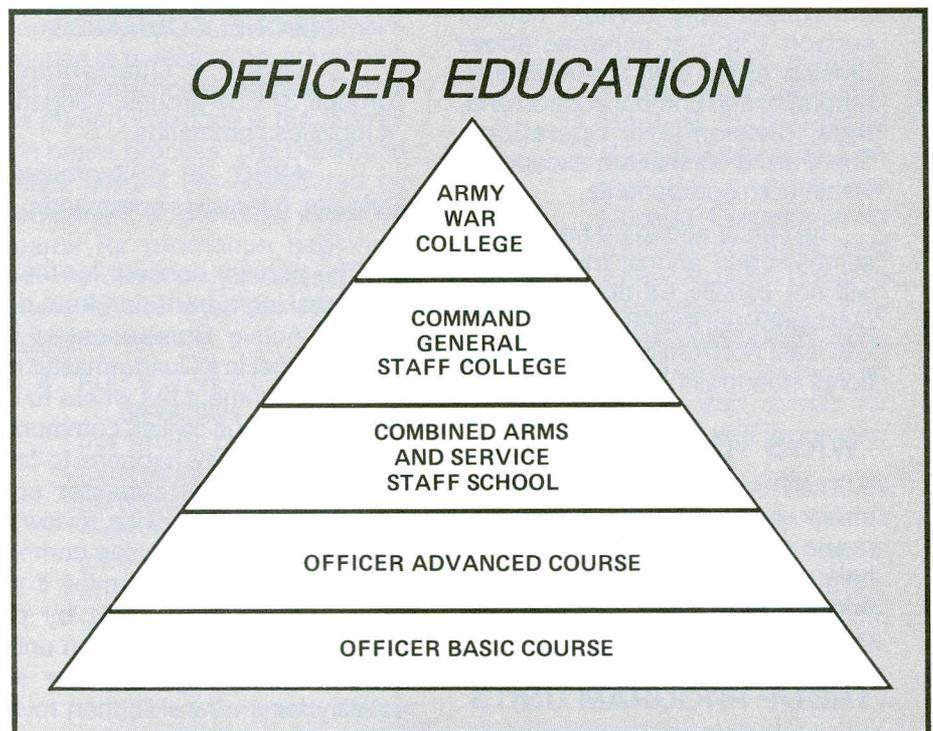


Figure 1.

- A USAR Troop Program Unit (TPU) or ARNG unit assignment,
 - Individual Ready Reserve (IRR),
 - Individual Mobilization Augmentee (IMA).
- The second group of officers within the RC includes the officer who is no longer obligated but wishes to maintain an association with the Army. This officer is interested in active participation in the system for many reasons, including patriotism and monetary motivation. This is a true member of the all-volunteer Army.

ARNG VERSUS USAR

The USAR program and the ARNG program differ. This article will discuss only a portion of the mobilization mission and the impact on the individual. USAR units are traditionally combat service support (CSS) at echelons above division. ARNG units are traditionally combat and combat support and, thus, division-level operations. There are units that are exceptions within both components.

The officer attending training assemblies and annual training (AT) will not usually be able to distinguish between the ARNG and USAR -- at least not from a mission/operational standpoint.

WAYS TO PARTICIPATE

The RC Quartermaster officer is able to perform operational duties, manage career development, balance civilian and military education, and earn success in a number of ways.

TROOP PROGRAM UNITS

A TPU, which is a table of organization and equipment (TOE) or

table of distribution and allowances (TDA) unit, is an operational unit that retains its identity upon mobilization. The members serve and train with the unit and will deploy with the unit. Members participate in unit training activities on a part-time basis and usually attend annual training as a unit.

Quartermaster TPUs in the RC:

COMPANY COMMANDS

USAR: 126 Quartermaster companies, 161 other CSS and multifunctional company-size units.

ARNG: 45 Quartermaster companies, 197 other CSS and multifunctional company-size units.

LIEUTENANT COLONEL COMMANDS

USAR: 29 Quartermaster battalions, 52 CSS and multifunctional battalions.

ARNG: 29 Quartermaster battalions, 79 CSS and multifunctional battalions.

COLONEL COMMANDS

USAR: 2 Quartermaster groups, 37 CSS groups, 4 brigades, 4 logistics commands.

ARNG: 26 CSS groups, 1 brigade, 6 logistics commands.

The primary concern for the officer making a transition from duty in the Active Component is not where to get in a Quartermaster unit or an assignment but where to live and work in the civilian community. If the community happens to have one of the Quartermaster commands, great. Otherwise, review the units within a reasonable commuting distance and determine if you can achieve your goals by participating with that particular unit. If you must branch transfer and qualify for a new skill, then review the options that you have, participate in the unit or the IRR. The

proponent school will assist in determining branch qualification requirements.

INDIVIDUAL READY RESERVE

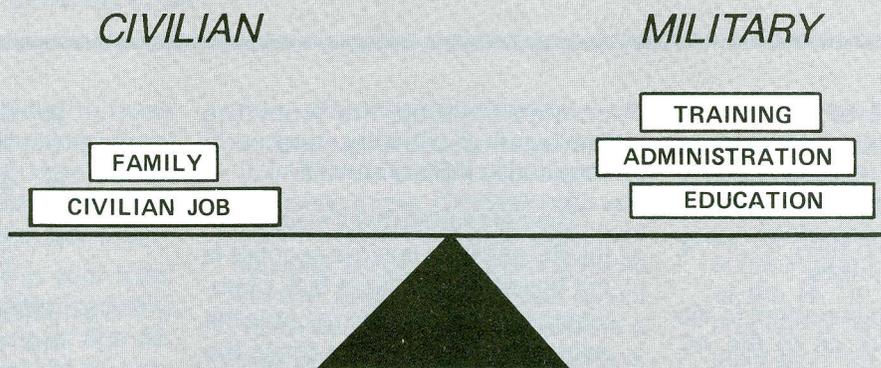
The IRR consists of all members of the Ready Reserve who do not belong to the Selected Reserve, such as troop program unit members, Active Guard Reserve (AGR) personnel, and Individual Mobilization Augmentees. Members may perform voluntary unpaid drills with units or perform other unpaid inactive duty training in order to accumulate retirement points. Individuals may be attached to units to perform duties without pay and can accumulate points with the accomplishment of projects. Approximately 13 percent of the 276,259 IRR soldiers are Quartermaster.

Officers assigned to the IRR can satisfactorily participate in the USAR program, but it does require more effort. Routine contact with the Army Reserve Personnel Center (ARPERCEN), St. Louis, MO, to identify counterpart training opportunities with Active Duty is a must. The duty is for a minimum of 12 days of training time. The emphasis is on training, and the fact that the Active Army may benefit from this training is incidental to the requirements. The officer uses the balance of time for earning enough retirement points to have a qualifying year by such actions as completing correspondence courses and special projects. Other methods are available but require coordination with ARPERCEN to determine eligibility and funding priorities.

The IRR officer can have a successful military career. However, it requires planning, performance and maintaining personal control of

THE RC OFFICER CHALLENGE

TIME - BALANCING CONFLICTS



FOR MOST RC OFFICERS - A DIFFICULT BALANCING ACT

Figure 2.

the career, a very real individual responsibility.

INDIVIDUAL MOBILIZATION AUGMENTEE

The IMA program is for soldiers who are not members of RC units, but who wish to have recurring training opportunities with the same organization. It allows the individual to participate and maintain experience in case of mobilization.

Current Active Army staffing is capable of meeting peacetime needs. However, in the event of mobilization, an augmentation force capable of immediately filling required positions is essential. The role of the IMA is first-line augmentation in the event of mobilization for war or national emergency. This program provides pre-identified Reserve soldiers to meet the active force's wartime requirements.

ARPERCEN works with individuals interested in the IMA program and with participating officers. ARPERCEN ensures that training opportunities are available and that the officer has the option of participating within the constraints of civilian employment.

Annual training (AT) is normally 12 days with the IMA agency. Training time is scheduled by the

organization in coordination with the individual.

Currently, there are 14,665 positions worldwide for IMA with 8 percent filled by Quartermaster personnel. IMA positions are available for all grades and military occupational specialties (MOSs).

SELECTION BOARDS

The RC officer records are reviewed and considered from many perspectives to ensure maintenance of participation, education, and performance standards. One of the primary methods is the promotion board process. The USAR and ARNG officers are considered by Department of the Army selection boards for promotion beginning with the selection for captain. The following are the two types of promotion boards:

- **FULLY QUALIFIED BOARDS.** To be eligible for selection, the ARNG or USAR officer must be in an active status or participating satisfactorily in reserve training, meet service requirements, meet educational requirements (officers), qualify physically and morally, and show the capability of performing the duties at the next higher grade. All officers found to be fully qualified will be

recommended for promotion. Boards meeting under this criteria select officers for promotion to captain through lieutenant colonel.

- **BEST QUALIFIED BOARDS.** The officer must first be fully qualified, then best qualified are selected. The following boards meet under this criteria:
 - Colonel selection board (USAR and ARNG).
 - Resident staff colleges such as Command General Staff College (CGSC), Army War College (AWC), Army War College Corresponding Studies Program, and Active Guard Reserve Program. *Note: The USAR and ARNG have separate selection boards and quotas for resident staff programs.*

Selection panels for the fully qualified and best qualified boards have USAR and ARNG representatives, as well as Active Component, combat, combat support, and combat service support personnel.

Selections for command at battalion/brigade/group/division

support command (DISCOM) levels are determined by the policies of the respective Continental U.S. Army (CONUSA) for Reserve Component soldiers or state for Army National Guard soldiers.

Command is as important to the RC officer's career as to the AC officer's; but the opportunity to command Quartermaster units is directly related to the availability (timing) of the assignment, civilian employer cooperation, and an amount of luck. Quartermaster commands are not equally distributed throughout the states.

CONCLUSION

The Reserve Component program rewards the individual who makes an effort at balancing all the forces impacting on the officer's life (Figure 2). This is a win-win situation for the Army and the individual soldier.

The Army wins by keeping an individual who maintains skills and technical proficiency. The officer's worth is enhanced because the Army may be able to use the civilian-acquired skills. The civilian

community benefits from the leadership training and skill acquired in military service.

The perception that it's easier for the RC officer to achieve success is not based on fact but a lack of understanding of the differences in the rules. The stresses to maintain the balance of a civilian job, family, and a military career are unique to the RC officer. You may not think this is much different than the active officer's balance when facing an unaccompanied tour, TDY, and routine job stress. However, put yourself in the middle of two employers who have a requirement for your services. To experience this easy life, talk to your commander and tell him that you need 75 days a year to work a part-time job. We in the RC do this every year.

Additional information concerning a USAR career is available from the following:

- USAR or ARNG Adviser, U.S. Army Quartermaster Center and School (PROV):

- Commercial (804) 733-3530
- AUTOVON 687-3530
- 1 - (800) - 284-4930 X3530
- ARPERCEN, Officer Personnel Management Directorate, Quartermaster Branch:
 - Commercial (314) 267-844
 - AUTOVON 693-7844
 - 1 - (800) - 325-4957
- IMA Division
 - Commercial (314) 267-736
 - AUTOVON 693-7736
 - 1 - (800) - 325-1874

LTC Mark A. Williams is U.S. Army Reserve Adviser to the U.S. Army Quartermaster General, U.S. Army Quartermaster Center and School (PROV), Fort Lee, Virginia.

THE NOT-SO-GOOD OLD DAYS

Most of us tend to romanticize the past, think it was somehow better back then, less complicated. In fact the good old days were never as good as they seem. This is especially true of the military in the last century, during the so-called Jacksonian Era of the 1830s and 40s.

For the Common Defense, a textbook on American military history, offers fresh insight on how it really was for soldiers back then:

Conditions, the authors tell us, "were often deplorable, featuring

low pay, coarse and monotonous rations, primitive medical facilities, and near-sadistic discipline. Isolated in frontier posts, soldiers had few opportunities for martial glory and none for becoming officers. Instead they performed manual labor, building and maintaining forts and roads, farming, caring for livestock, and cutting wood."

"Once enlisted, many men turned to drinking and desertion....desertion in the Army reached absurd proportions. In 1830 more than 1,200 men deserted

from an Army with an authorized strength of only 6,000!"

Officers who chose to make a career of the military found that promotions were few and far between. Everyone was tied to the seniority system. "It often took twenty or thirty years for an Army officer to become a major, and five year-old navy lieutenants were commonplace." So much for the good old days!--**Dr. Steven Anders, Quartermaster Corps Historian**

TRANSFERRING TO THE RESERVE COMPONENTS

LTC Gerald J. Connors, Jr.

So, you have decided to leave active duty (or the shrinking Army has decided for you). Here's information you need to plan your future in the Reserve Components (RC).

First, get it clearly in your mind that your personal goal is to achieve a pension which starts at age 60. Your professional goal is to continue making a contribution to the U.S. Army. Your military pension is the reward you receive for continuing to maintain professional standards. The key to the pension is your "retirement year." A retirement year is not a calendar year or a fiscal year. It is the 365-day period that starts on the day you first raise your hand and join the military. It is not the day you enter on active duty unless you raised your hand the same day. Let's say you joined on May 5th (the year doesn't matter) and went on active duty July 17th. Your retirement year ending (RYE) is 4 May.

This is important because the law says that you qualify for a pension if you have 20 "good" retirement years. Since RYE years overlap active duty years, you likely already have one more "good" retirement year than you would expect, based on your years of active duty.

What's a "good" year? A RYE with 50 or more points in it is a "good" year. You get 15 points just for being in the RC. Every day of active duty is a point. If you participate in a weekend drill in an RC unit you earn four points (and four days pay!). A point is given for every three hours of completed correspondence work. There are other ways to earn points and make good years but these are the main ones.

At age 60 all the points you have earned (if you made 20 good years) result in a pension. The more points, the bigger the check. For example, a sergeant has four years of active

duty (five "good years"). This sergeant joins a U.S. Army Reserve (USAR) unit for eight years, earning 75 points a year (12 weekends and summer camp). Then the sergeant decides to go into the Individual Ready Reserve (IRR) for seven years and does just two weeks a year plus correspondence courses. This totals 20 good years, allows promotion to sergeant first class (SFC) and would result in a pension of about \$325 a month. The money is based on what an active duty soldier is getting the year the reservist turns 60 so that inflation protection is built in (private pension plans don't do that). An officer putting in the same time would get about \$650 a month. More active duty or more points earned in the RC results in a bigger check. You also receive all the benefits that Active Army retirees have, including cost-of-living increases (which private pension plans don't provide).

Now that you have the long-term goal, what do you do in the short term?

Earning a living is the first issue to resolve. Once you know where you are going to settle, you can decide about joining an Army National Guard (ARNG) or USAR outfit. Before you leave active duty, however, there are some things you need to do. If your enlistment is going to end, see the in-service recruiter to enlist in the IRR so you will retain your status and rank until you know where you will be. If you have a job waiting or if you have already decided where you will be residing, then you can (through the in-service recruiter) see what RC slots are available there. Since the USAR is mostly combat service support units, a Quartermaster soldier should be able to find a unit. However, the units where you will

be residing may not have your military occupational specialty (MOS) so you may have to change it. Although the the ARNG is mainly a combat arms force, they do have some support units. An advantage of the RC is that you can "shop around" a bit to get the unit that suits you best.

Because the pay and other benefits for unit members are a really good second income, a lot of soldiers seek the paid slots. If you are an officer or sergeant with the rank E5 and above, you may not be able to get into a unit right away. In that case you work with your career adviser (CA) if you're an enlisted member (EM) or your personnel management officer (PMO) if you're an officer or warrant officer at the Army Reserve Personnel Center (ARPERCEN) in St. Louis, MO.

All soldiers have a CA or PMO assigned to assist them. CAs and PMOs all have toll-free lines so you can "reach out and touch them" at no cost to you. (Some telephone numbers to get you in contact are at the end of this article.)

What else do you do before you leave active duty?

You should get a physical examination because it is hard to arrange for one once you are out. You can't train (get paid for active duty) without a valid one. Also, common sense says to get checked out before you leave active duty. A physical remains valid for four years. Do everything you need to get a copy of your last physical. Do not accept the statement that "It'll be in your record."

If you are a Regular Army (RA) officer, you must apply for a USAR commission. It does not

TRANSFERRING TO THE RESERVE COMPONENTS

LTC Gerald J. Connors, Jr.

So, you have decided to leave active duty (or the shrinking Army has decided for you). Here's information you need to plan your future in the Reserve Components (RC).

First, get it clearly in your mind that your personal goal is to achieve a pension which starts at age 60. Your professional goal is to continue making a contribution to the U.S. Army. Your military pension is the reward you receive for continuing to maintain professional standards. The key to the pension is your "retirement year." A retirement year is not a calendar year or a fiscal year. It is the 365-day period that starts on the day you first raise your hand and join the military. It is not the day you enter on active duty unless you raised your hand the same day. Let's say you joined on May 5th (the year doesn't matter) and went on active duty July 17th. Your retirement year ending (RYE) is 4 May.

This is important because the law says that you qualify for a pension if you have 20 "good" retirement years. Since RYE years overlap active duty years, you likely already have one more "good" retirement year than you would expect, based on your years of active duty.

What's a "good" year? A RYE with 50 or more points in it is a "good" year. You get 15 points just for being in the RC. Every day of active duty is a point. If you participate in a weekend drill in an RC unit you earn four points (and four days pay!). A point is given for every three hours of completed correspondence work. There are other ways to earn points and make good years but these are the main ones.

At age 60 all the points you have earned (if you made 20 good years) result in a pension. The more points, the bigger the check. For example, a sergeant has four years of active

duty (five "good years"). This sergeant joins a U.S. Army Reserve (USAR) unit for eight years, earning 75 points a year (12 weekends and summer camp). Then the sergeant decides to go into the Individual Ready Reserve (IRR) for seven years and does just two weeks a year plus correspondence courses. This totals 20 good years, allows promotion to sergeant first class (SFC) and would result in a pension of about \$325 a month. The money is based on what an active duty soldier is getting the year the reservist turns 60 so that inflation protection is built in (private pension plans don't do that). An officer putting in the same time would get about \$650 a month. More active duty or more points earned in the RC results in a bigger check. You also receive all the benefits that Active Army retirees have, including cost-of-living increases (which private pension plans don't provide).

Now that you have the long-term goal, what do you do in the short term?

Earning a living is the first issue to resolve. Once you know where you are going to settle, you can decide about joining an Army National Guard (ARNG) or USAR outfit. Before you leave active duty, however, there are some things you need to do. If your enlistment is going to end, see the in-service recruiter to enlist in the IRR so you will retain your status and rank until you know where you will be. If you have a job waiting or if you have already decided where you will be residing, then you can (through the in-service recruiter) see what RC slots are available there. Since the USAR is mostly combat service support units, a Quartermaster soldier should be able to find a unit. However, the units where you will

be residing may not have your military occupational specialty (MOS) so you may have to change it. Although the the ARNG is mainly a combat arms force, they do have some support units. An advantage of the RC is that you can "shop around" a bit to get the unit that suits you best.

Because the pay and other benefits for unit members are a really good second income, a lot of soldiers seek the paid slots. If you are an officer or sergeant with the rank E5 and above, you may not be able to get into a unit right away. In that case you work with your career adviser (CA) if you're an enlisted member (EM) or your personnel management officer (PMO) if you're an officer or warrant officer at the Army Reserve Personnel Center (ARPERCEN) in St. Louis, MO.

All soldiers have a CA or PMO assigned to assist them. CAs and PMOs all have toll-free lines so you can "reach out and touch them" at no cost to you. (Some telephone numbers to get you in contact are at the end of this article.)

What else do you do before you leave active duty?

You should get a physical examination because it is hard to arrange for one once you are out. You can't train (get paid for active duty) without a valid one. Also, common sense says to get checked out before you leave active duty. A physical remains valid for four years. Do everything you need to get a copy of your last physical. Do not accept the statement that "It'll be in your record."

If you are a Regular Army (RA) officer, you must apply for a USAR commission. It does not

come to you automatically. The appointments number at ARPERCEN to call about a commission is (800) 325-4898. Do not accept from your duty station that "It will be taken care of your last day."

Officers and sergeants (SGTs) with the rank E5 and above, should get an official military photograph. Here again, you keep copies, and don't leave them all in your file. Try to get four or five copies in addition to the one for your file.

What happens to your records? If you have a unit assignment directly from active duty, your records will be sent directly to the unit. If you don't have a unit to go to, your dental, medical, and personnel files are combined and sent to the U.S. Army Military Personnel Center (PERSCOM) (formerly MILPERCEN) in Alexandria, VA, for officers and to Indianapolis, IN, for EM. There the official file (the microfiche) is added to the combined file which is then put in a box, and the box is put on a pallet. When the pallet is full, it is shipped by freight to St. Louis. There the combined file is taken out of the box by clerks who read the files and extract your basic data and enter it into the ARPERCEN computer. (The PERSCOM and ARPERCEN computers don't talk to each other yet.) This is why it sometimes takes two to four months for ARPERCEN to pick you up. Also, with all the manual handling, things can get lost. Therefore, try to copy your records before they start their journey. If you are assigned to or join an ARNG unit, the National Guard records center is at the Guard Personnel Center (GUARDPERCEN) in the Washington D.C. area. GUARDPERCEN doesn't have PMOs and CAs like ARPERCEN. Career advice and guidance in the

Army National Guard are handled at your unit or state headquarters.

Your PMO or CA will be able to write orders on you if you send: the transfer order assigning you to the Reserve Components, a copy of the DD Form 214 (Certificate of Release or Discharge From Active Duty) (the very important separation form you get when you leave active duty), a valid physical (done within four years), a DA Form 873 (Certificate of Clearance and/or Security Determination) if there is one on you, a copy of your DA Form 2-1 (Personnel Qualification Record - Part I), an Officer Record Brief (ORB) (for officers), and any other special forms that apply to you.

How do you get into a unit?

Unless you have an MOS that is in demand, it may be hard to get into a unit if you are above the rank of specialist. You should visit all the units where you live (both USAR and ARNG). Before you visit,

Wear your uniform and look your best Would you hire someone who claimed to be a soldier but looked like someone who didn't know what a 'deuce & a half' was?

prepare some information to leave with the unit. Officers should call their PMO before they leave active duty and request a blank ORB. Then they should copy their PERSCOM ORB onto the RC version, putting items that can change in pencil. Enlisted soldiers should have a copy of their DA Form 2-1 with their current address and phone number(s) clearly marked. Both officers and enlisted personnel should write a military-type resume. It should show your civilian skills and employment as well as your military experience. When you phone for an

interview with a unit, determine who makes the decision to accept you. The weekday senior civilian is usually not the person to make the call. Try to get an appointment with the decision-maker. Wear your uniform and look your best. Would you hire a person who claimed to be a soldier but looked like someone who didn't know what "deuce & a half" was? At each unit you visit be sure to ask for leads for other units.

If you have checked all the units that are in your area and you don't have an offer, you will have to make some decisions.

You can stay in the IRR. If you do you should keep checking with ARPERCEN for an IMA (Individual Mobilization Augmentee) assignment. In fact, as soon as you come under ARPERCEN's control you should start asking for IMA. An IMA is a soldier who is given mobilization orders to a slot in a unit, usually at a headquarters or support unit.

These soldiers train two weeks each year at their unit so they know where to go and what to do for mobilization. In the recent past, IRR soldiers were able to train also, but funding shortages likely will prevent IRR soldiers from getting two weeks a year except in courses required for promotion such as officer advanced course.

You can become a student attached to a U.S. Army Reserve Forces School. There are 92 of them. When you are visiting units, find the one closest to you. You won't get paid but you will earn those famous retirement points and make

contacts that will help you get into a unit. The training may also help you change to an MOS needed in your area.

You can find and join a non-pay unit called a Reserve Training Unit (RTU) or IMA Detachment. Both units are made up mainly of soldiers who can't find units or were promoted out of a slot. The units usually meet two or three nights each month for two hours a meeting. Each meeting is a retirement point. Being attached to this type of unit authorizes you for coverage by the Serviceman's Group Life Insurance (SGLI). The attachment also gets you an annual officer evaluation report (OER) or enlisted evaluation report (EER) which you must have to be promoted. In the RC you go before mandatory promotion boards just as in the Active Army. You need to plan so that you meet the minimum requirements when you come up for promotion. Your CA or PMO will be able to advise you what you need for promotion. These non-pay units have flexible training plans designed by the units to meet the needs of the unit members. The best place to be is in a regular unit, but the RTU units and IMA detachments are better than no unit. To find which RTU units and IMA detachments are in your area, call local USAR and ARNG units and ask the full-time personnel (usually the senior civilians) for leads and phone numbers.

You can investigate joining another service (including the U.S. Coast Guard Reserve). This is involved, but it can be done by working with that service.

You can seek non-pay attachment to a USAR or ARNG unit. Note that you are always ASSIGNED to

some unit. You can only be ASSIGNED to ONE unit at a time but you can be ATTACHED to many places while you are assigned to the one unit. Attachment to a regular unit offers the chances that when a pay slot opens up (if you have built a good reputation) you will likely get the assignment. Being in a regular unit also keeps your skills sharp and is usually more satisfying than an RTU unit or IMA detachment.

You may have heard of the Active Guard Reserve (AGR) program. To apply to come on active duty under this program, you must first have two years in a paid drill unit or two years in an IMA slot. Applications are taken twice a year, and a board is held to establish an order of merit list. Soldiers are offered positions depending on the needs of the Army, their speciality and place on the list. It is not a fast process. Your CA or PMO can answer questions about AGR.

If none of the above work or fit your job situation, then take correspondence courses to get good retirement years. Your CA or PMO will help you with the paperwork and discuss what courses would be best for you. Remember though, that in most cases you will have to get an EER or OER to get promoted. Stay in close contact with your CA or PMO if you are not in a unit of some kind. Your CA or PMO will help you reach your goal of a well-deserved pension at age 60.

One last thought. Most of us don't wear our patriotism on our sleeves, but continued service is the right thing to do for citizens of a country like ours. It can also be fun. Good luck, soldier. 

LTC Gerald J. Connors, Jr., a former Quartermaster Branch Chief at the U.S. Army Reserve Personnel Center (ARPERCEN), St. Louis, Missouri, is now the U.S. Army Reserve Adviser at the Army Logistics Management College, Fort Lee, Virginia.

TOLL-FREE TELEPHONE NUMBERS FOR ARPERCEN

OFFICER COMBAT SERVICE SUPPORT (QUARTERMASTER CORPS)
(800) 325-4957

OFFICER COMBAT ARMS (INFANTRY) (800) 325-4891/4882

OFFICER COMBAT SUPPORT (CORPS OF ENGINEERS) (800) 325-4987

OFFICER SPECIAL BRANCHES (JUDGE ADVOCATE GENERAL'S CORPS)
(800) 325-4916

WARRANT OFFICERS (800) 325-4361/4362

ENLISTED COMBAT SERVICE SUPPORT (QUARTERMASTER CORPS)
(800) 325-4756

ENLISTED COMBAT ARMS (INFANTRY) (800) 325-1878/4750

ENLISTED COMBAT SUPPORT (JUDGE ADVOCATE GENERAL'S
CORPS) (800) 325-4757/4095

For more information on the IRR and ARPERCEN, check out SOLDIERS magazine of October 1989.

THE INDIVIDUAL MOBILIZATION AUGMENTEE

MAJ Donald H. Lewis MAJ Ira S. Naiditch

With implementing new systems and bringing remodeled warehouses on line, the Defense Depot Mechanicsburg, PA (DDMP) Master Storage Plan needed updating. The Directorate of Distribution conducted a search to find the most qualified individual to do the job. Those considered included members of the depot's professional civilian work force, active duty military, and Individual Mobilization Augmentee (IMA) officers.

The mission was assigned to MAJ Donald H. Lewis, a member of the U.S. Army Reserve (USAR), serving his two weeks of annual active duty as an IMA. MAJ Lewis is serving his fourth consecutive IMA tour at DDMP. Bringing his civilian skills in data processing and logistics management in addition to his 16 years of experience as a Quartermaster officer, MAJ Lewis has worked in projects ranging from developing storage policies to analyzing depot systems requirements.

In a national emergency or large-scale mobilization, many military organizations will have immediate needs for augmentation. The IMA program exists to help provide that augmentation with experienced, knowledgeable, and technically proficient Reserve Component officers to fill critical positions.

IMA officers are reservists, usually in the ranks of warrant officer through colonel, assigned to authorized mobilization slots in active duty organizations around the world. They work on special projects which may or may not be part of the daily routine, conduct studies, and participate in many of the daily operations of their host units. MAJ Lewis' position at DDMP is just one of more than 14,000 IMA slots Armywide. Eight percent of all IMAs are Quartermaster officers.

In addition to their military proficiency, IMAs can bring

tremendously valuable civilian experience to their military positions. Often a very clear parallel exists between military duty and civilian occupation. Always a dedicated citizen soldier/officer, the IMA prepares to hit the ground running to accomplish the mission. Additionally, IMAs can bring a new perspective and offer innovative approaches to problem solving. The application of civilian experience to military situations, problems, and issues often results in sound solutions and new courses of action.

To maintain the highest state of readiness possible, IMA officers must meet physical fitness, height/weight, military education, and branch-oriented proficiency standards. To achieve that, the IMAs must be resourceful, independent, and able to take the initiative. Unlike traditional USAR

unit members, IMAs do not participate in regularly scheduled weekend unit drills. The IMA must be disciplined and self-motivated to search out military opportunities to attain the required standards and earn sufficient points for qualifying years for retirement. The IMA may participate in activities such as correspondence courses, local U.S. Armed Forces school attendance and unpaid duty assisting Reserve Officers' Training Corps (ROTC) units, in addition to their two weeks of paid annual training.

For the maximum familiarity with their duty assignment, IMAs coordinate their own annual training with the assigned unit and Army Reserve Personnel Center (ARPERCEN), St. Louis, MO. Here the IMA learns about the personnel with whom he or she will work for many years to come while



MAJ Donald H. Lewis observes procedure during his active duty as an Individual Mobilization Augmentee at Defense Depot Mechanicsburg, PA, with John Getz, deputy chief of bin operations, and Karen Jones, a data transcriber.

accomplishing the assigned military missions.

In the Quartermaster Corps, positions for IMA officers include wholesale supply systems of the Army and Defense Logistics Agency, Alexandria, VA; Headquarters, Department of the Army, Deputy Chief of Staff for Logistics (HQDA DCSLOG), Washington, D.C.; Training and Doctrine Command (TRADOC), Fort Monroe, VA; and the U.S. Army Soldier Support Center, Alexandria, VA.

Assignments exist both in the continental United States (CONUS) and overseas. With Active Component strength cuts imminent, the role of the Reserve Components and, specifically, the IMA become more critical than ever to our nation's security.

For more information about the IMA program, contact the Quartermaster/Transportation Team, Officer Personnel Management Directorate, ARPERCEN, at 1-800-325-4980. 

MAJ Donald H. Lewis, a Quartermaster Officer, has been assigned as an Individual Mobilization Augmentee (IMA) at Defense Depot Mechanicsburg, Pennsylvania, for the past four years.

MAJ Ira S. Naiditch, a Quartermaster Officer, is the Logistics Management Officer at Defense Depot Mechanicsburg, Pennsylvania.

THOUGHTS ON BEING AN IMA

John Greaves

As our Individual Mobilization Augmentee (IMA) tour nears, we start getting "psyched up" for our active duty training. Many of us start looking for the uniforms and other military accouterments that we will require. There may even be a little concern over whether or not uniforms still fit and whether we have to sweat out the weigh-in (literally and figuratively). We make arrangements in our civilian workplace and coordinate family responsibilities to ensure that the whole place doesn't fall apart while we are away.

While all this is part of our routine, it may overshadow the most important aspects of our preparation. That is what we must do to be ready to walk into that position on Monday morning and begin functioning in our mobilization assignment. Many of us are products of a troop program unit and can painfully recall all the planning conferences, visits, and other extra hours associated with preparing our units for mobilization. Why should it be any different for the IMA? If anything, we should be

more prepared and better able to be fully functional upon arrival at our assigned position.

The same types of actions for a unit to be mobilized can be adapted for an IMA. We need prior coordination with our mobilization site so that personnel are ready to accept us and have a plan for how to use us. In effect, we need to have our mission essential task list (METL) prepared. You may ask, "Is this my responsibility?" You bet it is. We need to be sure that both parties are aware of what tasks will be assigned and accomplished during the tour. Nothing is more frustrating than arriving for duty and watching some administrative officer or supervisor scurry around to determine what our "meaningful contribution" will be.

The final piece of individual contribution for a successful tour is your professional preparation. The physical requirements of weight and the Army Physical Fitness Test (APFT) are important and should not be overlooked. However, the mental preparation is paramount to fulfilling our obligation of a mobiliza-

tion assignment. We need to maintain a level of competence equal to our grade and assignment. The U.S. Army is rapidly changing, and we have to keep abreast if we are going to be effective. Most of this information is available through official and unofficial publications. Obtain access to these and stay mentally fit and informed to function in your "go to war" assignment.

We have an obligation to the unit that we train with. We must be prepared to walk into our assignment, ready to perform. We also have a responsibility to the system that allows us to fulfill our obligation to serve our country in an honorable and productive manner. 

John Greaves is the Senior Military Analyst, Concept and Studies Division, Directorate of Combat Developments, U.S. Army Quartermaster Center and School (PROV), Fort Lee, Virginia. He currently is a Colonel in the U.S. Army Reserve assigned to Troop Support Division, Deputy Chief of Staff, Logistics, Department of Army, Washington, D.C.

ARMY NATIONAL GUARD'S ROLE AFTER HURRICANE HUGO: ST. CROIX

MAJ David Saylor MAJ William Erwin

For many, the devastation was beyond comprehension. Hurricane Hugo hit the Virgin Islands of the United States on the night of 17 September 1989 with a fury that demolished homes and businesses, disrupted communications and transportation, downed power lines, polluted water supplies, and caused unbelievable hardships for those who lived there. While the entire Virgin Islands received damage, the island of St. Croix was particularly hard hit. The situation provided a unique opportunity for the Army National Guard to put skills to work and to demonstrate that years of training pays dividends.

The disaster also gave the Virgin Islands National Guard an opportunity to pinpoint its weaknesses. Because virtually every person on St. Croix was affected by the storm, including Army National Guard soldiers and their families, some units struggled to accomplish their civil disaster mission. Without such help from the Army National Guard, recovery would have taken much longer.

Weather forecasters had predicted several days in advance that Hurricane Hugo would pass over the Virgin Islands, so limited planning was possible. Some equipment was repositioned. Some Army National Guard members were called to duty to provide medical support, shelter management assistance, and assistance to the territorial emergency management operations center. However, those assets were not nearly enough to cope with the aftermath of Hurricane Hugo. A request went to the National Guard Bureau, Washington, D.C., from the Adjutant General (AG) of the Virgin Islands, Major General Robert Moorehead, for assistance.

The Virgin Islands was not the only place affected by Hurricane

Hugo. South Carolina suffered much the same damage as St. Croix: but the isolation of St. Croix, a United States territory, made restoration efforts in the Caribbean particularly difficult.

A staff augmentation team of 13 officers and noncommissioned officers (NCOs) (a command and control element of Alabama Army National Guard) was sent to support the AG in assessing what would be needed during the relief effort. In addition, two shower teams and the 109th Evacuation Hospital's deployable medical systems (DEPMEDS) hospital deployed from Alabama. Within 72 hours of receiving the deployment alert, the first elements were on the way to St. Croix.

Approximately 58 members of the 109th Evacuation Hospital of Birmingham, AL, were the first to arrive on St. Croix on 23 September 1989. They began directing the activities of the DEPMEDS facility which became fully operational on 30 September 1989. Fifty-three of the personnel redeployed to Birmingham on 3 October 1989, leaving a caretaker staff of five to maintain the DEPMEDS equipment.

On 24 September 1989, the Assistant Adjutant General for Alabama arrived on St. Croix with the rest of the requested assistance. Assisted by the Assistant Adjutant General for the Virgin Islands, the team began immediately defining a plan to assist civil authorities in relief efforts and the restoration of St. Croix.

The first requirements were easy to determine. Food and water were needed immediately by the hurricane victims. A distribution plan was devised with the American Red Cross, the Department of Agriculture, and the Virgin Islands Emergency Management Agency.

The goal of the Department of Agriculture and the American Red Cross was to distribute food until the major food stores could be reopened. Thus, the immediate requirement was to transport the food to the hurricane victims.

Using assets provided by the XVIII Airborne Corps and the Alabama Army National Guard, a food distribution plan was implemented on St. Croix. Once unloaded at the airport, donated food was trucked to three food distribution warehouses. From the warehouses, it was transferred to food distribution points throughout the island, using the assets of the Virgin Island's Transportation Department, XVIII Airborne Corps, and the Alabama National Guard.

Within days, a deficiency in the organization of the food distribution process was pinpointed. The Alabama Army National Guard stepped in with a movement control team (MCT) from the 1103rd Transportation Battalion, Eufaula, AL, to provide organization and improve the food distribution process. Soon the hurricane victims were receiving food in an orderly manner. As retail stores began to reopen, the Department of Agriculture and the American Red Cross began a food stamp program so residents could buy food locally.

The hurricane virtually wiped out the island's Water and Power Authority (WAPA). Facilities were not expected to be operational for several months, so providing water to the St. Croix residents was a priority. The requirement was divided into two phases. Phase I was water distribution. Phase II was the establishment of water purification points.

An oil company had a desalinization plant at its refinery that could

produce sufficient water for St. Croix. But, because the pipelines and dumping facilities of WAPA were destroyed, distribution became the immediate problem. A joint effort between civilian contractors and the Virgin Islands National Guard provided the means to get the water to distribution points. In addition to civilian water trucks, a total of 22 400-gallon military water trailers were provided by the Readiness Group in Puerto Rico. The Readiness Group and the Alabama National Guard also provided eight M54 water trucks.

Once water was being distributed from the oil company's refinery, Phase II began. This phase established water purification points in the populated areas of St. Croix.

The plan called for using the 620th Quartermaster Company's Engineer Research Development Laboratories (ERDLATORs) to purify water contained in large cisterns (underground storage tanks) at designated housing projects and schools. Some of the storage tanks exceeded a 200,000-gallon capacity.

The process was not the normal manner in which water purification units are employed, but it was what the situation dictated. The Army National Guard soldiers accepted the challenge and accomplished the mission.

While missions of food and water distribution were being handled, the approximately 300 soldiers who were called to territorial active duty had to be supported. The requirement meant establishing a base camp with laundry and shower support.

The 662d Field Service Com-pany of the Virgin Islands National

Guard had the laundry equipment for the requirement, but did not have the field showers. The 123rd and 1135th Supply and Service Companies of the 122d Support Group, Alabama Army National Guard, were called upon to provide field showers and the personnel to operate them. One shower unit was established at the base camp and one was set up to support the DEP-MEDS site. Personnel from the 662d Field Service Company took advantage of an opportunity to receive some shower point refresher training.

Three laundry units from the 662d Field Service Company were used to support the base camp. Daily laundry service was initially established, but after assessing the demand, service was cut to every other day. However, one-day laundry service was maintained. The restoration effort created a demand for transporting soldiers from St. Thomas to duty on St. Croix. Since the Virgin Islands National Guard helicopters were destroyed during Hurricane Hugo, the Kentucky National Guard responded with two UH-60 Blackhawks with crews. The Kentucky National Guard proved invaluable in troop rotation support and in sling loading equipment vital to the restoration effort.

The lack of both internal and external communication was initially solved by personnel of the 285th Combat Communications Flight (CCF) Virgin Islands National Guard. The restoration of communications by the 285th CCF with assistance provided by the Alabama Air Guard and a communications team from the South Carolina Army National Guard made the National Guard restoration effort possible.

The role of the military during disasters is to support civil authorities. Such support, in most cases, is dependent on the flexibility of a military unit and its personnel. Because of the uniqueness of civil disasters, the ways military units receive taskings and the means they use to accomplish their assigned missions are not always "by the book." Knowledge of equipment, ability, and training determines how flexible the military personnel can be.

The citizen soldier has traditionally been expected to perform during emergency situations. They are taught to "train as you would fight." As Hurricane Hugo proved, the enemy is not always the expected. The disaster proved that the combat service support soldier has skills which are in demand during disasters. The disaster also emphasized the need for continuous training.

Such disasters also provide a way to test military units. The response to the aftermath of Hurricane Hugo became an evaluation which could not be manipulated. It provided a truthful and accurate examination of the capabilities of the units involved. 

MAJ David Saylor is the Organization Training Officer for the 167th COSCOM, Headquarters, 167th Support Command (Corps), Birmingham, Alabama.

MAJ William Erwin is the Public Information Officer for the 167th COSCOM, Headquarters, 167th Support Command (Corps), Birmingham, Alabama.

SUPPLYING LOW INTENSITY CONFLICT: NATHANAEL GREENE'S SOUTHERN CAMPAIGN OF 1781

LT Raymond W. Lemaster

As the Cold War slowly thaws, low intensity conflict becomes the most likely battle that today's soldier will fight. Planning to supply that future battle must become a focal point for today's logisticians. In developing logistical doctrine for low intensity conflict, it is important to look not only to the future, but also to the past. A historical perspective is a particularly valuable tool in understanding the fundamental principles of operating in this environment. Low intensity conflict is characterized in FM 100-20 (Low Intensity Conflict) as "internal defense and development assistance operations" by United States forces. While this definition places the United States in a supporting role, remember that the United States itself once waged a successful revolution that extensively used guerrilla warfare.

In 1780, during the American Revolution, Major General Nathanael Greene was appointed commander of the Southern Army. This "army," with an authorized strength of 17,000, actually consisted of 2,307 men on paper, of whom 1,482 were present and less than 800 were equipped and fit for duty. Greene wrote to Commander in Chief of the Continental Army, General George Washington:

My first object will be to equip a flying army, to consist of about eight hundred horse and one thousand infantry. This force, with the occasional aid of the militia, will serve to confine the enemy in their limits, and render it difficult for them to subsist in the interior country. I see but little prospect of getting a force to contend with the enemy upon equal grounds, and therefore must

make the most of a kind of partisan war until we can levy and equip a larger force. (Francis Vinton Greene, General Greene, page 183.)

Greene enlisted the aid of partisan forces that consisted of the local militia under several charismatic leaders. These forces had been conducting a successful guerrilla war against the British and soon proved invaluable to Greene's Campaign.

Nathanael Greene's Southern Campaign is considered one of the most brilliant in American history. The culminating point of the American Revolution, the Southern Campaign turned British public opinion against the war and set the stage for General Charles Cornwallis' defeat at Yorktown. When Greene took command of the Southern Army, the British controlled everything south of North Carolina. Within 11 months, the Carolinas and Georgia were recovered and the American governments reestablished. Outnumbered three to one, Greene's Army marched 950 miles, fought three battles and a score of minor engagements, conducted five sieges, captured nine posts and took nearly 3,000 prisoners. Most amazing of all, Greene's forces won only a single battle during this victorious campaign.

This victory was directly attributable to Greene's use of logistics. He repeatedly suffered tactical defeats, yet he achieved the ultimate objective of every movement his army made. Greene achieved these objectives by making movements that maximized his ability to supply his force and minimized his enemy's ability. As the former Quartermaster General, he had developed a deep

appreciation of the role that logistics plays in combat. His focus on logistics in waging irregular warfare is clearly seen in his orders to Brigadier General Daniel Morgan concerning movement to the British outposts of South Carolina:

The object of this detachment is to give protection to that part of the country and spirit up the people, to annoy the enemy in that quarter, collect the provisions and forage out of the way of the enemy, which you will have formed into a number of magazines in the rear of the position you may think proper to take. You will prevent plundering as much as possible, and be careful of your provisions and forage as may be, giving receipts for whatever you take to all such as are friends to the independence of America. (Kenneth Roberts, The Battle of Cowpens, page 49.)

Greene's logistical focus was also evident in his meticulous preparations for this campaign. Upon assuming command, he contracted for arms, ammunition, and clothing from Pennsylvania, and additional clothing from Southern merchants. He placed Brigadier General Mordecai Gist in charge of collecting and forwarding supplies from Delaware. Baron Friedrich Wilhelm Ludolf Gerhard Augustin Von Steuben was sent to Virginia to recruit reinforcements and establish a supply base. Upon reaching the Carolinas, Greene appointed a quartermaster and a commissariat, and sent his engineer to reconnoiter the rivers of the Carolina piedmont. He contracted for boats, wagons, and innovative wheeled boats. Throughout the



General Greene's Army, Original Painting by Robert Wilson

Southern Campaign, Greene saw the primary mission of his army as survival and therefore keyed all his decisions and movements toward that end.

Greene's first movement of the campaign was unorthodox. He was so inferior in numbers to Cornwallis that battle was impossible until he could raise and equip a larger force. His only plan was to wage a partisan warfare, threatening Cornwallis' flanks, breaking up his communications and intercepting his supplies. To achieve this, Greene divided his force. He sent Morgan with 600 men to threaten the British outposts of South Carolina and took the remaining 1,100 men to threaten Charleston. Greene states that he was "well satisfied with the movement . . . it makes the most of my inferior force,

for it compels my adversary to divide his, and holds him in doubt to his own line of conduct." (Francis Vinton Greene, *General Greene*, page 185.) This movement increased his ability to obtain supplies and disrupted the British attempts to forage the same area. He had spread his supply requirements over a larger area, increasing his resource base, and had gained control of the headwaters of the river systems that supplied the British.

Cornwallis responded to Greene's movement by dividing his own force, sending his cavalry under Tarleton to pursue Morgan. Morgan waited for the British forces at Cowpens, SC, and defeated them in classic, open battle. Following this victory, Greene united his force and

made a rapid withdrawal into Virginia.

This retreat to the Dan River was the key to the Southern Campaign. It was a masterfully executed delaying action that clearly demonstrated Greene's use of logistics as a determinant of strategy. To maintain pursuit, Cornwallis was forced to burn his supply and wagon trains -- an action considered so severe that over 250 men chose to desert rather than face the hardships of living off the land. Greene was able to maintain a high rate of march because of his anticipation of such an action. He had established magazines containing three days of food at mills along the river system. Each day of the withdrawal, Greene grew closer to his potential source of resupply

and reinforcement in Virginia; and Cornwallis was stretched further from his base of supplies in Wilmington, NC.

As Greene withdrew, he assembled all the watercraft of the area at each river crossing and then sent them ahead to the next site, forcing the British to ford each water obstacle. Additionally, he used his partisan forces to sweep the area of supplies ahead of the armies, thereby denying both supplies and the means of transporting them to the pursuing British. Cornwallis finally withdrew upon reaching the Dan River, having exhausted his ability to supply his troops and having driven them to the point of collapse. During the "race to the Dan," Greene used logistics to accomplish what his inferior force was not capable of doing on the battlefield -- break down the British ability to wage war.

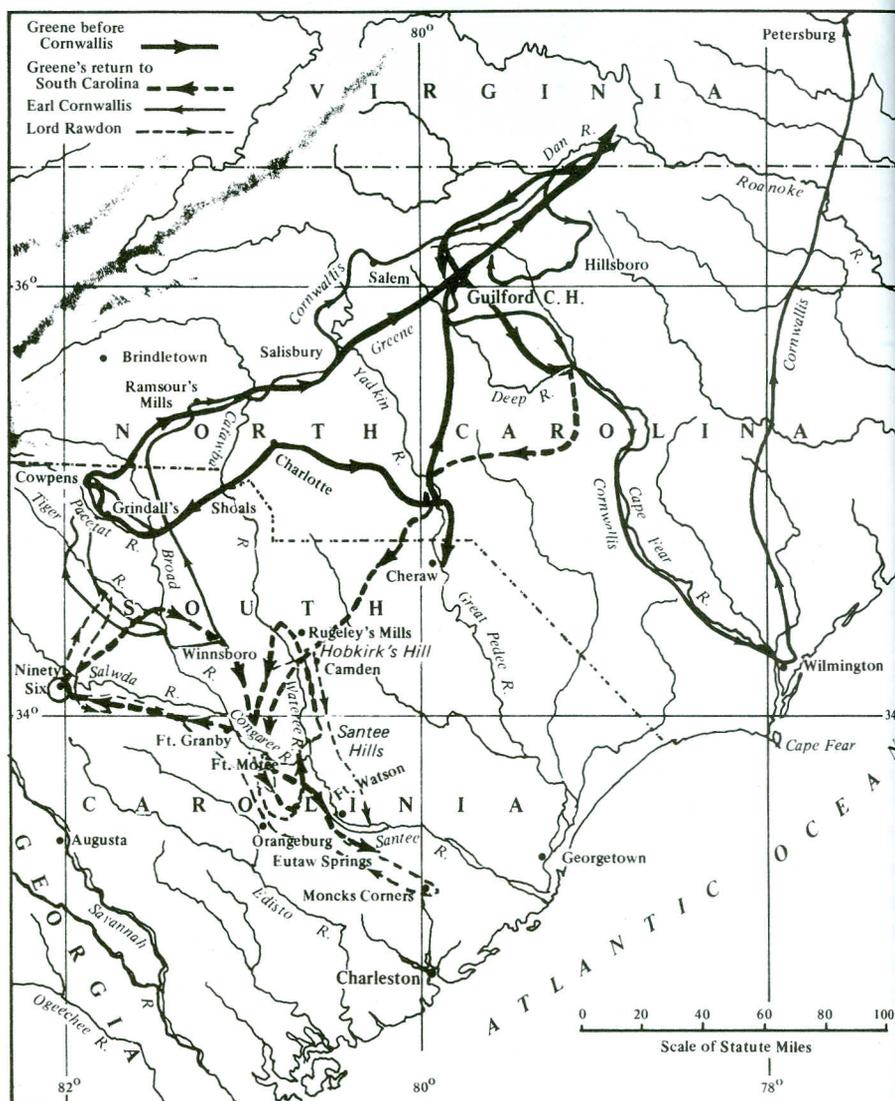
As Cornwallis withdrew to Hillsborough, NC, Greene turned his army and began a pursuit. The two armies met at Guilford Court-house and Greene lost the battle. Cornwallis, though, was forced to continue his withdrawal to his base of supplies on the North Carolina coast. Greene lost the tactical engagement but achieved his strategic objective. As the British moved to Wilmington, the Americans were free to move into South Carolina. From Wilmington, Cornwallis left the theater and moved towards Yorktown, VA. Greene launched his reconquest of South Carolina by conducting a harassment campaign against scattered British garrisons. The weaker ones were attacked and taken. A campaign of supply interdiction eventually caused abandonment of stronger British garrisons. Greene used partisan raiders to intercept supplies that were destined for the British by both water and land. He made the

situation intolerable by threatening the garrisons with military forces as well. These actions forced the British to abandon the South Carolina interior in the summer of 1781 and to evacuate Charleston in 1782.

Throughout the Southern Campaign, Greene acted as if he were still the Quartermaster General who had restored order to supplying the Continental Army. His entire focus was to obtain supplies while denying them to the British. It was as if he had put himself in

the place of the British Quartermaster's office and designed the worst possible scenario for the British.

Greene's planning used the total resources of the Carolinas in a massive effort to maintain his own forces. The army suffered severe hardships but undoubtedly would have perished if not for Greene's planning. To supply his men with arms and ammunition, Greene created two laboratories: one at Salisbury, NC, and one in Virginia. Overalls and shirts were



Retreat to the Dan, January – February 1781
From Avery's History of the United States and Its People

and reinforcement in Virginia; and Cornwallis was stretched further from his base of supplies in Wilmington, NC.

As Greene withdrew, he assembled all the watercraft of the area at each river crossing and then sent them ahead to the next site, forcing the British to ford each water obstacle. Additionally, he used his partisan forces to sweep the area of supplies ahead of the armies, thereby denying both supplies and the means of transporting them to the pursuing British. Cornwallis finally withdrew upon reaching the Dan River, having exhausted his ability to supply his troops and having driven them to the point of collapse. During the "race to the Dan," Greene used logistics to accomplish what his inferior force was not capable of doing on the battlefield -- break down the British ability to wage war.

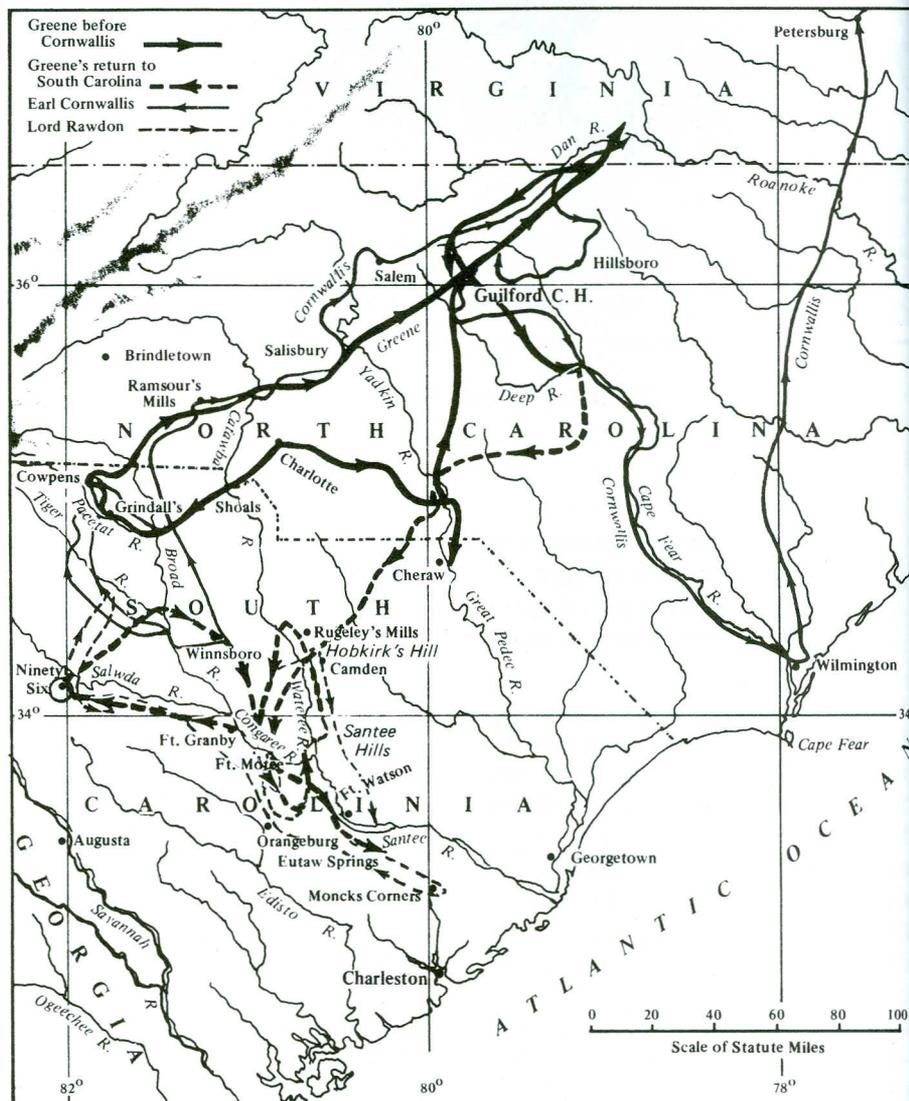
As Cornwallis withdrew to Hillsborough, NC, Greene turned his army and began a pursuit. The two armies met at Guilford Courthouse and Greene lost the battle. Cornwallis, though, was forced to continue his withdrawal to his base of supplies on the North Carolina coast. Greene lost the tactical engagement but achieved his strategic objective. As the British moved to Wilmington, the Americans were free to move into South Carolina. From Wilmington, Cornwallis left the theater and moved towards Yorktown, VA. Greene launched his reconquest of South Carolina by conducting a harassment campaign against scattered British garrisons. The weaker ones were attacked and taken. A campaign of supply interdiction eventually caused abandonment of stronger British garrisons. Greene used partisan raiders to intercept supplies that were destined for the British by both water and land. He made the

situation intolerable by threatening the garrisons with military forces as well. These actions forced the British to abandon the South Carolina interior in the summer of 1781 and to evacuate Charleston in 1782.

Throughout the Southern Campaign, Greene acted as if he were still the Quartermaster General who had restored order to supplying the Continental Army. His entire focus was to obtain supplies while denying them to the British. It was as if he had put himself in

the place of the British Quartermaster's office and designed the worst possible scenario for the British.

Greene's planning used the total resources of the Carolinas in a massive effort to maintain his own forces. The army suffered severe hardships but undoubtedly would have perished if not for Greene's planning. To supply his men with arms and ammunition, Greene created two laboratories: one at Salisbury, NC, and one in Virginia. Overalls and shirts were



Retreat to the Dan, January – February 1781
 From *Avery's History of the United States and Its People*

available in May 1781 because the countryside around Salisbury had been producing them since December 1780 per Greene's instructions. He ordered magazines established within each county to contain three day's food supply so the army could rest at least one day and still have sustenance to march to another supply point without food.

Functioning as pontoon trains, Greene's improvised wheeled boats played a key role in his ability to make rapid advances and withdrawals within the extensive river system of the piedmont. It was this logistical anticipation and improvisation that allowed Greene's army to survive despite limited support from the southern governors.

The Southern Campaign of 1781 was a low intensity conflict fought and won with logistics. Greene's main objective was not to destroy the British force, but merely to maintain his own. The two key factors in Greene's over-

whelming success were the effectiveness of the partisan war of interdiction and his own mastery of inland water transportation. These factors reveal the critical importance of security, mobility, and communications in supporting low intensity conflict operations.

Quick and unpredictable maneuver without boundaries characterizes low intensity conflict. This requires innovative support operations that must be light and highly mobile to be responsive. Greene took this concept to the extreme by not using trains to move supplies with him. Instead, he maneuvered a network of caches around his force by the fastest available mode of transportation. The characteristic of unlimited maneuver causes low intensity conflict logistical operations to be extremely vulnerable to interdiction. Greene concentrated on exploiting this vulnerability by continually disrupting the British lines of communication. Security of support activities, therefore,

must be a high priority in low intensity conflict to maintain continuity.

Quick, unpredictable movements during low intensity conflict make communication between support and maneuver commanders critical. In this, Greene had the supreme advantage: he was both, which allowed him to completely intertwine logistics and strategy. Communication must be maximized in low intensity conflict to achieve the highest degree of integration possible. These three fundamental principles of supplying low intensity conflict -- security, mobility, and communication -- along with Greene's consummate ability to anticipate and improvise were the keys to winning the Southern Campaign. They are also the keys to winning the low intensity conflicts of the future. 

*LT Raymond W. Lemaster,
graduate of the Officer
Advanced Course, U.S. Army
Quartermaster Center and
School (PROV), Fort Lee,
Virginia.*

BIBLIOGRAPHY

1. Babits, Lawrence E. "Greene's Strategy in the Southern Campaign, 1780-1781," Air Force Journal of Logistics, Winter 1984, 10-13.
2. Bowler, R. Arthur. Logistics and the Failure of the British Army in America, 1775-1783. Princeton, New Jersey: Princeton University Press, 1975.
3. Curtis, Edward E. Organization of the British Army in the American Revolution. New York: American Museum Science Books, 1969.
4. Greene, Francis Vinton. General Greene. New York: Associated Faculty Press, 1970.
5. Greene, Francis Vinton. The Revolutionary War and the Military Policy of the United States. New York, 1911. (No longer in print)
6. Hatch, Louis Clinton. Administration of the American Revolutionary Army. Burt Franklin, Publishing: 1971.
7. Huston, James A. The Sinews of War: Army Logistics, 1775-1953. Army Historical Series. Washington, D.C., 1966.
8. Johnson, Victor Leroy. The Administration of the American Commissariat During the Revolutionary War. Philadelphia, 1941. (No longer in print.)
9. Lesser, Charles H. Sinews of Independence. Chicago, Illinois: University of Chicago Press, 1976.
10. Lumpkin, Henry. From Savannah to Yorktown: The American Revolution in the South. Columbia, South Carolina: The University of South Carolina Press, 1981.
11. Risch, Erna. Supplying Washington's Army. Washington, D.C.: Center of Military History, United States Army, 1981.
12. Roberts, Kenneth. The Battle of Cowpens. Philadelphia, Pennsylvania: Eastern Acorn Press, 1981.

SUSTAINMENT DURING LOW INTENSITY CONFLICT:

THE 7TH INFANTRY DIVISION (LIGHT) IN OPERATION NIMROD DANCER, PANAMA, MAY 1989—DECEMBER 1989

CPT John E. Malapit

This article is presented as a case study of a recent low intensity operation. The article reflects the experiences of logistical personnel from the 7th Infantry Division (Light) who participated in Operation Nimrod Dancer. The content of the article does not necessarily represent the official U.S. Army position.

Sustainment during low intensity conflict is becoming an important issue as evidenced by current world events. Attempted coup attempts in the Philippines; the thaw of the Cold War and dissolution of the Warsaw Pact; the drug war in Columbia, South America; and political unrest in Central America signify a break from conventional warfare. On 11 May 1989, elements of the 7th Infantry Division (Light) (ID(L)) were deployed to Panama on Operation Nimrod Dancer. This action was in response to the country's political instability perpetuated by the government of General Manuel Antonio Noriega. Logisticians can gain valuable insight, for use in future operations, by focusing on the support operations conducted by the 7th ID(L).

The U.S. Army doctrine pertaining to sustainment during low intensity conflict is currently being revised. Two field manuals dealing with the subject -- Field Manual 63-2-1 (Division Support Command Light Infantry, Airborne, and Air Assault Divisions), and Field Manual 42-26 (Headquarters and Supply Company and Forward Supply Companies, Supply and Transport Battalion Light Infantry Division) -- are scheduled for publication in early 1991. The 7th ID(L) used Field Circular 63-32 (Corps Combat Service Support) as a guide for



Soldiers loading equipment to support U.S. troops in Panama in 1989



Soldiers deploying to Panama for Operation Nimrod Dancer

logistical operations during Operation Nimrod Dancer. However, this circular recently expired.

The deployment to Panama was conducted according to phased contingency operations outlined in

Much of the instability in the world today points toward sustainment during low intensity conflict as an important doctrinal issue.

Field Manual 63-3J (Combat Service Support Operations-Corps) -- Phase 1 - Deployment; Phase 2 - Lodgement; Phase 3 - Expansion of the Logistics Base and Buildup of Forces; Phase 4 - Termination of Conflict or Transition to a Mature Theater. Eighteen hours after notification of alert, the 7th ID(L) deployed a battalion task force (reinforced) to Panama.

Upon arrival at Howard Air Force Base (AFB), Panama, 7th ID(L) support personnel conducted lodgement operations and established a logistics airhead. The headquarters element of the 9th Infantry Regiment (Manchus) was established at Fort Sherman, located on the Atlantic side of the Panama Canal. Logistics played its most important role at this point of the operation. Planning the movement of personnel, equipment, and materiel was the responsibility of the support personnel deployed with the task force. Supply flow needed to be established because the length of the operation was unknown.

The combat service support elements that deployed included a headquarters element from the 7th Supply and Transport Battalion (S&T), Forward Area Support Team (FAST) I, and Company A of the 7th S&T.

Upon expansion of the logistics base and arrival of additional troops, 7th ID(L) support personnel established three areas of control. These areas were Howard Air Force Base (AFB), Mandingo Point and Empire Range (in the vicinity of Gamboa), and Fort Sherman. Howard AFB was the logistical airhead where supplies were received from either Fort Ord, CA, or Charleston, SC, through logistics aircraft ("log bird") or normal supply channels. Mandingo Point was the loading area for supplies loaded onto

wheeled vehicles, or watercraft for intracanal transport, while Empire Range served as a staging area for supplies arriving from Howard AFB which were to be transhipped through Mandingo Point. The final destination for all supplies was Fort Sherman. Supplies were either ferried from Mandingo Point by Army water vessels or transported on the Carretera Boyd-Roosevelt main supply route (MSR).

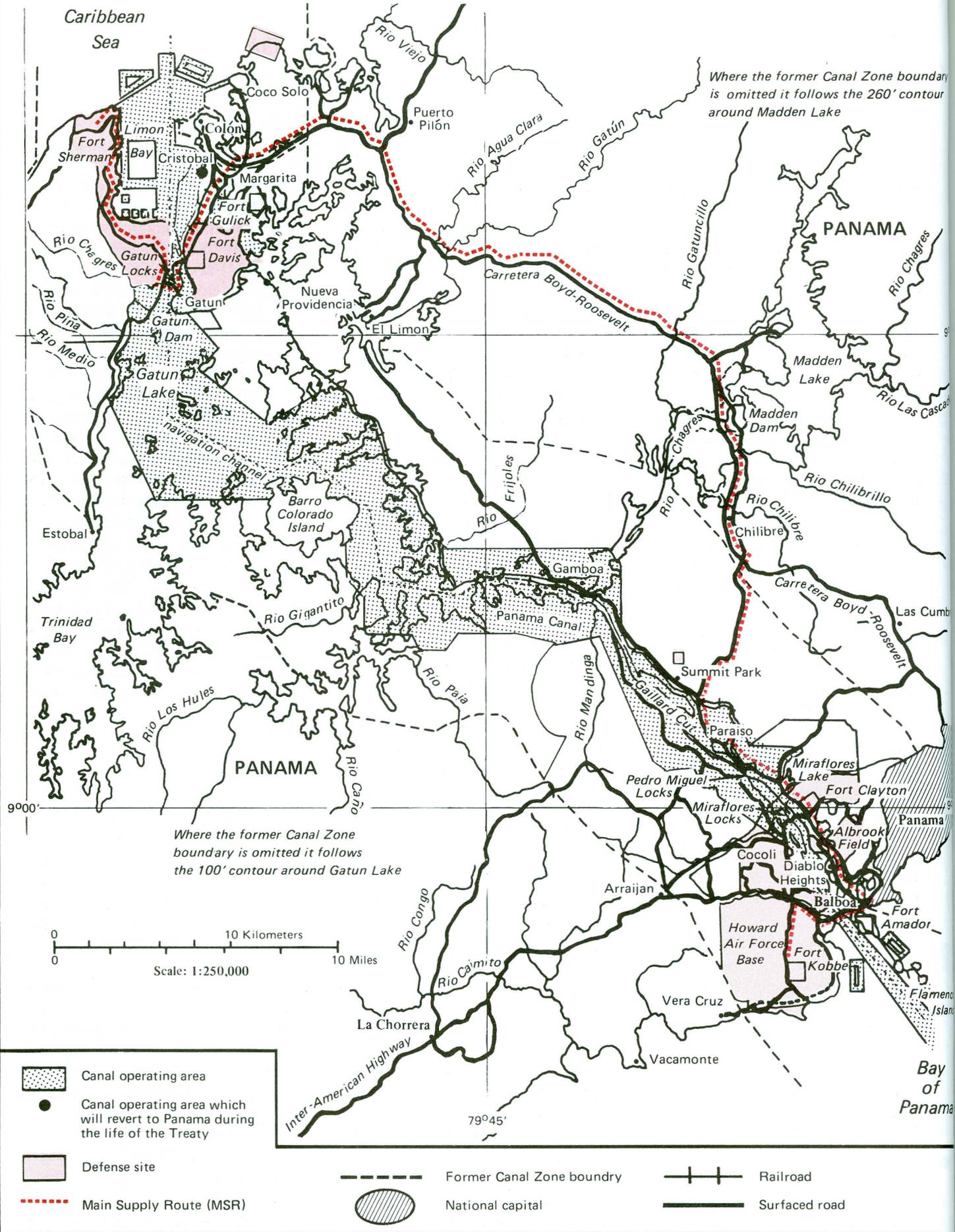
The majority of sustainment problems occurred during the expansion phase of the operation. The first and most serious problem, which confronts all light divisions, concerned the low density of transportation assets. There were no dedicated transportation assets aside from the three five-ton trucks assigned to FAST I. In an attempt to overcome this problem, support personnel from the 7th ID(L) task force requested transportation support from the 41st Area Support Group Movement Control Center (MCC), who in turn tasked the 193rd Support Battalion. The 193rd's low density of wheeled vehicles added to the transportation problem. The problem was further complicated because aerial assets could not be used due to operational constraints. Task force personnel prioritized and consolidated wheeled vehicle assets to overcome this problem. Additional wheeled vehicles that arrived from Fort Ord within a matter of days somewhat eased transportation requirements.

The use of Army water vessels (landing craft motorized 8's--LCM8's) to transport supplies to Fort Sherman from Mandingo Point also eased transportation requirements. However, there were not enough of these craft to move the amount of supplies and equipment

required. The majority of supplies were transported by wheeled vehicles from Mandingo Point/Empire Range to the brigade support area (BSA) at Fort Sherman. The Carretera Boyd-Roosevelt MSR was the only route available, and it runs outside the canal zone which made route and convoy security a challenge. The MSR coupled with limited wheeled vehicle assets created a serious transportation management challenge. The MSR was used by other units, which further complicated the problem, limiting use by the 7th ID(L) task force to every other day.

The administrative reporting process played a vital role. Logistical reports were required at 7th ID(L), U.S. Army Forces Southern Command (USARSO), and Department of the Army level. The daily reporting requirement included the level of all classes of supply and a daily equipment status report (DA Form 2406). It was not unusual for higher levels of command to get involved with maintenance and supply actions. An example was the project code assigned to units of the 7th ID(L) and 5th Infantry Division (Mechanized). Requests with this code initially caused problems with tracking requisitions because all requests were shipped from the continental United States (CONUS) on the same priority. During peak demand periods, supporting personnel could not prioritize the items that were actually critical -- life support items versus routine resupply items. As operations became established, requisitions subsided, and the system worked. However, if demands increased to a point similar to that experienced initially, then involvement of a military air traffic control unit (MATCU) (a Military Traffic Management Command (MTMC)

LAND AND WATERS OF THE PANAMA CANAL TREATY



Panama Canal Operating Area

activity) at Charleston AFB, would have become necessary. The MATCU, in coordination with the 193rd BMMC, would have then prioritized the shipment of essential supplies.

Class III (petroleum, oils, and lubricants) accounts were initially established through the 193rd Support Battalion, and fuel was trucked from Fort Clayton to Fort Sherman. As the operation continued, an account was established near Fort Sherman (at Colon) at an existing fuel point. This greatly reduced the distance traveled and made fuel more readily accessible.

Distance played a critical role in the establishment of Class V (ammunition) operations. Because of the lack of transportation assets, ammunition arrived at an initial ammunition supply point (ASP) at Fort Sherman before the arrival of the Division Ammunition Officer (DAO) representative. The DAO representative remained at Mandingo Point awaiting transport while maintaining in-transit control and accountability. Technical expertise was not present on site at Fort Sherman until the DAO representative was immediately moved to the initial ASP, quickly establishing sound procedures and preventing serious problems.

Once initial logistical operations were established, the supply process became routine and attention was focused on minor problems. Office equipment such as extra telephones, shredders, telefax machines, and copying machines became high-demand items. Due to the unstable situation in Panama at the time, many of these items, requiring local procurement, were not readily available.

USARSO provided outstanding in-country support. The 193rd

Support Battalion and 41st Area Support Group were already in place and provided the necessary foundation for the 7th ID(L) to conduct support operations. A Materiel Management Center (MMC), movement control center (MCC), and joint headquarters (previously established) made coordination with higher echelons simpler.

Training played an integral role in the logistical operations conducted by elements of the 7th ID(L). The senior leadership in the division emphasized the "train as you fight" concept in all aspects of training. In utilizing the brigade slice method during all types of exercises, including external evaluations (BOLD THRUSTS), continuity of operations is assured whenever an infantry unit is deployed. During Operation Nimrod Dancer, the 9th Infantry Regiment (Manchus) held the Division Ready Brigade (DRB) mission. Every combat arms, combat service, and combat service support (CSS) unit that supported the 9th Infantry Regiment also held the same mission. Upon alert, task force elements were prepared to respond quickly and efficiently.

Under the forward area support coordinator (FASCO) concept, FAST I and Company A of the 7th S&T provided 100 percent dedicated support to the 9th Infantry Regiment. This concept allowed a support package to be tailored quickly and efficiently to the intensity of a battle. The 7th ID(L) leadership is dedicated to keeping experience within the FASTs. As a result, each of the three FASTs within the 7th ID(L) are cohesive units that have been working together for a period of time.

There is no impromptu detail to accomplish a mission. The FAST officer in charge (OIC) is the interface between the brigade and the

Division Support Command (DISCOM), creating a special bond and credibility between the supported brigade and the DISCOM.

Logistics is similar in any division. However, the manner of mission accomplishment varies. Support at the 7th ID(L) emphasizes the sustainment imperatives required of all successful logisticians. These imperatives -- anticipation, integration, continuity, responsiveness, and improvisation -- were exercised extensively by the 7th ID(L) support elements in Panama. The importance of each of these was demonstrated through the operation. Logisticians must have a "sixth sense" in anticipating the needs of a supported unit.

CSS units were already working with their combat arms counterparts. Since the length of the operation was unknown, continuous support was coordinated for an unspecified amount of time. The support cell displayed quick, improvised response in providing services when wheeled vehicle assets were short by pooling assets to meet transportation requirements. In any situation, flexibility was key.

Logistical operations conducted during Operation Nimrod Dancer laid the foundation for future, larger operations. On 20 December 1989, Operation Nimrod Dancer transitioned to an operation of greater magnitude when Operation Just Cause began. By successfully establishing initial support operations, the transition was made with minimal effort.

Several lessons can be learned from Operation Nimrod Dancer. In-country support immensely aided the sustainment process and the 7th ID(L) capitalized on the situation. The FASCO concept utilized by the 7th ID(L) proved its effectiveness and value to a light division. The

supply concept of throughput used by light divisions versus that of distribution point used by USARSO somewhat impeded the sustainment process. Transportation assets are critical due to the low density within the 7th ID(L) and must be carefully managed. However, flexibility, prior training, and resourcefulness with

respect to the sustainment imperatives allowed the 7th ID(L) to successfully support Operation Nimrod Dancer. Much of the instability occurring in the world today points towards the low intensity arena. The "Lightfighter" logisticians of the 7th ID(L) learned from their experiences of Operation Nim-

rod Dancer and Operation Just Cause and will be ready to sustain future operations. 

CPT John E. Malapit was the Aide-de-Camp to the Commanding General of 7th Infantry Division (Light) from July 1988 to September 1989.

BIBLIOGRAPHY

Department of the Army Field Manuals and Field Circulars

1. Field Circular 63-31, Combat Service Support Operations -- Corps (expired edition, not renewed).
2. Field Manual 25-100, Training the Force, 15 November 1988.
3. Field Manual 42-26, Headquarters and Supply Company and Forward Supply Companies, Supply and Transport Battalion Light Infantry Division (Coordinating Draft, September 1987).
4. Field Manual 63-2-1, Division Support Command Light Infantry, Airborne , and Air Assault Divisions (Coordinating Draft, May 1989).
5. Field Manual 63-3J, Combat Service Support Operations -- Corps, 12 August 1985.
6. Field Manual 100-5, Operations, May 1986.

Interviews

7. Interview with COL David Archer, former Commander, 7th Supply and Transport Battalion, 7th Infantry Division (Light), 11 December 1989.
8. Interview with MAJ Steve Howard, former Executive Officer, 7th Supply and Transport Battalion, 7th Infantry Division (Light), 29 December 1989.

REAL WORLD TRAINING: QUARtermaster OFFICER BASIC COURSE 89-14

LT April Caron LT Deirdre Lint

Field training exercises (FTXs) for Quartermaster Officer Basic Courses traditionally have been canned exercises where a class spends a week in the field concentrating on infantry-type skills. These important activities incorporate only a portion of the actual duties that Quartermaster officers will manage in their units.

Quartermaster Officer Basic Course (QMOBC) 89-14, in an effort to establish new standards for training, incorporated the new Army training doctrine from FM 25-100 (Training the Force) into its FTX. Guidance from the class training, assessment, and counseling (TAC) officer gave the training committee a start. The class would have a real-world mission to perform during its field training. The class would become a clothing exchange and bath (CEB) platoon of a supply and service company.

The Tactical Exercise Without Troops (TEWT) committee began planning for the exercise two months ahead. They reviewed the field manual and the table of organization and equipment (TOE) for a CEB platoon as well as the mission training plan (MTP) to establish the mission-essential task list (METL) for the week-long exercise. Once this was completed, the TEWT committee followed the MTP and divided training into four phases: Phase 1 - Predeployment and Training, Phase 2 - Deployment/Tactical Mission, Phase 3 - Support Mission, and Phase 4 - Recovery.

Phase 1 - Predeployment proved a valuable learning experience, beginning with the site selection. Previous QMOBCs held their exercises at Fort A.P. Hill, VA, three hours from Fort Lee, VA. The first objective was to locate an appropriate train-

ing site at Fort Lee to eliminate the travel time. This task required coordination with Fort Lee's Environmental Protection Agency (EPA) office, Headquarters and Headquarters Company (HHC), 240th Quartermaster Battalion's Headquarters Company, and F Company, 244th Quartermaster Battalion. Though only a minor task, site selection demonstrated to the class the great amount of coordination required to plan even the smallest of exercises. Additional training planned by the TEWT committee included an air mobile/sling load exercise with Company C, 4th Battalion, 158th Combat Aviation Regiment, a U.S. Army Reserve (USAR) unit from Fort Eustis, VA, and the Military In the Field (MIF), which is a section of the petroleum, oils, and lubricants (POL) training facility at Fort Lee.

The air mission commanders from the USAR unit with QMOBC

89-14's air liaison officers developed a two-day, training mission allowing student officers to participate in helicopter movement planning and sling load training with UH-1 helicopters.

The second day of Phase 1 training began with a forced road march to the MIF airfield where the students, MIF instructors, and pilots from the USAR unit participated in sling load and aerial delivery training before the arrival of the air support. Training was conducted in a round-robin fashion where one officer guided a UH-1 helicopter into place using the proper hand and arm signals while two fellow officers actually hooked up POL equipment to the UH-1.

Phase 2 - Deployment/Tactical Mission began at 1500 hours on 2 November 1989. The advance party, led by the company executive officer (XO), departed the assembly



Soldiers from QMOBC 89-14 prepare to sling load a 500-gallon drum.

area and moved to Training Area 5 at Fort Lee where they secured the area and started setting up their field operation.

The main body movement began the following morning at 0500 hours. The main body moved by foot through the forested area adjacent to the training area where they linked up with the advance party.

Phase 3 - Support Mission was the final field phase of training. The class set up a nine-head shower unit along with one laundry unit.

Two lieutenants had attended Fast Track enrichment sessions within the Advanced Individual Training program to familiarize themselves with setting up and operating the laundry and bath equipment. They instructed the class on setting up and operating the nine-head shower unit and laundry unit.

Support for the class, although not a major phase of training, required committee members to coordinate with units located throughout the post. Class I

(rations) support for the exercise came from a cook from the 16th Field Services Company, 240th Quartermaster Battalion. Officers on the field exercise experienced the full gamut of meals available to soldiers in the field, including meals ready to eat (MREs), A-Rations, B-Rations, and T-Rations. Medical support, an easy support requirement to overlook, was organized by using medics from the 85th Evacuation Hospital at Fort Lee.



Soldier guides the helicopter with hand and arm signals.



Supplies are being successfully sling loaded forward.

'Lieutenants learned that Quartermaster officers face challenges very different from their counterparts in the combat arms branches.'

Phase 4 - Recovery was an important phase that actually began when the troops departed for training and continued throughout training. Beginning the recovery phase in the field made the garrison portion easier because of the maintenance performed in the field -- an important lesson for new lieutenants to take to units throughout the Army.

Although not the primary mission, individual tactical skills did play an important part in the training. Lieutenants learned that Quartermaster officers face challenges very different from their counterparts in the combat arms branches. The class learned that combat service support units must be flexible and never let their guard down. The operation, overrun by aggressors during one portion of the field phase, brought home the importance of being prepared for the enemy to attack at any time. By accepting a realistic Quartermaster mission for their TEWT, QMOBC 89-14 lieutenants are better prepared to take on the challenges of providing outstanding combat service support in any tactical environment. 

LT April Caron, a student in the Quartermaster Officer Basic Course at Fort Lee, Virginia, was scheduled for assignment to Fort Lewis, Washington, after further training at Fort Benning, Georgia, and Fort Lee.

LT Deirdre Lint, a student in the Quartermaster Officer Basic Course at Fort Lee, Virginia, was scheduled for assignment to the 229th Supply and Service Company, Augsburg, Germany.



Training, assessment, and counseling (TAC) officer conducts an after action review on the sling loading operation.



Soldiers move from helicopter after completing hookup.

SUPPORTING THE FORCE . . . 'IN THE SINAI WITH THE 1ST U.S. SUPPORT BATTALION'

LTC James M. Colvin Jr. CPT Michael D. Houle

The Sinai Peninsula is a windswept desert, known for blazing hot days, freezing nights, constantly shifting sand dunes, waterless wastes and for being, strategically, one of the most important pieces of key terrain in the world. Throughout recorded history, over 50 invading armies have traversed this sparsely populated expanse, either heading for Egypt and Africa or moving in the other direction toward the great civilizations of Eurasia.

Moses crossed the Sinai during the Exodus. Alexander the Great crossed the Sinai in his conquest of the world, as did the Roman Legions in their quest to do the same.

In recent history, the Suez Canal has added even greater strategic importance to this area. As the most vulnerable choke point in the line of communications between Asia and Europe, the canal has been the objective of campaigns in both World Wars. Field Marshall Rommel and his Afrika Corps were headed towards the canal when the German panzers stalled against the British defenses at El Alamein. Defeated there, the Germans lost the initiative in North Africa. The British, in sole possession of both sides of the canal, maintained their vital communications link with Asia. This pattern of conflict has continued in more recent times with the Egyptians and Israelis contesting ownership of the Sinai for the past four decades.

The Sinai has not seen a major conflict since the last war between Egypt and Israel in 1973. Since that time, there has been relative peace in the region. One of the reasons the area has remained peaceful is the presence of the Multinational Force and Observers (MFO).

The MFO is the organization established in 1981 to supervise the implementation of the treaty and security agreement between Egypt and Israel. The MFO consists of approximately 3,200 soldiers and civilians from the 11 nations of Canada, Columbia, England, Fiji, France, Italy, Netherlands, New Zealand, Norway, Uruguay, and the United States, stationed at two installations and 33 remote sites in the Sinai Peninsula, Egypt. The logistics support for this large and diverse organization comes from the 1st U.S. Army Support Battalion (1SB) (Sinai).

The 1SB (Sinai), formerly known as the Logistical Support Unit, is an independent forward support battalion assigned as a direct subordinate unit of the XVIII Airborne Corps at Fort Bragg, NC, but under the direct operational control of the force commander. The mission, and the unit itself, resulted from the Treaty of Peace signed between Israel and Egypt in March 1979 and a protocol established in August 1981 to supervise the treaty's implementation.

The mission of the 1SB (Sinai) is to provide direct support of all classes of supply, transportation, medical, dental, veterinary, preventive medicine, explosive ordnance disposal (EOD), aviation, Materiel Management Center (MMC), Movement Control Center (MCC), and communications and small arms repair to the MFO over the approximately 12,000-square-kilometer area of the Sinai. The battalion is uniquely organized to accomplish this mission.

The 465 soldiers of the 1SB (Sinai) provide a myriad of technical specialities. Fifty-three different military occupational specialities

(MOSs) are organized to meet the MFO needs. Six companies make up the 1SB (Sinai) and provide support from two widely separated base camps that are 370 miles apart.

The battalion headquarters, headquarters and headquarters company, medical company (minus), supply company, and transportation company support the majority of the MFO from North Base Camp located at El Gorah. In the northeast corner of the Sinai Peninsula, El Gorah is located approximately 30 kilometers west of the Rafa Border Crossing Terminal into Israel and 35 kilometers south of the Mediterranean Sea. The aviation company, support company, and a detachment from medical company (minus) provide support to MFO elements in the southern sector from South Base Camp, located between Sharm el Sheik and Namma Bay at the southeastern tip of the Sinai Peninsula.

Initially, the duration of a tour for U.S. support soldiers was six months. However, in 1986, to ensure continuity in mission support, the tour for U.S. soldiers changed from a six-month temporary duty (TDY) assignment to a 12-month tour. Soldiers are awarded the MFO Medal for each six-month period of assignment to the MFO.

Headquarters and headquarters company (HHC), the largest of the 1SB (Sinai) companies at North Camp, has a wide variety of responsibilities. HHC provides administrative support to the soldiers of the Force Materiel Management Center (FMMC) and Force Movement Control Center (FMCC) that are under operational control of the force Chief of Logistics Officer (CLO). Also, with HHC is the battalion staff,

Army Post Office (APO), EOD element, the military police section, the chaplain section, the finance section, and the force surgeon.

Other elements within HHC provide support to all contingents. The FMCC maintains accountability of all force property, provides asset visibility, and manages all classes of supply, less Class VIII (medical). The FMCC manages all transportation requirements for the MFO. The FMCC coordinates all movements of supplies, personnel, and equipment, whether by ground or air.

The medical company provides medical and dental care to all members of the MFO, and on a limited basis, to local civilian nationals. The unit also provides veterinary and preventive medicine support to MFO personnel. The medical company provides these services from two clinics, one at each camp.

The transportation company, like the medical company, is a multinational force in its own right. With driver and operations center support from New Zealand and Uruguay, the transportation company provides transportation assets to fulfill the requirements of hauling fuel, water, food, mail, and Class II (general) and Class IV (construction and barrier materiel) supplies. The transportation company delivers and receives containerized goods from sea and air ports in both Egypt and Israel. Additionally, the transportation company safely moves MFO personnel to locations throughout the area. Company personnel drive over 800,000 miles per year, mainly over the 370-mile main supply route, sometimes under life-threatening conditions.

The supply company has the mission to receive, store, and issue all classes of supply except Class V (ammunition) and Class VIII (medical supplies). Four main

dining facilities, plus the club systems, receive over 4,000 tons of fresh produce, dairy, and perishable/nonperishable foodstuffs from the Class I (rations) platoon. Over 3 million gallons of petroleum products issued annually pass through the Class III (petroleum, oils, and lubricants) platoon's vehicles and pumping systems. The company's Class II (general supplies), Class IV (construction and barrier materiel), and Class VII (major end items) platoon operates a central receiving point, a self-service supply center, a Class II and Class IV warehouse, and a property disposal yard. The Class IX (repair parts) platoon operates separate aviation and commercial parts storage and issue facilities. All supplies entering MFO control must pass through the hands of the supply company personnel.

The support company, located at South Camp, provides all facets of

supply and service support to MFO contingents within the southern sector controlled by the MFO. This includes a U.S. Army infantry battalion that rotates every six months from XVIII Airborne Corps, the 1SB's Aviation Company, an Italian Navy contingent, a Dutch military police element, and a civilian-contracted support force. The support company handles all supply receipt, storage, issue and resupply operations, transportation movement control, stock control, communications and small arms repair, EOD operations, and postal operations.

The aviation company, also located at South Camp, provides UH-1 Huey helicopter support for missions of medical evacuation, search and rescue operations (SAR), aerial observation, troop movement, and aerial resupply operations to United States infantry observation posts and other MFO locations. The 25 assigned pilots fly



The transportation company delivers water and fuel under hazardous conditions to remote observation posts throughout the Multinational Force and Observers (MFO) sector of the Sinai.

approximately 3,800 hours per year. Each pilot is trained in desert and night vision goggle operations.

Although the 1SB (Sinai) is situated in a harsh, isolated, desert environment and the tour is considered a hardship tour, soldiers of the 1SB (Sinai) have unique opportunities available. The 1SB (Sinai) soldiers can visit and experience the historical and biblical sites of the Sinai, Egypt, and Israel. All of 1SB (Sinai) soldiers have frequent opportunities to travel the relatively short distances to these locations. No other assignment offers the opportunity to visit places in Egypt such as the Pyramids, the Luxor and Karnak temples, and the Aswan Dam on the Nile River. In the Sinai itself, soldiers can follow the route of Moses during his exodus from Egypt with the Israelites, to include climbing Mount Sinai for a firsthand look at the biblical site of the passing of the Ten Commandments. Israel abounds with notable sites. Jerusalem, Bethlehem, Nazareth, and the Sea of Galilee, to name only a few, are all within a reasonable driving distance.

Despite this harsh and isolated environment and the hazards associated with duty in this part of the world, the motto of the 1SB (Sinai) describes its presence and mission in the Sinai: "Support the Force." 

LTC James M. Colvin, Jr., a Quartermaster Officer, is commander of the 1st U.S. Army Support Battalion, Sinai Peninsula, Egypt.

CPT Michael D. Houle, a Quartermaster Officer, is S3 (Operations and Training Officer), for the 1st U.S. Army Support Battalion, Sinai Peninsula, Egypt.



Supply company soldiers provide storage and issue all goods used by the Multinational Force and Observers (MFO).

A TACTICAL EVACUATION OF THE BRIGADE SUPPORT AREA

CPT Kevin C. Lee

During the 1989 Branch Liaison Team visits by the U.S. Army Quartermaster Center and School (PROV), Fort Lee, VA, numerous battalion commanders cited the need for lessons learned and information about what successful commanders have done to prepare for the rear battle. The following article is the first that will address the rear battle and provide commanders with ideas for both training and integration into their tactical standing operating procedures (SOPs).

Combat service support (CSS) units in the brigade support area (BSA) do not have the necessary combat power to protect themselves against a sizable enemy force. The best counter to an imminent attack by armored or motorized forces is a controlled evacuation of the most critical CSS assets and personnel. Using phase lines from the brigade's operational overlay, the forward support battalion (FSB)/BSA commander can develop trigger lines to issue warning and execution orders. The BSA tenant units and slices are alerted if enemy forces penetrate friendly defenses and cross the trigger lines as they advance toward the BSA. Designated critical CSS assets and command and control personnel will "bug-out" in an orderly manner to a predetermined alternate position when the execution order is issued.

The following SOP was developed as an annex to a forward support battalion's tactical SOP (TACSOP). The "bug-out" is designed as a contingency, if normal BSA defense measures are not considered adequate based on the enemy's size and combat power.

SUBJECT: Standing Operating Procedure (SOP) -- Brigade Support Area (BSA) Tactical Evacuation (Operation Bug-Out)

1. PURPOSE: To guide and direct development and implementation of a tactical evacuation plan for critical combat service support (CSS) assets in the BSA. This plan is necessary to continue sustainment operations to the brigade combat team if the BSA is threatened to be overrun or destroyed.

2. SCOPE: This SOP applies to all units and tenant slices located within the BSA and under the operational control of the forward support battalion (FSB) BSA commander.

3. GENERAL: Preplanned phase lines are used to develop trigger lines. These lines are based on the brigade's operational overlay and expected rates of enemy advance. The FSB/BSA commander will use these trigger lines to issue warning and execution orders to begin the evacuation plan. BSA units are alerted if enemy forces penetrate friendly defenses and cross the trigger lines. Designated critical CSS assets and command control personnel will evacuate the BSA to a predetermined alternate position.

4. RESPONSIBILITIES:

A. FSB/BSA commander will:

1. Provide overall command and control.
2. Review all tactical overlays and determine trigger lines to issue warning and execution orders.
3. Review and approve consolidated listing of critical CSS assets.
4. Request authority to execute the evacuation order from the brigade commander.

5. Issue warning and execution orders.

6. Monitor the evacuation.

B. Battalion executive officer will:

1. Act as the officer-in-charge and executor of the plan.

2. Supervise the establishment of the battalion battle center.

3. Select and conduct reconnaissance of the alternate position(s) routes, and rally points.

4. Collect, consolidate, review, and recommend critical assets listings.

5. Ensure coordination of evacuation plan with the division support command (DISCOM) and brigade operations.

6. Conduct briefings and rehearsals with BSA units/slices.

7. Command activities at the alternate position.

C. Battalion S2/3 (Intelligence Officer/Operations and Training Officer) will:

1. Establish the battalion battle center in the BSA tactical operations center.

2. Obtain brigade operational overlay and post.

3. Obtain enemy template and post.

4. Prepare and post evacuation plan overlay.

5. Coordinate artillery and tactical air support for the evacuation routes and alternate positions.

6. Monitor, track, and plot all friendly and enemy movements.

7. Advise the FSB/BSA commander and executive officer (XO) of enemy movements and current positions.

8. Notify brigade and DISCOM operations of intent to evacuate.

9. Ensure evacuation plan is integrated into the brigade and DISCOM operational plan.

10. Coordinate and plan for military police support during the evacuation.

D. BSA unit/slice commanders will:

1. Develop list of critical assets for evacuation.
2. Participate in the reconnaissance of the alternate positions, routes, and rally points.
3. Participate in all rehearsals.
4. Monitor battalion command net for alert notifications.
5. Execute the evacuation plan on order.
6. Appoint a unit point of contact.

5. PLANNING:

A. Before deployment, each unit/slice commander must determine and list the most critical CSS assets based on the current brigade operations plan.

B. Each unit/slice commander will submit this list to the battalion XO for review and consolidation. The XO will submit the listing to the FSB/BSA commander for approval.

C. The plan must be coordinated and discussed with each BSA tenant unit. Each tenant unit must understand the plan and the role its unit will play.

D. A copy of this SOP and an Evacuation Planning Sequence Checklist will be issued to each tenant unit.

6. ALTERNATE POSITION(S), ROUTE, AND RALLY POINT:

A. As soon after the site of the current BSA is selected, an

alternate position(s) must also be selected using map and physical reconnaissance.

B. The alternate position(s) must be reconnoitered as the BSA is being occupied and set up. Execution of the bug-out is possible at any time.

C. Alternate positions are selected based on the principles of observation, cover and concealment, obstacles, key terrain, and avenues of approach (OCOKA). The ability to secure the position and the ease of accessibility are key.

D. When developing the route to the alternate position(s) a primary and secondary must be established. Preplanned artillery targets should be plotted in and around the BSA as well as along the evacuation routes, and the alternate position(s).

E. At a minimum, establish two rally points on the evacuation routes. The main rally point, established midway along the route, serves two purposes:

1. Roll count of units and number of vehicles evacuated.
2. Traffic control point -- The second rally point is located near the entrance to the alternate position and will serve as a traffic control point and observation post for the alternate position.

F. It is essential to establish primary and secondary alternate positions, routes, and rally points.

7. REHEARSAL:

A. As soon after the alternate position(s) is reconnoitered, rehearsals of the evacuation must begin.

B. Accomplish the rehearsals in the following order:

1. Alert notification and feedback.
2. Unit key leaders and ground guides mock evacuation.
3. Full dress rehearsal under time constraints.

C. Rehearsals will be conducted either announced or unannounced. Rehearsals will be conducted during daylight and darkness.

D. After action reviews (AARs) will be conducted after each rehearsal.

8. BATTALION BATTLE CELL:

The FSB S2/3 will establish the battalion battle cell in the BSA tactical operations center (TOC). The mission of the battle cell is to monitor and track the battle and plot enemy advances and positions.

A. At a minimum, the battle cell will consist of the following:

1. Current map board.
2. Brigade defensive overlay.
3. Enemy template.
4. BSA evacuation overlay.
5. Battalion command net.
6. DISCOM command net.
7. Brigade operations and intelligence net.
8. Brigade administrative and logistics net.

B. BSA radio and wire communications to all units/slices must be tied into the battle cell for alerts of warning and execution orders.

C. The battle cell will be staffed at a minimum by:

1. FSB S2/3 - day shift.
2. XO - night shift.

9. MILITARY POLICE SUPPORT:

A. The military police (MP) platoon in the BSA is an integral part of the BSA security force. MP support will be included in the evacuation.

B. MPs will occupy key terrain forward of the BSA to act as an observation/screening force. They will also provide a forward communications link for the FSB/BSA commander to observe and report enemy actions and movements.

C. MPs will be positioned along the evacuation route in the event of an evacuation to patrol and secure the routes during the bug-out.

D. Coordination will be made with the DISCOM for additional MP support as required.

10. EXECUTION:

A. The FSB S2/3 will plot enemy advances and positions. Warning and execution orders will be issued if enemy forces cross the trigger lines.

B. The warning order will be issued if enemy forces break through the forward line of own troops (FLOT), and cross the first trigger line. This trigger line will usually be 25 to 30 kilometers (km) forward of the BSA. Actions upon receipt of the warning order include:

1. Notification of unit personnel.

2. Selected critical CSS equipment preparation, load-up, and start-up.

3. Critical CSS personnel/equipment standby.

C. The execution order will be issued if enemy forces cross the second trigger line and enemy contact is imminent. The second trigger line will usually be 10 to 15 km forward of the BSA.

D. If the enemy rate of advance is determined to be faster than planned, the execution order will be issued before or with the warning order.

E. The evacuation will be conducted in two phases, critical assets and remaining assets. The FSB/BSA commander will make a determination based on the location of each unit, the size of that unit and its density of critical assets, and the most important CSS assets to be saved. The FSB S2/3 will develop evacuation march tables and an order of march based on the commander's determination.

F. The XO will leave the BSA as the execution order is issued and supervise activities at the alternate position. The battalion command sergeant major (CSM) will move out to the main rally point and monitor those activities. Once the evacuation is complete, the CSM will follow the trail elements to ensure all disabled vehicles are policed or determine further disposition.

G. If possible, the remainder of the BSA may evacuate to the

alternate position once all critical CSS assets from the first phase have departed the BSA.

11. ACTIONS AT THE ALTERNATE POSITION:

A. The battalion XO will supervise activities at the alternate position.

B. Once evacuated elements occupy the alternate position, a priority of tasks will be conducted. Specific tasks are per tactical standing operating procedure (TACSOP) for occupying new sites.

12. ADDITIONAL INSTRUCTIONS:

A. External units conducting business inside the BSA when the execution order is issued will be integrated into the BSA host unit's evacuation.

B. Adequate rations, water, and ammunition to support the evacuated elements will be transported by internal organic assets.

C. Evacuation elements must be alert for air and nuclear, biological, chemical (NBC) attack during the evacuation. Air guards will be posted by each unit in their convoys and the appropriate mission-oriented protection posture (MOPP) level observed.

D. Adequate communications assets must be brought to the alternate position by all units. If time permits, disconnect landlines and recover the communications wire in the BSA when the warning order is issued. Transport wire and radio communications to the alternate position.

13. COMMAND AND CONTROL:

A. The battalion XO is the executor of the evacuation and has overall command and control of the bug-out and alternate position.

B. In the event the battalion

XO is not present, the senior company commander will take charge and implement the plan, followed by the next senior company commander.

C. The battalion XO will monitor the BSA command frequency from the alternate position. In the event the BSA is destroyed or

overrun, the battalion XO will assume command and continue sustainment operations in support of the brigade combat team. 

CPT Kevin C. Lee is a student in the Quartermaster Officer Advanced Course at Fort Lee, Virginia.

Evacuation Planning Sequence Checklist

	GO	NO GO
1. BSA units/slices have developed and submitted lists of critical CSS assets?		
2. BSA tenant units/slices briefed?		
3. Evacuation plan coordinated, integrated, and approved by DISCOM and brigade headquarters?		
4. Primary and alternate position(s), routes, and rally points selected and approved?		
5. Primary and alternate position(s), routes, and rally points reconnoitered?		
6. Battle center established?		
7. Current brigade orders, maps, overlays, and enemy templates on hand and posted?		
8. Communications nets available and operational?		
9. Rehearsals scheduled and conducted?		
10. Tactical air support and artillery targets planned and approved?		
11. Additional military police support coordinated for protection during the evacuation?		
12. MP evacuation on order mission prepared?		

CLEANING THE SWORD

CPT Charles F. Moore

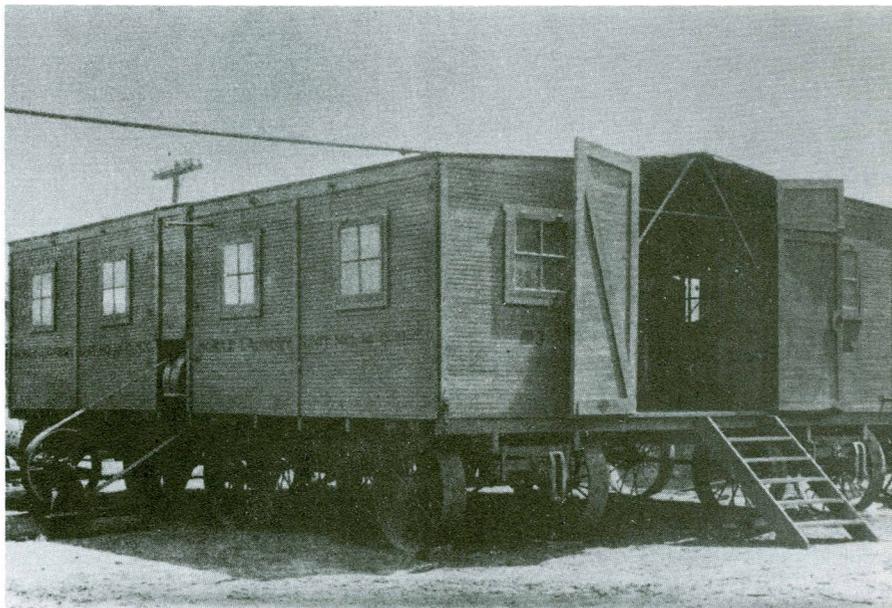
Soldiering is dirty business. Since the Revolutionary War, the Quartermaster Corps has supplied clean, serviceable clothing to front line combat soldiers. One of General Mifflin's earliest challenges was clothing procurement for Revolutionary soldiers while facing severe wool shortages, limited production capability, and no money.

The Quartermaster Corps has continually experimented with a variety of techniques to meet the clean clothing challenge. Usually, those techniques were determined by prevailing technology, the nature of the war, and the quality of the clothing.

From the Revolutionary War through the early 20th century, clean clothing was supplied to soldiers by replacing worn out, filthy uniforms with new ones. Clothing textiles and primitive construction techniques, coupled with the hard life of early soldiers and lack of laundry technology, simply did not support continual cleaning.

Whether slopping through mud, sweltering in tropical heat, or swimming in continuous rain, combat soldiers do not stay clean very long. Soldiers knew that clean clothing, when provided, did not come often. For the first 150 years of U.S. history, soldiers were left to their own devices for personal laundry. Most did not bother, and the result was substantial loss of combat power due to disease.

The health risk factors associated with poor personal hygiene were well known at the turn of the century. British forces established standards of field hygiene, appointed field sanitation officers, and published manuals on sanitation techniques—including clothing sanitation. Their pioneering efforts were a result of astronomical non-



First Quartermaster mobile laundry unit

battle casualties. During the Crimean War, the English lost 21,000 soldiers to diseases. Regimental medical officers knew that clothing provided a perfect home for a persistent camp follower and disease carrier—the common louse (the "Greyback" of the Civil War and "Cootie" of World War I).

World War I marked the first real attempt to provide front line soldiers with clean clothes through laundering and sanitation. The "Cootie" problem and its inherent risk of massive nonbattle casualties, coupled with the advent of chemical warfare, jolted slow-moving design and procurement activities into high gear.

French and English forces already had mobile laundries in the zone of operations and furnished many of the units first used by American Forces. The first American portable unit was completed in October 1917 by the Broadbent Portable Laundry

Corporation and consisted of four trailers carrying the laundry equipment, two trailers carrying supplies, and a steam tractor as prime mover and power source. On the road, the system extended for more than 100 feet and was often associated with the arrival of Barnum and Bailey's Circus.

Laundry companies organized to operate the systems were staffed by one second lieutenant and 37 enlisted soldiers. These companies were separate organizations attached to armies, corps, or divisions based essentially on accessibility of the parent unit since the laundries needed hardstands, good roads, and considerable maneuver space.

World War I soldiers never had adequate laundry service. In 1917, General Pershing requested that every division embarking for France be assigned a mobile laundry. The first system arrived in Europe in May 1918, and three

more were received in August. By Armistice Day in November, 24 units were in Europe. Capable of servicing 1,500 men per day, the units operated primarily in the rear. Most trench soldiers did not see clean uniforms until they were relieved from the front lines. This severe lack of laundry service resulted in "Cooties" living on more than 90 percent of American soldiers at the front. Following the war, mobile units were used for salvage, sanitation, and reclamation of clothing for return to storage.

In June 1940, renewed interest in mobile units led to fund allocation for study and design. The most significant technological achievement was the reduction in size from six trailers to one. Mounted on a semi-trailer, this system consisted of a washing machine, an extractor, and two steam-heated tumblers for drying clothes. The new system had obvious advantages over the old one in ease of concealment, maneuverability, and increased capacity. Contracts were let for 1,331 systems. By October 1942, several hundred had been shipped to mobile laundry companies to begin training.

Technological changes and innovations continued throughout World War II. The semitrailer design, although an improvement over the World War I model, was still too heavy and bulky. Several new designs were tested. One design shrank the equipment to fit onto two, two-wheeled trailers (precursor of our current system) and another ingenious design was for an "airborne" laundry.

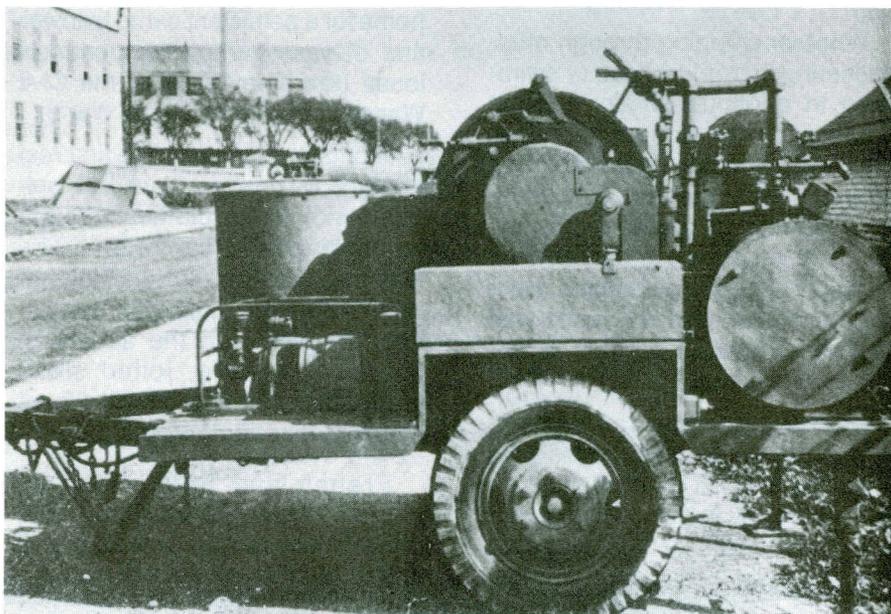
The airborne laundry consisted of two skid-mounted units which were totally self-contained, needing only fuel, water, and oil to operate. It could be mounted in either a C-47 or a CG-4A glider. The system was

designed to service soldiers at isolated sites far from fixed facilities, primarily on the islands of the South Pacific.

More significant than the development of new machines was the courage, perseverance, and Yankee ingenuity of the men who operated them. The 600th Quartermaster Laundry Company landed on Utah Beach on D+40 and followed VII Corps through the breakout at St. Lo. During the assault of the Siegfried Line from 18 September through 23 December, the unit set up operations just out of enemy artillery range and serviced the 1st, 4th, 8th, 9th, 83rd, 99th, and 104th Infantry Divisions, and the 3rd and 5th Armored Divisions, processing more than 2 million pounds of laundry. The unit contended with fuel and parts shortages, massive workloads, and a constantly changing tactical situation. The 463rd Quartermaster Laundry Company landed in

France on June 18 and set up on a narrow beachhead three days later. Staying close to the front on the race through Europe called for the men to pull patrol duty, fight snipers, and survive many bombings and strafings. In one day, the company was strafed five separate times. Despite this, one platoon cleaned clothes for more than 135 organizations, totaling more than 50,000 pounds--in one week.

Laundrymen occasionally found themselves in the heat of battle. One laundry platoon following Lieutenant General Patton across France set up on a river bank in the midst of a battle between American tanks and German Infantry. Technical Sergeant Rufus Pressley, the platoon sergeant, and his men "joined in the fight, captured eight Germans, killed a few, and chased off the remainder." (Quartermaster Training Service Journal, 10 November 1944, page 24.) Another laundry platoon supporting Fifth

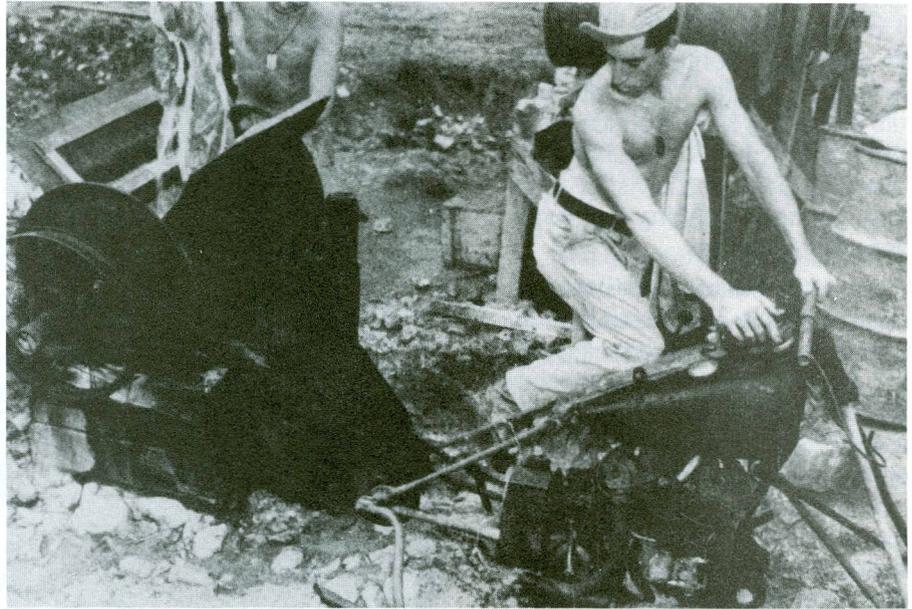


Post World War II laundry unit, one of two trailers carrying the washer, extractor, water heater, drain bin, auxiliary electric pump, and gasoline tank

Army at Anzio stayed under attack: "Persistent 20 to 25 minute strafing by enemy planes at Anzio made it extremely difficult to get the laundry done as the men had to keep diving in and out of their foxholes to escape the hail of lead that was continually thrown at them." (Quartermaster Training Service Journal, 26 January 1945, page 14.)

In the Pacific Theater, a variety of techniques were used. Quartermaster Composite Companies were assigned to island bases to provide nearly all Quartermaster functions including laundry. For soldiers assigned to truly remote locations, the Office of the Quartermaster General developed simplified instructions on how to launder clothes and devised special handwashing kits to be used by units having no other means available. A set had 3 nesting washtubs, 7 scrub brushes, 5 washboards, and 200 feet of cotton clothesline.

Soldiers have always exhibited a remarkable degree of imagination



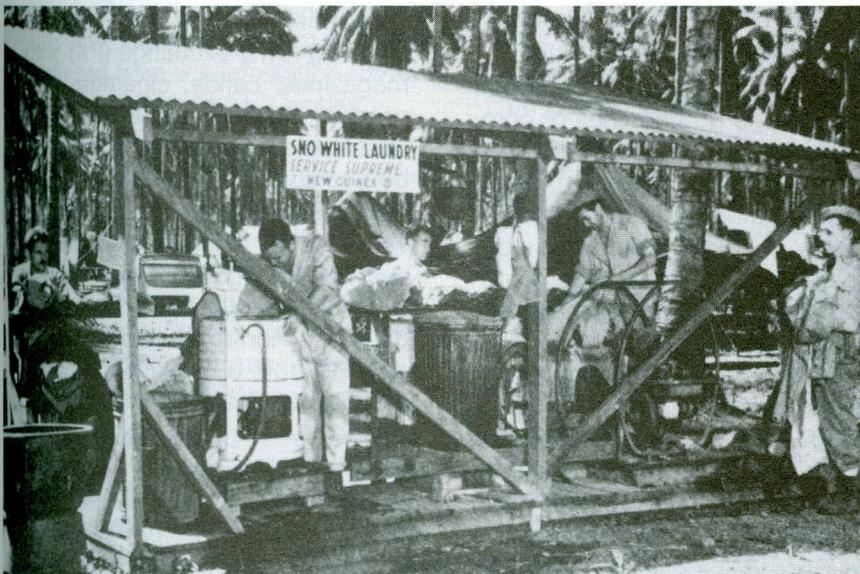
A "Rube Goldberg" machine built from a steel drum and an old motorcycle during World War II

when something needed to be done. "Rube Goldberg" washing machines were scattered all through the Pacific Islands. Most of them operated around salvaged 55-

gallon drums, with an agitator geared to a homemade windmill. Lieutenant Colonel Carl Yost, Quartermaster Corps, stated: "... have seen hundreds ... It is an amazing demonstration of the American soldier's ingenuity being put to a practical use." (Quartermaster Training Service Journal, 28 September 1945, pages 5-9.) When Japan surrendered, the Quartermaster Corps had 73 laundry companies in the field.

Quartermasters have always relied on a combination of direct laundry support, and clothing exchange and bath with backup laundry support, to get clean clothes to the front. The Korean Conflict heralded a much greater emphasis on forward clothing exchange and bath operations with follow-on laundry support.

In February 1951, the 1st Cavalry Division Quartermasters established a clothing exchange system with their bath units which provided



A World War II improvised laundry made from salvaged parts and a commercial washer in New Guinea

SAFETY SAVES SOLDIERS

DO YOU CARE ENOUGH?

LTC George C. Knapp, Jr.

The U.S. Army Safety Center, Fort Rucker, AL, calls human error a contributing factor in 80 percent of all Army accidents. Although the Quartermaster Corps is currently experiencing a favorable downward trend in the number of accidents involving Quartermaster soldiers, most accidents were preventable --

they involved human error. Table 1 (Total Accident Matrix for Quartermasters, FY 88 and FY 89) provides a breakdown of Quartermaster accidents by military occupational speciality (MOS) and general accident category. It also shows the MOSs responsible for a disproportionate number of accidents

based on the number of soldiers in each MOS as a percentage of the total Quartermaster Corps population. Given that most accidents are preventable and that human error is involved, it becomes important to identify and analyze each accident based on the reasons for human error and the error itself.

TABLE 1.

ACCIDENT	MOS															OFFICER TOTALS	PERCENTAGE OF TOTAL QM ACCIDENTS	
	43E	43M	57E	57F	76C	76V	76X	76Y	76Z	77F	77L	77W	76P	94B	WO			
Driving Privately Owned Vehicle (POV)	18	2	5		23	18	2	53	3	27	1	4	17	83		3	259	15%
Driving Military Vehicle		2			36	39	4	101	2	120	2	4	20	59	3	4	396	23%
Sports	11		2		39	39	3	79	1	31		2	15	34	2	15	273	16%
Human Locomotion (Examples: running, marching, slipping, falling)	6	1		1	18	23	3	53	1	18	2	2	11	108	2	5	254	15%
Material Handling	3		1		17	15	1	42	1	33		2	4	35	1	4	159	9%
Maintenance	2	1	1		10	5		26	1	17			3	10			76	4%
Weapons	4				5	2	1	13	1	4		1	1	1		2	35	2%
Parachuting	37							14		5		1		18		6	81	5%
Horseplay					1	1	1	6						4			13	1%
Personal Hygiene	2				3	2		2		4			1	4		1	19	1%
Food Preparation						2		3		1		1	1	69		1	78	5%
Combat Soldiering (Examples: hot and cold weather injuries, human locomotion in a field environment)				1	9	12	1	10	1	5		1	6	9		1	56	3%
TOTALS	83	6	9	2	161	158	16	402	11	265	5	18	79	434	8	42	1699	
PERCENTAGE OF TOTAL QM ACCIDENTS BY MOS	4.9	0.35	0.5	0.1	9.5	9.3	0.9	23.7	0.6	15.6	0.3	1.0	4.6	25.5	0.5	2.5		
PERCENTAGE OF TOTAL QM POPULATION	2.6	0.3	0.6	0.5	10.0	8.9	1.7	24.1	1.6	11.7	0.3	1.0	7.5	22	2.0	5.0		
LIKELIHOOD OF BEING IN AN ACCIDENT	1/22	1/48	1/50	1/333	1/46	1/42	1/77	1/44	1/111	1/32	1/36	1/44	1/67	1/37	1/167	1/91		

LEGEND:

(Tables 1, 2, 3, and 4)

FY - Fiscal Year

QM - Quartermaster

WO - Warrant Officer

MILITARY OCCUPATIONAL SPECIALTIES (MOSs):

43E Parachute Rigger

43M Fabric Repair Specialist

57E Laundry and Bath Specialist

57F Graves Registration Specialist

76C Equipment Records and Parts Specialist

76P Materiel Control and Accounting Specialist

76V Materiel Storage and Handling Specialist

76X Subsistence Supply Specialist

76Y Unit Supply Specialist

76Z Senior Supply/Service Sergeant

77F Petroleum Supply Specialist

77L Petroleum Laboratory Specialist

77W Water Treatment Specialist

94B Food Service Specialist

Table 2 (Major Reasons for Human Error) shows the major reasons for human error. In a large portion of human-error-related accidents, the error causing the accident ties in some way to a failure to perform to standard (individual failure) or failure to enforce standards (leader failure). For example, Table 3 (Parachuting Accident Matrix for Quartermasters, FY 88 and FY 89) indicates that 54 percent of all 43E (parachute rigger) parachute accidents and 67 percent of all 94B (food service specialist) parachute accidents are caused by improper parachute landing falls (PLFs). The primary error is landing with feet apart. Either soldiers are ignoring the standard (individual failure) or leaders are not identifying soldiers having difficulties and requiring them to practice until they can meet the standard (leader failure). Although the figures do not consider the number of jumps made, one conclusion might be that additional prejump training is needed to prevent future accidents.

Accident prevention requires the active involvement of the entire chain-of-command to hold soldiers accountable for knowing standards and performing to them. The Sergeant Major of the Army told his

TABLE 2.

MAJOR REASONS FOR HUMAN ERROR	
Standards are not clear or practical or do not exist	Command Failure
Standards exist but are not known or ways to achieve them are not known	Training Failure
Standards are known but are not enforced	Leader Failure
Standards are known but are not followed	Individual Failure

TABLE 3.

PARACHUTING ACCIDENT MATRIX FOR QUARtermasters, FY 88 AND 89																	
CAUSE	MOS															TOTALS	PERCENTAGE OF TOTAL QUARtermaster PARACHUTING ACCIDENTS BY CAUSE
	43E	43M	57E	57F	76C	76V	76X	76Y	76Z	77F	77L	77W	76P	94B	WO OFFICER		
No Parachute Landing Fall (PLF)							3	1								4	4.9%
Improper PLF	20						4	1					12		4	41	50.6%
Improper Exit	2															2	2.5%
Canopy Control	4						1						2			7	8.6%
Entanglement	2							1								3	3.7%
Combat Equipment	1						1				1				1	4	4.9%
Static Line	3						3	1					4		1	12	14.8%
Parachute Malfunction	1						1									2	2.5%
Terrain	4						1	1								6	7.4%
TOTALS	37	0	0	0	0	0	0	14	0	5	0	1	0	18	0	6	81
PERCENTAGE OF TOTAL QUARtermaster PARACHUTING ACCIDENTS BY MOS	45.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.3%	0.0%	6.2%	0.0%	1.2%	0.0%	22.2%	0.0%	7.4%	

TABLE 4.

CAUSE	BY MOS															TOTALS	PERCENTAGE OF TOTAL QUARTERMASTER MILITARY VEHICLE ACCIDENTS BY CAUSE
	43E	43M	57E	76C	76V	76X	76Y	76Z	77F	77L	77W	76P	94B	WO	OFFICER		
Groundguide				3	6	1	11		10		1	2	5			39	9.8%
Speeding				3	1		3	1	5				12	1		26	6.6%
Too Fast For Road																	
Conditions				7	2	1	14		22		1		3	1		51	12.9%
Misjudge Road		1		4	2	2	1		7			1	2			20	5.1%
Misjudge Clearance					2		2		6							10	2.5%
Following Too Closely				1	1		8		9		1					20	5.1%
Vehicle Malfunction					3		3	1	2		1		5		1	16	4.0%
Brake Malfunction					3		2		10							15	3.8%
Tire Malfunction					2		2		2							6	1.5%
Inadequate Preventive Maintenance Checks and Services(PMCS)					1		1		9							11	2.8%
PMCS Brakes														1		1	0.3%
PMCS Tires												2				2	0.5%
No Parking Brake		1		1			2									4	1.0%
No Chalk Blocks									4							4	1.0%
No Truck Commander									4	1						5	1.3%
Fatigue							5		4			4			1	14	3.5%
No Licence				1	2		2		4			1				10	2.5%
Response To Skid				2								1				3	0.8%
Fail To Yield				2			6		4				25			37	9.3%
Fall From Vehicle				1			7		6				3			17	4.3%
Passing				1			1		4							6	1.5%
Steep Grade									3							3	0.8%
Improper Use							1		4			1			1	7	1.8%
Improper Load												1				1	0.3%
Oversteering				2			1									3	0.8%
Left In Gear				1			4									5	1.3%
No Use Of Safety Equipment				1			2		1							4	1.0%
No Reason				6	14		23			1		7	4		1	56	14.1%
TOTALS	0	2	0	36	39	4	101	2	120	2	4	20	59	3	4	396	
PERCENTAGE OF TOTAL MILITARY VEHICLE ACCIDENTS BY MOS	0.0%	0.5%	0.0%	9.1%	9.8%	1.0%	25.5%	0.5%	30.3%	0.5%	1.0%	5.1%	14.9%	0.8%	1.0%		

noncommissioned officers that undisciplined behavior never corrects itself. It continues until someone is killed or someone cares enough to take action to change a soldier's behavior. Training to standard and caring leadership are the key. Safety is a predictable result of a disciplined command environment and quality training conducted by leaders who enforce standards because they care!

Unfortunately, leader awareness alone is not enough. Someone must care enough to take action to prevent that unsafe practice or attitude from causing an accident. The chain-of-command may not recognize that a risk taker exists in their unit. Yet, someone in the unit knows because its not unusual to hear someone say, "I knew something like this was going to happen." Table 4 (Military Vehicle Accident Matrix for Quartermasters, FY 88 and FY 89) indicates that driving too fast for road

conditions, failure to use a ground guide, and failure to yield are the leading causes for Quartermaster military vehicle accidents. Most unit standing operating procedures (SOPs) demand an assistant driver. What were they doing prior to these accidents? The chain-of-command and especially commanding officers will always bear the burden of ultimate responsibility, but that does not remove the obligation of peers to be their brother's keepers versus their brother's pallbearers.

Representatives of the U.S. Army Safety Center visited three battalion-size organizations with good safety records and found the following five factors common to all three organizations:

- Performance criteria were precisely defined.
- All personnel were acutely aware of the performance criteria.

- Training was conducted to a high standard.
- Immediate and effective action was taken to deal with any deviation from established performance standards.
- Operations were conducted by the book, and unit moral was high.

The last factor is probably the most important. Unit members were proud that their organization conducted operations by the book. These soldiers apparently recognize their responsibility to each other and were willing to take the required action even when it might affect someone's career. 

LTC George C. Knapp, Jr. is the Director, Directorate of Evaluation and Standardization, U.S. Army Quartermaster Center and School (PROV), Fort Lee, Virginia.

INDEX 1989

The Spring 1990 edition marks the second anniversary of the Quartermaster Professional Bulletin. The following index references what the Quartermaster Corps printed in the Spring, Summer, Autumn, and Winter issues for 1989. This quarterly publication focuses on keeping Quartermaster soldiers and Department of the Army civilians aware of emerging developments within the Corps. The staff once more thanks all the authors from throughout the world who submitted articles, graphics, and photographs. Your support makes the Quartermaster Professional Bulletin a reality. Sustainer of the U.S. Army since 1775, the Quartermaster Corps exchanges information and ideas in its published voice dedicated to the professional development of the Quartermaster soldier. If there's a topic you would like to see in a future issue or if you want to submit an article, please contact us by calling AUTOVON 687-4741/4382, Commercial 804-734-4741/4382, or by writing to:

**COMMANDER
U.S. ARMY QUARTERMASTER CENTER AND SCHOOL (PROV)
ATTN: ATSM-ACZ-PB (EDITOR)
FORT LEE, VIRGINIA 23801-5032**

AIRBORNE

HTARS: HEMTT Tanker Aviation Refueling System SFC Michael E. Anderson	SPRING 1989
Petroleum Testing in the Field: The Airmobile Lab and the Manportable Test Kit MSG Steven Bellarose	SPRING 1989
5,000 Club CPT Deirdre Cozzens	SUMMER 1989

AUTOMATION

AFMIS - Automating Subsistence Management SFC Delona Francis	SPRING 1989
Artificial Intelligence in Logistics -- The Future is Now CPT Ira S. Naiditch	AUTUMN 1989
Automated Supply Training Gary Liptrap	AUTUMN 1989
LOGMARS Nicholas L. Flaim	AUTUMN 1989
Lost and Found SFC Willard C. Sabourin	AUTUMN 1989
SARRS Richard Weinz	AUTUMN 1989

Steam and Electricity: The Origins of Supply Automation in America Dr. J. Britt McCarley	AUTUMN 1989
TACCS SFC Willard C. Sabourin	AUTUMN 1989
The SAAS Family SFC Willard C. Sabourin	AUTUMN 1989
ULLS - S4 SFC Edward B. Scott	AUTUMN 1989
Automation in the Motor Pool SFC Willard C. Sabourin	WINTER 1989
Focused Prescribed Load List (FPLL) CPT Michael J. Fehn	WINTER 1989
LOGMARS Future Advancements CPT John P. Hays	WINTER 1989
Objective Supply System Jay W. Briggs	WINTER 1989
The Standard Army Maintenance System SFC Willard C. Sabourin	WINTER 1989

AWARDS

Quartermaster Professional Bulletin Writing Award	SUMMER 1989
---	-------------

CAREER NOTES

Command CPT John C. Loomis	SPRING 1989
Master Warrant Officer Program ROTC Affiliation Program	SPRING 1989
Branch Detail MAJ Mark G. Cole	SUMMER 1989
NCOER CSM Larry E. Ryles	SUMMER 1989
Quartermaster Officer Advanced Course MAJ David B. Sanders, CPT Michael L. White, and CPT Paul N. Fortune	SUMMER 1989
QM Master Warrant Officer (MWO) Update CW4 Leslie Craig	SUMMER 1989
CAS3 CPT Gary G. Furneaux	AUTUMN 1989
Intermediate Military Education Level Study MAJ Mark G. Cole	AUTUMN 1989
Restructuring of the MAM Program LTC Daniel D. Ziomek	AUTUMN 1989
Personnel Management at the Quartermaster/Chemical Branch LTC Stephanie S. Hunter and CPT Eric A. Flagg	WINTER 1989
Taking Care of Junior NCOs SGM William H. Hicks	WINTER 1989
Total Warrant Officer System CW4 David P. Welsh	WINTER 1989

COMMENTARY

Petroleum Distribution Corps Forward COL Richard P. Dacey	SPRING 1989
1989 - The Year of the NCO MG William T. McLean	SPRING 1989
Accountable Officer LT Jennifer L. Rice	SUMMER 1989
Defense Fuel Supply Center - World's Largest Refined Fuel Purchaser BG James E. Bickford	SUMMER 1989
Farewell to the Quartermaster Corps MG William T. McLean	SUMMER 1989
Petroleum Distribution, Echelons Above Corps COL Richard P. Dacey	SUMMER 1989

Innovative Methods of Retaining Quality Female Soldiers CPT Angela Neier	AUTUMN 1989
Supply Automation Overview Sustainment Imperatives BG Paul J. Vanderploog	AUTUMN 1989
Sustainment of Theater Army Operations MAJ Robert W. Grissom and Dr. Powell W. Owens	AUTUMN 1989
Class IX Customer Assistance: Strategies for Success LT Lisa M. Shaler-Clark	WINTER 1989
Class IX Mobility Overview Paul Fournia	WINTER 1989
Class IX (Repair Parts) Overview The Quartermaster Profession BG Paul J. Vanderploog	WINTER 1989 WINTER 1989
Quartermaster Standard-Bearers CSM Milton B. Hazzard	WINTER 1989

DEVELOPMENT

Activating the 54th GRREG Company CPT Darnell J. Bethel	SPRING 1989
HTARS: HEMTT Tanker Aviation Refueling System SFC Michael E. Anderson	SPRING 1989
"High Octane Support" at the 260th POL BN CPT Steven A. Curlee	SPRING 1989
Logistics Power: A New Principle of War MAJ Richard A. Bursell	SPRING 1989
Petroleum Testing in the Field: The Airmobile Lab and the Manportable Test Kit MSG Steven Bellarose	SPRING 1989
Refuel on the Move CPT Gerald J. Cotter	SPRING 1989
Think SMART! CW3 Michael R. Menefee	SPRING 1989
U.S. Army Troop Support Serves The Most Deserving Deborah Fields	SPRING 1989
Korean Storage Facility Thrives LTC William K. Huff	SUMMER 1989
Fast Track Senior Rater Profiles LTC Mark A. Williams	AUTUMN 1989 AUTUMN 1989
Universal Self-Deployable Cargo Handler Forklift Trucks Bobbie Gale Stell	WINTER 1989

FIELD EXERCISES

- REFORGER 88 SUMMER 1989
MG Thomas B. Arwood and
COL Walter A. Bawell
- Lessons Learned from LOGEX 89 AUTUMN 1989
LTC James C. Yule
- LOGEX 89: How the Third World AUTUMN 1989
War Began
- Army's Only Active Duty Graves WINTER 1989
Registration Deploys
LT Quinton A. Lewis

GRAVES REGISTRATION

- Activating the 54th GRREG SPRING 1989
Company
CPT Darnell J. Bethel
- Army's Only Active Duty Graves WINTER 1989
Registration Company
Deploys
LT Quinton A. Lewis
- The U.S. Army Europe Mortuary WINTER 1989
System
Donald L. Kerns

HISTORY

- German Logistics Failure: SPRING 1989
Lesson of Operation Barbarossa
MAJ Frank Wright
- POL on the Red Ball Express SPRING 1989
Dr. Steven E. Anders
- Reflecting the Pride of the Corps: SPRING 1989
The Quartermaste Hall of Fame
- 1989 Quartermaster Hall SUMMER 1989
Hall of Fame Inductees
- Operation PLUTO: The Story SUMMER 1989
of the Channel Pipeline
- Steam and Electricity: AUTUMN 1989
The Origins of Supply
Automation in America
Dr. J. Britt Mc Carley
- An Early Lesson in Repair Parts WINTER 1989
Dr. Steven E. Anders
- The Mobilization Barracks WINTER 1989
E.F. Porter, Jr

INDEX

- Quartermaster Professional SPRING 1989
Bulletin 1988 Index

LIAISON

- What is an IMSO? WINTER 1989

MEMORIAM

- In Memoriam: Major General SUMMER 1989
(Ret.) Victor J. MacLaughlin

PETROLEUM

- HTARS: HEMTT Tanker Aviation SPRING 1989
Refueling System
SFC Michael E. Anderson
- "High Octane Support" at the SPRING 1989
260th POL BN
CPT Steven A. Curlee
- Petroleum Distribution Corps SPRING 1989
Forward
COL Richard P. Dacey
- Petroleum Testing in the Field: SPRING 1989
The Airmobile Lab
and the Manportable Test Kit
MSG Steven Bellarose
- Red Ball to the Rescue SPRING 1989
Dr. Steven E. Anders
- Refuel on the Move SPRING 1989
CPT Gerard J. Cotter
- Korean Storage Facility Thrives SUMMER 1989
LTC William K. Huff
- Lifeline to Sustainment: SUMMER 1989
The European Military
Pipeline System
MAJ Raymond L. Rodon
- "POL-CATS" - 53rd SUMMER 1989
Quartermaster Company
CPT Karen Sims
- Petroleum Distribution, SUMMER 1989
Above Corps
COL Richard P. Dacey
- Pipeline and Terminal Operations SUMMER 1989
at the 240th QM Battalion
CPT Jeffrey Schmidt
- TWI Sun Refining SUMMER 1989
CPT Jerome C. Brinker
- Trans-Korea Pipeline SUMMER 1989
SPC Keith D. Butler
- Snake in the Grass WINTER 1989
LT Aimee L. Kominiak

RESERVES

- Senior Rater Profiles AUTUMN 1989
LTC Mark C. Williams

SAFETY

- Safety Saves Soldiers WINTER 1989
James R. Clark

SUBSISTENCE

- AFMIS: Automating Subsistence Management
SFC Delona Francis SPRING 1989
- U.S. Army Troop Support Agency
Serves the Most Deserving
Deborah Fields SPRING 1989

SUPPLY

- Steam and Electricity:
The Origins of Supply
Automation in America
Dr. J. Britt McCarley AUTUMN 1989
- Think SMART!
CW3 Michael R. Menefee SPRING 1989
- Accountable Officer
LT Jennifer L. Rice SUMMER 1989
- Organizational Supply
Management System (OSMS)
Nancy B. Briggs AUTUMN 1989

- Shared/Integrated Supply Training
Jerry W. Henderson AUTUMN 1989
- Class IX Mobility Overview
Paul Fournia WINTER 1989
- Focused Prescribed Load List
(FPLL) WINTER 1989
- Outfitting the Force: ECWCS-A
Friend in the Field
CPT Daniel G. Grassi WINTER 1989

TRAINING

- TWI Sun Refining
CPT Jerome C. Brinker SUMMER 1989
- Shared/Integrated Supply
Training
Jerry W. Henderson AUTUMN 1989
- Soldiers in Space
LT Stephen D. Loughnane WINTER 1989
- Quartermaster Standard-Bearers
CSM Milton B. Hazzard WINTER 1989

STATESIDE MORTUARY SERVICE TRANSFER

Managing stateside military mortuaries is now exclusively an Air Force responsibility. The Army transferred its mortuary in Oakland, CA, to Travis Air Force Base, CA, last October.

"It's a better arrangement, since the Air Force already operates the mortuary at Dover (DE) Air Force Base," said COL Mel Hoherz, director of the Army's Casualty and Memorial Affairs Operations Center in Alexandria, VA.

The mortuary service at Dover was little-known except for the occasional death of service members stationed in Europe or the Mediterranean. The Jonestown, Guyana, civilian tragedy in 1978, the 1983 Beirut Marine barracks bombing, and the Gander, Newfoundland, military charter plane crash in 1985 put the spotlight on Dover, DE.

"There is only one unit in the DoD active force to respond to mass-casualty incidents," COL Hoherz said. "The Army's 54th Quartermaster Company at Fort Lee, VA, has 90 soldiers to do recovery work anywhere in the world."

"Graves registration is an important mission," said Tom Bourlier, deputy director of the Graves Registration Center at Fort Lee. "Who else is going to care for the dead on the battlefield? The graves registration specialists are technical experts who search for, properly and delicately recover, and evacuate remains to temporary cemeteries and mortuaries, and carefully and delicately retrieve them."

Recovering the person's property is especially important to proper identification. "The process of identification starts at the point of death," Bourlier said. "One can make identification more difficult if various personal possessions are removed, such as the member's identification tags, jewelry, or billfold."

Graves registration specialists are trained to provide the dignity and respect of the dead one would expect, Bourlier said. Without the trained technicians, the ground commander would have to fight his battle and keep the rest of his men alive, plus care for his dead soldiers, added COL Hoherz.

BATTLE-FOCUSED SQT FOR RESERVE COMPONENTS

The Skill Qualification Test (SQT) development process at the U.S. Army Quartermaster Center and School (PROV) (QMC&S (PROV)) evaluates the battle-focused individual training of Reserve Component (RC) units exactly like Active Component (AC) units. The QMC&S (PROV) develops RC-only tracks for appropriate SQTs when analysis shows significant differences between military occupational speciality (MOS) and duties at the skill levels in RC and AC units.

The QMC&S (PROV) training departments make every attempt to involve RC personnel in the SQT development process. The QMC&S (PROV) includes the following in RC training:

- Initial/ongoing coordination. Selected RC units determine specific systems, equipment, and mission-essential task lists.
- SQT tryout validations. Tasks unique to the RC are tested by RC soldiers. For task tests common to both the RC and AC, soldiers from both components validate QMC&S (PROV) SQTs.
- RC-tailored SQT. The QMC&S (PROV) attempts to make the SQT relevant to the RC and to provide timely SQT notices. This gives RC commanders adequate time to review and identify tasks which are not applicable to the unit. The RC soldiers will not be scored on tasks for which their unit does not have the equipment or mission when they take the SQT. Results provide the RC commander a clear analysis of individual weaknesses and strengths and identify unit training needs.

FY 90 QUARTERMASTER RESERVE COMPONENT OFFICER ADVANCED COURSE

The FY 90 resident phase schedule of the Quartermaster Reserve Component Officer Advanced Course follows:

Phase	Dates	Phase	Dates
I	17 Feb - 3 Mar 90	III	8 - 20 Jul 90
I	5 - 19 May 90	III	29 Jul - 10 Aug 90
I	4 - 18 Aug 90		

QUARTERMASTER TRAINING MATERIALS

Direct requests for training materials prepared by the U.S. Army Quartermaster Center and School (PROV), Fort Lee, VA, to:

COMMANDANT
U.S. ARMY QUARTERMASTER CENTER AND SCHOOL (PROV)
ATTN: ATSM-DTO-ET
FORT LEE, VA 23801

MILITARY QUALIFICATIONS STANDARDS (MQS) UPDATE

Military Qualifications Standards (MQS) is a training system for both Active and Army Reserve officers. Part of the total Army officer professional development system, MQS provide opportunities for officers to improve their efficiency in both common core/common task and Quartermaster skills. MQS include a suggested reading program.

The revised concept for MQS includes three tiers:

- MQS I- precommissioning.
- MQS II - company grade.
- MQS III - field grade.

The system is tied to training doctrine. The manuals for the reading program will be pocket-sized for easy field use. Manuals applicable to Quartermaster officers include:

- Common task manual.
- 92A (Quartermaster General); 92B (Supply and Materiel Management); 92D (Aerial Delivery and Materiel).
- 92F (Petroleum).
- 92G (Subsistence).

Expected distribution for these publications is March through June 1991. To get future manuals under pinpoint distribution procedures:

- Identify request as an officer soldier training publication (STP)/MQS manual.
- If your unit doesn't have a publications account, establish an account with the U.S. Army Publications Center, 2800 Eastern Boulevard, Baltimore, MD 21220.
- Submit officer STP/MQS requirements on Department of the Army (DA) Form 12-99 (Request for Establishment of a Publications Account). This form establishes a subscription for present and future publications.

To get STP/MQS manuals that have already been distributed:

- Officers should place their orders through their unit's publications representative.
- Units must submit DA Form 4569 (USAPC Requisition Code Sheet) to the publications center.

EVALUATION AND STANDARDIZATION

HOTLINE INFORMATION

The Directorate of Evaluation and Standardization (DOES) in the U.S. Army Quartermaster Center and School (PROV) (QMC&S (PROV)) collects immediate feedback from the field with a 24-hour telephone answering service. DOES records incoming calls after normal duty hours and responds to the caller the next duty day. DOES requests comments on strengths and weaknesses of all officer, warrant officer, and enlisted Quartermaster graduates. Comments comparing Quartermaster soldiers graduating from Fort Lee to graduates from Fort Jackson, SC, and Fort Dix, NJ are also needed. Also, DOES encourages feedback on acceptability, use, errors, and recommended changes to Quartermaster doctrine, equipment, field manuals (FMs), technical manuals (TMs), Army Training and Evaluation Programs (ARTEPs), soldier training publications (STPs), skill qualification tests (SQTs), and training extension course (TEC) instructional packages. The QUARTERMASTER HOTLINE NUMBER IS AUTOVON 687-3767, or COMMERCIAL (804) 734-3767. Two 1-800 numbers have been established for Fort Lee. These numbers connect you with the Fort Lee operator. The numbers are 1-800-554-4570 for callers outside Virginia and 1-800-552-4820 for callers inside Virginia. Collect calls will not be accepted. Units or individuals unable to call should send their comments to:

Commander
U.S. Army Quartermaster Center and School (PROV)
ATTN: ATSM-EV
Fort Lee, VA 23801-5000

Send requests for training materials to Commandant, U.S. Army Quartermaster Center and School (PROV) (QMC&S (PROV)), ATTN: ATSM-DTO-ET, Fort Lee, VA 23801. Direct questions about Reserve school course training material to Jerry Clemons, ATZM-DTC-TS, Commercial (804) 734-5452/5167 or AUTOVON 687-5452/5167. Only requests for materials prepared at the QMC&S (PROV) will be honored. No Department of the Army (DA) materials will be supplied by the QMC&S (PROV). To order doctrinal publications such as Army regulations (ARs), FMs, DA pamphlets, DA circulars, STPs, and ARTEPs, use DA Form 4569 (USAPC Requisition Code Sheet) or Autodin and send to U.S. Army Adjutant General Publications Center, 2800 Eastern Boulevard, Baltimore, MD 21220. Emergency publications of ARs (five copies) may be obtained by calling Baltimore, Commercial (301) 671-8529 or AUTOVON 584-4820 for all other publications. Unit identification code and publications account number are required.

AIRBORNE AND FIELD SERVICES

REVISION/CHANGE TO AIRDROP FIELD MANUALS

Listed below are field manuals (FMs) on Airdrop of Supplies and Equipment that will be revised or changed in FY 90:

- FM 10-512, Rigging Typical Supply Loads
- FM 10-517, Rigging 1 1/4-Ton Utility Vehicles (HMMWV)
- FM 10-523, Rigging Air Force Communications Control Vehicles
- FM 10-527, Rigging 155-MM Howitzers
- FM 10-531, Rigging the 6,000-Pound Capacity Forklift Truck
- FM 10-532, Rigging 1 1/2-Ton Trailers
- FM 10-534, Rigging Air Defense Artillery Gun (Vulcan)
- FM 10-540, Rigging Tilt Trailers
- FM 10-541, Rigging Aluminum Bridges (Floating and Fixed)
- FM 10-555, Rigging 1 1/2-Ton Ammunition Trailer
- FM 10-564, Rigging Fuel Drums
- FM 10-576, Rigging 613S Scrapers

Point of contact is Roger Hale at AUTOVON 687-3428, Commercial (804) 734-3428.

QUARTERLY AIRDROP REVIEW AND MALFUNCTION REVIEW ANALYSIS BOARD

The Quarterly Airdrop Review and Malfunction Review Analysis Board, hosted by the U.S. Army Quartermaster Center and School (PROV), will meet at Fort Lee, VA, on the following dates:

- 11-12 April 1990
- 11-12 July 1990
- 10-11 October 1990

Point of contact is Don Lynn at AUTOVON 687-2013, Commercial (804) 734-2013.

SUPPLY AND PROFESSIONAL DEVELOPMENT

UNIT SUPPLY UPDATE 12

Take good care of your Unit Supply Update 12. A publishing delay for this update was overcome in November 1989. The frequency of publishing new editions of the update makes regular resupply impractical. Update 13 is not scheduled for publication until January 1991. A limited number of copies are maintained at the Baltimore Publications Center. To place an emergency order, call AUTOVON 584-2533 or Commercial (301) 671-2533. Emergency orders are limited to 10 copies, and you must have a valid publications account number when calling.

CHIEF OF STAFF, ARMY, SUPPLY EXCELLENCE AWARD

Nominations for the FY 90 Supply Excellence Award (SEA) program closed on 19 Dec 89. Twenty-seven company and battalion-size units from 10 major Army commands (MACOMS) are included in this year's active Army competition. Ten U.S. Army Reserve (USAR) and nine Army National Guard (ARNG) unit finalists are also competing. The U.S. Army Quartermaster Center and School (PROV), Fort Lee, VA, as executive agent for the SEA, administers the program and provides on-site evaluation teams for the three components. The U.S. Army Personnel Command (PERSCOM) (Reserve Components) and the Army National Guard Bureau also provide evaluators. The evaluation period is February - June 1990. Winning units will be announced early 4th Quarter.

PETROLEUM AND WATER

BERM LINERS FOR COLLAPSIBLE FUEL TANKS

The U.S. Army Troop Support Command (TROSCOM) awarded a contract to manufacture single-piece berm liners for collapsible fuel tanks in 1987. Delivery of the liners began in 4th Quarter FY 88. Because the berm liners are stock-funded, requiring units must submit funded requisitions for their needs. Berm liners, when properly used, will help protect the environment in case of a tank failure. Berm liners are available in the following five sizes:

Capacity	National Stock Number	Cost	Dimensions
3,000 Gallons	5430-01-237-3658	\$1,029	26'8" x 26'8"
10,000 Gallons	5430-01-237-3659	\$1,544	37'5" x 37'5"
20,000 Gallons	5430-01-237-3660	\$2,059	39'2" x 37'2"
50,000 Gallons	5430-01-237-3661	\$3,089	46'8" x 84'2"
210,000 Gallons	5430-01-237-3657	\$3,657	105' x 105'

All berms have 2-inch drains in the front and rear.

Recently, the Petroleum and Water Department, U.S. Army Quartermaster Center and School (PROV), Fort Lee, VA, installed liners in its training areas. Liners were placed under 3,000-, 10,000-, and 50,000-gallon fabric tanks. Several lessons were learned:

- Lay out and measure liners before installation. Due to the manufacturing process, some dimensions vary compared to the listed dimensions.
- Be very meticulous when constructing the berm walls. Correct dimensions are critical to ensure that the edge of the liner comes to the top center of the berm wall. If the berm is too large, the liner's position will allow precipitation under the liner; too small, and the berm may not hold the contents of a full fabric tank in the event of a spill.
- Depending on the site for the liner, the drain's location may be too close to the edge of the liner and move the drain assembly flange farther from the edge. In some cases, even after careful construction of berm and measurement of the liner, the drain flange rested about half the distance up the inside of the berm wall. Water could not be drained.
- Located at the end of each drain hose is a 2-inch threaded gate valve. Units should locally manufacture a 2-inch threaded nipple with a 3-inch cam lock coupling. This makes it easier to use standard Army equipment to drain the berm in case of a tank failure.

GRAVES REGISTRATION

54TH QUARTERMASTER COMPANY (GRREG) SUPPORTS OPERATION JUST CAUSE

The Army's only active duty Graves Registration (GRREG) company, the 54th Quartermaster Company (GRREG), Fort Lee, VA, supported Operation Just Cause by deploying a team of GRREG personnel to the Dover Air Force Base Mortuary in Delaware and a team to Panama. This was the GRREG personnel's first deployment to support a military operation since activation at Fort Lee in December 1988. The team deployed to the Dover mortuary to augment existing staffs of the mortuary, the Armed Forces Medical Examiner's Office, and the Federal Bureau of Investigation. The team that deployed to Panama assisted with the disinterment and processing of deceased Panamanian civilians. GRREG personnel from the 1st Corps Support Command (COSCOM) supported the operation by providing GRREG support for U.S. military personnel killed in action and establishing interment sites for Panamanians. The 54th Quartermaster Company maintains two teams ready for rapid deployment in support of military operations and peacetime disasters.

GRAVES REGISTRATION'S NEWEST SYSTEM

Newest on the horizon is the Graves Registration (GRREG) Storage Litter System. Currently in development, the system is expected to be fielded during the 1st Quarter FY 91. This system will provide the Army a method of storing and evacuating human remains in emergencies. The system will provide for the optimum number of remains that can be stored horizontally on litters in a 8' x 8' x 20' refrigerated military-owned demountable container (MILVAN) (R-MILVAN) and will provide GRREG personnel access to individual remains. The system will have the capability to secure individual remains to litters that are contained in the system. In kit form, the system will be easily installed in the R-MILVAN by the unit maintenance support element. GRREG activities in a theater of operations will use the GRREG Storage Litter System when necessary to store human remains before identification and evacuation. It will be operated at temporary cemeteries, mortuaries, or central identification laboratories in corps or echelons above corps during war. It will be operated at mass casualty sites by personnel assigned to GRREG units during peacetime. This system is designed to save manual labor and enhance the operational efficiency of GRREG units.

FIELD TESTING FOR A CHEMICALLY CONTAMINATED AREA

A field test and evaluation of procedures to handle and process chemically contaminated remains and personal effects was conducted 11-26 October 1989 at Fort Lee, VA, by personnel from Dugway Proving Ground, Salt Lake City, UT. This action was a combined effort by the Quartermaster and Chemical schools, and the EAI Corporation of Abingdon, MD. The Graves Registration (GRREG) Center and the 54th Quartermaster Company (GRREG) from Fort Lee, VA, provided site support and participants. The test involved the 54th performing recovery operations under baseline (nonchemical) and chemical warfare scenarios for military occupational specialty (MOS) 57F (Graves Registration Specialist). The completed test results will be used to develop doctrinal procedures. Special visitors to the test site included the Deputy Assistant Secretary of the Army for Logistics.

REVISED GRAVES REGISTRATION OPERATIONAL CONCEPT

The Graves Registration (GRREG) Center and the Directorate of Combat Developments at the U.S. Army Quartermaster Center and School (PROV) developed a revised operational concept for Mortuary Affairs/GRREG support in a theater of operations. The concept will provide theater commanders greater flexibility to task-organize support in care and handling of deceased personnel and their personal effects. The concept replaces the corps GRREG company with a collection company that will be capable of operating collection points throughout the corps, divisional, and brigade areas. The collection company will operate area collection points. The requirement for a GRREG battalion will be deleted. The GRREG company in the Theater Army Area Command (TAACOM) will be redesigned to operate a personal effects depot, several area collection points, and a mortuary. The mortuary will operate under the Current Return Program (Vietnam Conflict). This company, when under the Graves Registration Program, will operate temporary cemeteries in the TAACOM and corps area instead of a mortuary. The concept will provide the structure to support the Army Mortuary Affairs Program during varying levels of combat operations.

TECHNOLOGY FOR GRAVES REGISTRATION

The Graves Registration (GRREG) Center is evaluating the possibility of integrating new technology to enhance identification procedures. The following systems are under consideration:

- The Computer Assisted Post Mortem Identification (CAPMI). CAPMI is a software package which compares dental characteristics of a specific remains to other casualties identified in other data bases. The result is a categorized list of casualties with similar characteristics by order and type of dental restorations. This process can compare thousands of records in only seconds.
- The Remote Image Transmission System. This system enables identification personnel to photograph fingerprints, scars and/or tattoos, and other identifying marks using a video camera. Images are stored on a floppy disk which can be manipulated to magnify and highlight specific areas. Laboratory-quality photographs are immediately produced using a photoprinter linked to the computer system. These photographs can be transeived worldwide in just minutes by either wire or satellite communications systems for analysis.
- The Miniature X-ray System (Handheld). This product of the U.S. Army Institute of Dental Research will provide GRREG personnel the capability to produce dental X-ray film of remains and instantly develop the film for identification processing at temporary cemeteries and theater mortuaries. Plans are to add two of the machines to each GRREG company.

New technology in Graves Registration identification procedures will allow personnel to interface with several data bases. This decreases the time required to make valid and reliable decisions.

UPDATE--NEW GRAVES REGISTRATION OFFICER COURSE (8B-SI 4V)

The Graves Registration (GRREG) Center at Fort Lee, VA, conducted the Graves Registration Officer Course on 12-23 February 1990, the first time in approximately 20 years that officers received detailed graves registration training. All graduates of this course are awarded the additional skill identifier of 4V. Graduates are trained for command staff positions requiring graves registration knowledge, are prepared to assume responsibilities of a Joint Mortuary Affairs Office of a unified command, and are prepared to supervise collection point operations. The next course, open to officers of all branches of service, is scheduled for 30 April through 11 May 1990. Interested personnel must submit requests for attendance through established training channels.

FIELD MANUAL ON TACTICS, TECHNIQUES, AND PROCEDURES

Field Manual (FM) 10-63-2 on tactics, techniques, and procedures for Graves Registration (GRREG) units is scheduled for fielding 2d Quarter FY 91. This manual will consolidate and supersede FM 10-296 (Headquarters and Headquarters Units, Graves Registration Battalion) and FM 10-297 (Graves Registration Company). This new manual summarizes existing doctrine; addresses unit administration, logistics, and tactical operations; provides operational guidelines for the units; and details the major changes of graves registration companies resulting from unit conversion to the "L" Series table of organization and equipment (TOE) under the Quartermaster Force Improvement Program.

FIELD MANUAL 10-63 (HANDLING OF DECEASED PERSONNEL IN THEATERS OF OPERATION)

Field Manual 10-63 (Handling of Deceased Personnel in Theaters of Operation) is scheduled for fielding 4th Quarter FY 91 instead of 4th Quarter FY 90 as identified in the Autumn 1989 issue of the Quartermaster Professional Bulletin. This delay is necessary to fully address the issues identified during the Joint Mortuary Affairs Conference, 30-31 August 1989, at Fort Lee, VA.

ARMY CENTER OF EXCELLENCE, SUBSISTENCE

FOOD MANAGEMENT ASSISTANCE TEAMS SUPPORT RESERVE COMPONENTS

Food Management Assistance Teams (FMATs) are available to help improve food service operations on both a scheduled and requested basis for U.S. Army Reserve and Army National Guard units during their annual training periods. Teams visit each major training site and provide hands-on assistance with food preparation, administration, field equipment, field sanitation, safety, and other food service matters.

These visits are funded by the Army Center of Excellence, Subsistence (ACES) at the U.S. Army Quartermaster Center and School (PROV), Fort Lee, VA, and are a good source of "free" training. The ACES point of contact is CPT Frank Takacs, Jr., Food Management Assistance Operations Division, Army Center of Excellence, Subsistence, U.S. Army Quartermaster Center and School (PROV), Fort Lee, VA, 23801-5000, AUTOVON 687-2511/4319.

Details outlining the procedures for requesting an FMAT are in paragraph 3-1, Army Regulation (AR) 30-1 (The Army Food Service Program).

FOOD MANAGEMENT ASSISTANCE TEAM (FMAT) UPDATE

- Food Management Assistance Team (FMAT) visits during 1st Quarter 1990 show that weaknesses exist in administration, sanitation, equipment replacement, and maintenance.
- Future budgetary constraints will require efficient allocation and use of food service resources. Food service personnel will have to accomplish more with less. One way to accomplish this mission is to identify areas to improve productivity. Productivity improvements result in substantial monetary savings as well as improvements in overall quality. If you have any productivity improvement suggestions or would like to discuss a productivity improvement idea, please contact CPT Frank Takacs, Jr., AUTOVON 687-3808/4319 or write to Army Center of Excellence, Subsistence, ATTN: ATSM-CES-OA, U.S. Army Quartermaster Center and School (PROV), Fort Lee, VA 23801-5000.
- All loose T-Ration pans can be transferred from the field to the garrison dining facility account at the conclusion of a field exercise. This could be a tremendous asset to the dining facility manager. With a little imagination and the use of the T-Ration Garrison Cook Book, these entrees could be transformed into highly acceptable meal components or additions. For a copy of the T-Ration Garrison Cook Book, call AUTOVON 687-3808/4319.
- During scheduled or requested visits, the FMATs are available to provide classes on any food service topic and to update the field soldiers on food service issues. For the best use of the teams, coordinate issues and concerns with the team chief prior to the scheduled visit.

NUTRITION UPDATE

During the first worldwide nutrition conference, October 1985, Fredericksburg, VA, the major Army commands (MACOMS) requested the Army Nutrition Planning Committee (ANPC) to make a standardized "calorie-nutrition card." The card, titled "Guide To Good Eating Card," was developed. It was included in the 15 August 1989 update to Army regulation (AR) 30-1 (The Army Food Serve Program), Appendix J and J-1 as a requirement, resources permitting. The Office of the Deputy Chief of Staff for Logistics determined that a one-time distribution of one camera-ready copy of the "Guide To Good Eating Card" be provided each installation. The card will be used for all meals, and will have information on each food item on hot lines, short order lines, fitness bars, and self-serve food items to include the serving size, the specific number of calories, and the levels (High (H), Medium (M), or Low (L)) for fat and sodium. Each installation will derive this information from the monthly Supply Bulletin (SB) 10-260 (Master Menu) and SB 10-264 (Nutrient Values of Master Menu Recipes and Food Items). The appropriate food group/groups will be marked for each item. The goal of the card is to assist diners in making an informed decision about what they are selecting and eating in the dining facility. If you have not received a camera-ready copy of the card, send your request to U.S. Army Quartermaster Center and School (PROV), U.S. Army Center of Excellence, Subsistence, ATTN: ATSM-CES-OD, Fort Lee, VA 23801-5000.

DEPARTMENT OF THE ARMY FOOD SERVICE/TROOP ISSUE SUBSISTENCE ACTIVITY /DIETITIAN FOOD SERVICE CONFERENCE

Budget and plan now to attend the next worldwide food service conference, 22-26 October 1990, at Fort Lee, VA. The major focus will be Army subsistence issues for the 1990s. Maximum attendance by food service warrant officers, troop issue subsistence officers, and dietitians should be planned.

ARMY REGULATION 30-18 TROOP ISSUE ACTIVITY UPDATE

An update of Army Regulation 30-18 (Army Troop Issue Subsistence Activity Operating Procedures) has been fielded to all major Army commands (MACOMS) for review. Projected publication of the new regulation is 3rd Quarter FY 90.

BASIC COMMISSARY MANAGEMENT COURSE

The Basic Commissary Management Course (BCMC) is designed to provide military personnel in military occupational specialties 76P (Materiel Control and Accounting Specialist), 76X (Subsistence Supply Specialist), and 92G (Subsistence Management) and Department of Defense (DOD) civilians (general schedule (GS)/wage schedule (WS) 1144) with knowledge of the principles, procedures, and responsibilities necessary for operating a Troop Support Agency (TSA) commissary store.

The course provides instruction in personnel and financial management, automated data processing, and meat and produce department operations. Additional skill Identifier (ASI) U5 for noncommissioned officers and special skill identifier 4U for officers is awarded upon course completion. The course offers career progression for civilians. The six-week course is accredited by the Southern Association of Colleges and Schools.

The BCMC instills a basic understanding of commissary functions and prepares students for assignment into the commissary system. For questions about the course, phone Mr. Byrd, AUTOVON 687-4445.

FIELD BREAD BAKING OPERATIONS COURSE

The Field Bread Baking Operations Course trains enlisted personnel to manage and operate the mobile field bakery plant. It also teaches the functions and principals of baking operations, maintenance of bakery equipment, the preparation and administration of baked products, as well as safety requirements in mobile field bakery operations. The course is designed for Active Army and Reserve Components with military occupational speciality (MOS) 94B (Food Service Specialist). For questions about the course, phone SFC Semeli, AUTOVON 687-1781.

RESERVE COMPONENT FOOD SERVICE SANITATION ADJUNCT INSTRUCTOR

Food Service Sanitation Adjunct instructors use materials from the U.S. Army Quartermaster Center and School (PROV), Fort Lee, VA, plus training aids from government and commercial sources to train food service workers. Reserve Component units send qualified personnel to the Quartermaster Center and School (PROV) or to other designated sites for a one-week course in food service sanitation. These personnel fill positions as veterinarians, dietitians, preventive medicine personnel, or food service supervisors. These courses are scheduled three months in advance. Messages are sent to all five armies and the National Guard Bureau to fill quotas. Students receive one week of technical training in foodborne disease and food service sanitation. Those students achieving 90 percent on the final test become adjunct instructors. Units should make every effort to send personnel with a strong desire to be adjunct instructors. Past history shows only a small percentage of certified instructors use this method to train food service personnel.

NEW DOCTRINE FOR ARMY FIELD FEEDING

In November 1989, The U.S. Army Quartermaster Center and School (PROV), Fort Lee, VA, began distributing the new "draft" Field Manual (FM) 10-23 to replace the current FM 10-23 (Army Food Service Operations) and Field Circular (FC) 21-150 (Combat Field Feeding System Operations). This new draft, entitled "Basic Doctrinal Manual for Army Field Feeding," was distributed Armywide, to include U.S. Army Reserve units. The draft FM 10-23 will serve as interim doctrine for Army field feeding until the permanent FM 10-23 is fielded through regular pinpoint distribution channels. Comments and recommendations on the draft are encouraged. Field Manual 10-23 will be the basic field feeding manual. It will include all field feeding information from the old FM 10-23, FM 10-22 (Baking Operations), FM 10-25 (Preparation and Serving of Food in the Garrison Dining Facility), FM 10-26 (The Army Food Advisor), and FC 21-150. In FY 90, a second manual, FM 10-23-2, will be developed to cover procedures for food preparation and serving as well as management of the dining facility. It will include the garrison portions of the old FM 10-23, FM 10-22, FM 10-25, FM 10-26, and a chapter on dining facility equipment that will replace Technical Manual 10-415 (Dining Facility Equipment: Operation and Operator Maintenance). Once the second manual is published, the other manuals will be rescinded. Field Manual 10-23-1 (Commander's Guide to Food Service Operations) will remain pocket-sized and will be updated in FY 90 or FY 91, as resources become available. For further information or clarification, contact Ellen Waraksa, AUTOVON 687-2742/3963, or Commercial (804) 734-2742/3963.

COMBAT DEVELOPMENTS

ARMY FIELD FEEDING SYSTEM (AFFS) DOCUMENTATION UPDATE

The Vice Chief of Staff, Army approved the concept of the Army Field Feeding System (AFFS) 18 May 1989. Based on this approval, tables of organization and equipment (TOE) organic to divisions, separate brigades, and armored cavalry regiments (ACRs) were changed to reflect required changes and then published in the Consolidated TOE Update 8910 (Oct 89). The TOE documentation reflects the requirements for H, J, and L series TOEs. The result added cooks, eliminated the dedicated feeder units concept, and provided more units with a cooking capability (mostly at battalion level). It provided the units a capability to serve a minimum of two A-Ration meals each week. TOEs that comprise echelons above division and echelons above corps organizations/units reflecting AFFS changes are scheduled for publication in Consolidated TOE Update 9004.

CAREER
NOTES

ARMY ACQUISITION CORPS ESTABLISHED

The Army's top leaders have announced a major change to military and civilian personnel policy involving its acquisition program.

Secretary of the Army Michael P. W. Stone and Army Chief of Staff General Carl E. Vuono approved the formation of a joint military and civilian Army acquisition corps (AAC).

"It is imperative that our development and acquisition processes permit us to exploit fully the great promise of American technology while at the same time maintaining streamlined and efficient management structures," said Secretary of the Army Stone. "To accomplish this, we must have a corps of dedicated professionals who are experts in systems development and acquisition."

"The Army acquisition corps is the Army's program to develop military and civilian acquisition and leaders," he added.

General Vuono called the new Army acquisition corps "the next logical step in the Army's efforts to streamline its management efforts and improve efficiency. The program will integrate education, training, assignment experience, selection for key assignments, and promotion processes for military and civilian members."

In July 1989, Secretary of Defense Richard Cheney released his Defense Management Report (DMR), previously approved by President George Bush. The report's purpose was to "implement fully the Packard Commission's recommendations, improve substantially the performance of the defense acquisition system, and manage more effectively the Department of Defense and our defense resources." To develop military acquisition managers, the DMR directed the armed services to establish plans for a "dedicated corps of officers...who will make a full-time career as acquisition specialists."

The DMR stated that early selection, timely specialization, assignment to acquisition positions, attractive career paths, and promotion potential to the highest flag grades were necessary to attract a dedicated corps of acquisition officers.

In the acquisition corps developed by the Army, officers enter the program in their eighth year of service after gaining branch experience. Fully funded advanced civil schooling in scientific, technical, or managerial disciplines will be offered to participants. A series of acquisition assignments will follow.

The AAC officers will be selected for advanced military schooling, such as Command and General Staff College, Defense Systems Management College, and senior service schools, according to current procedures. Army promotion policies will be structured to ensure promotion potential for AAC officers from company grade to general officer. The AAC officers will not compete for battalion and brigade command but will compete for manager and program executive officer positions.

Going beyond DMR requirements, the Army has established a civilian acquisition career structure that parallels and complements the military program. Civilians will enter the AAC from existing career programs at grades General Schedule (GS) 13 and above. These career programs will provide much of the required training and experience. Some civilians will receive further schooling and developmental assignments.

Education on military matters by AAC civilians will be an integral part of the program.

Civilians will remain eligible to compete within their career programs but will focus more directly on acquisition-related assignment opportunities. The civilian program will provide for promotion from GS 13 through senior executive service (SES).

A management structure will integrate military and civilian components. The AAC corps members will be jointly managed by a Department of the Army-level executive board, a common program proponent office, and a centralized personnel administration office in the U.S. Army Personnel Command (PERSCOM).

SO YOU WANT TO GO TO COLLEGE?

MW4 J. W. Davis

Well, the Army wants you to go to college too!

The goal for warrant officers is to complete 60 semester hours or an associate's degree by the eighth year of warrant officer service.

In order to reach this goal, several alternatives are available--although your contribution of time and money increases as some of these programs feel the effects of the budget knife.

Start with your local installation's Army Education Center (AEC). These centers are the best source of information on available courses at local or extension colleges and the availability of tuition assistance (TA) funding.

This is study conducted during your off-duty time and may involve evenings and/or weekends. The requirements for receiving TA are outlined in AR 621-5 (Army Continuing Education System (ACES)) available at the AEC.

Don't get discouraged if TA is not available. Funds have been reduced recently due to budget constraints.

Even so, many state-supported colleges offer classes with state resident tuition rates to military personnel at a very reasonable cost. Be sure to reapply for TA each semester just in case funds should become available.

Once you've proven your aptitude for college study by establishing an excellent scholastic record in the first 25 to 30 semester hours, you can apply for one of several full-time education programs.

These programs are restricted to warrant officers in a career status (Regular Army (RA) or Voluntary Indefinite) with at least three years warrant officer service.

Also, officers must not have more than 14 years active federal service (AFS) other than Regular Army (OTRA) or 23 years AFS if RA as of the first day of full-time college attendance.

Since these programs are extremely competitive, the most critical element is manner of performance. Your efficiency reports must show outstanding

potential to justify the expense of Army funds to complete your education.

Your career manager can tell you whether your manner of performance and status of your military occupational specialty (MOS) will support your selection for civil schooling.

The two most commonly used civil education programs for warrant officers are Degree Completion and Permissive Temporary Duty (TDY).

Either may be used to complete an associate's degree, and both are described in AR 621-1 (Training of Military Personnel at Civilian Institutions).

The Permissive TDY program may be used to complete a degree in less than 20 weeks of full-time study. The officer must bear the full expense of tuition, books, and any cost of moving or commuting.

Officers may use the GI Bill or Veteran Educational Assistance Program (VEAP) benefits to offset some of these costs, if entitled. Your AEC and the Veterans Administration can advise you on your entitlements and procedures to apply for benefits.

The Degree Completion program permits an officer to make a permanent change of station (PCS) to the college and allows up to 12 months of full-time study. Again, the officer must bear the expense of tuition and books subject to any veteran's benefits to which he may be entitled.

From a practical standpoint, in order to get the maximum number of officers trained for the minimum expense, applications which do not require a PCS and/or require nine months or less of study are those which are most frequently approved.

Often the officer can finish the associate's degree at a college within commuting distance of the current assignment in two semesters or less.

The final program is the Army Educational Requirements System (AERS). This program is for officers selected for assignments designated as requiring a bachelor's or master's degree in a specific discipline.

CAREER NOTES

These positions are very limited (155 bachelor's, 20 master's) and don't exist in most MOSs. Normally, the officer selected must acquire the degree in 18 months or less. This program is fully funded by the Army for tuition, books, and PCS, but currently only eight officers per year are enrolled.

A fully funded program at the associate's level has existed in the past, but no allocations were funded for FY 90.

Civilian education is a key discriminator when your records appear before a selection board. To enhance your chances for civil schooling selection and career success, follow these simple rules:

- **Visit your AEC** and review ARs 621-5 and 621-1.
- **Enroll in off duty college courses** to establish a scholastic track record. Use local tuition assistance if possible.
- **Once you enter career status** and have 25 hours or more completed, contact your career manager to see if your manner of performance will support civil schooling.
- **Coordinate with your AEC** and a local college to see if you can complete an MOS-related associate's degree within two semesters. Most colleges will award additional constructive credit for your military training and work experience.
- **Contact the Professional Development Branch** of Warrant Officer Division, Ms. Brenda Norris, AUTOVON 221-7843, to assist in finalizing your application.
- **Update your Civilian Education Level (CEL)** code on your officer record brief (ORB) as soon as you have completed any college courses (CEL 7) and associate's degree (CEL 6).

MW4 J. W. Davis is the Chief, Professional Development, Warrant Officer Division, U.S. Army Personnel Command (PERSCOM), Alexandria, Virginia.

ARMY/AMERICAN COUNCIL ON EDUCATION REGISTRY TRANSCRIPT SYSTEM

Enlisted soldiers and veterans worldwide, who entered the Regular Army FOR THE FIRST TIME on or after 1 October 1981, are eligible for the Army/American Council on Education Registry Transcript System (AARTS) free transcript service.

Within the Army Continuing Education System, this service is one of the newest benefits for enlisted personnel. Closing the calendar year 1989, the AARTS Operations Center has issued more than 40,000 requested transcripts to soldiers, veterans, Army education centers, and colleges.

An automated system, AARTS is the only central repository for transcripts of soldiers' military experiences and educational testing achievements. All transcript data is reported by computer tapes directly to the AARTS Operations Center, Fort Leavenworth, KS, from official sources

including the U.S. Army Personnel Command, the Army Training Requirements and Resources System, Army service schools, the Educational Testing Service, the American College Testing Program, and the American Council on Education.

The AARTS transcripts document Army course completions, experience in military occupational specialties, skill qualification test scores, additional skill identifiers, and special qualification identifiers. They also document scores for College-Level Examination Program (CLEP) tests, Defense Activity for Non-Traditional Education Support (DANTES), Subject Standardized Tests, Scholastic Aptitude Test (SAT), American College Testing (ACT), and American College Testing - Proficiency Examination Program (ACT-PEP).

**CAREER
NOTES**

The AARTS transcripts describe the skills, knowledge, and abilities expected of soldiers completing military courses and working in military occupational specialties. The descriptions and relative college credit recommendations are the same as those which the American Council on Education publishes in the Guide to the Evaluation of Educational Experiences in the Armed Services.

Eligible soldiers and veterans can request AARTS transcripts for personal reference and for use by college registrars, potential employers, and Army education center counselors. Veterans find their transcripts valuable as they prepare resumes

explaining military experience to civilian employers.

An eligible soldier or veteran may obtain a transcript by submitting a completed DA Form 5454-R (Request for Army/American Council on Education Registry Transcript) or a written request to the AARTS Operations Center. The written request must include the person's name, social security number, basic active service date, signature, and mailing address.

For more information, write to the AARTS Operations Center, Fort Leavenworth, KS, 66027-5073; or call AUTOVON 552-4211, Commercial (913) 684-4211.

COMBINED ARMS AND SERVICES STAFF SCHOOL

Any Year Group 81 officer who has not yet completed the nine-week Phase II of the Combined Arms and Services Staff School (CAS3) at Fort Leavenworth, KS, must do so by the end of FY 90. Failure to attend may jeopardize promotion and staff college selection. FY 90 classes are also open to captains in Year Groups 82 and later who have completed the Officer Advanced Course and Phase I of CAS3. For report dates, refer to the Army-Training Requirement and Resource System (ATRRS) computer network, or call the CAS3 Operations Office at AUTOVON 552-2113/2602. Direct other questions to the senior Quartermaster representative on the CAS3 faculty, LTC Bill Reilly, at AUTOVON 552-2152/2838, extension 28. Captains must report to the Fort Leavenworth billeting office in Hoge Barracks by 1200 hours on their report date, one day before the class start date. Captains must bring a copy of their CAS3 Phase I completion certificate. The School of Corresponding Studies

(SOCS) no longer accepts hand-delivered Phase I material for scoring. Captains reporting for Phase II without a Phase I completion certificate in their possession will not be enrolled.

The Combined Arms Center Commander and Command and General Staff College Commandant (CAC Cdr and CGSC Cmdt) has initiated two changes which impact on your planning for CAS3 completion. First, enrollment in Phase I is now automatic upon graduation from the Officer Advanced Course. Captains have two years following advanced course graduation to complete Phase I, the nonresident phase. Second, CAS3 graduation is a prerequisite to enrolling in the CGSOCS nonresident course. Watch for these and other changes in Department of the Army (DA) Pamphlet 600-3 (Commissioned Officer Professional Development and Utilization), as mandatory CAS3 attendance becomes institutionalized in the officer professional development and selection policies.

CAREER
NOTES

MENTORSHIP -- A COORDINATED EFFORT

CW4 Leslie Craig CW4 Lee Marion

A mentorship program for newly appointed Quartermaster warrant officers (WOs) becomes a reality as a result of a joint effort between CW4 Leslie Craig, Quartermaster Warrant Officer Career Manager at U.S. Army Personnel Command (PERSCOM), Alexandria, VA, and CW4 Lee Marion, Office of the U.S. Army Quartermaster General, Fort Lee, VA. This new program already has been nicknamed "Adopt-A-Spot," referring to the one square on the WO1's silver bar.

Effective with Class 90-01 of the Warrant Officer Technical and Tactical Certification Course (WOT-TCC), which began on 1 January 1990, a block of instruction explains the mentorship program. Additionally, each warrant officer candidate's pinpoint assignment will be identified and a senior warrant officer of that installation will be contacted to serve as a mentor.

Upon departure from Fort Lee, each newly appointed warrant officer will know his or her mentor by name, telephone number, and building number. Upon arrival at the gaining installation, the two warrant officers will meet and establish a mentoring relationship to aid the newly appointed warrant officer in building a solid foundation for a promising career. Discussion topics include warrant officer

development, progressive assignments, military and civilian professional education, the officer evaluation system, and the promotion system.

This program is designed for the warrant officer's first utilization tour. Hopefully, "Adopt-A-Spot" will make the Army's mentor program stronger. It will also provide our junior warrant officers with a readily available source of knowledge from the experience of our senior warrant officers. However, the new mentorship program is not intended to replace the Army's sponsorship program.

For further information, phone CW4 Lee Marion at AUTOVON 687-4237 or Commercial (804) 734-4237 or write him at Office of the Quartermaster General, U.S. Army Quartermaster Center and School (PROV), ATTN: ATSM-ACZ-W, Fort Lee, VA 23801-5032.

CW4 Leslie Craig is the Quartermaster Warrant Officer Career Manager at U.S. Army Personnel Command (PERSCOM), Alexandria, Virginia.

CW4 Lee Marion is assigned to the Office of the Quartermaster General, U.S. Army Quartermaster Center and School (PROV), Fort Lee, Virginia.

COMING UP IN THE QMPB

*SUMMER 1990 -- Supply Support Operations
at the Wholesale Level*

In order to better accommodate our reading audience, the Quartermaster Professional Bulletin is now being distributed individually to Active Duty personnel at the grade of E8 or higher. Unit distribution will continue at the battalion level for other Active Army personnel. In the Reserve Components, distribution will continue at the company level.

Officers can ensure that they receive their individual copies by making sure that the address listed on their Officer Record Brief is accurate.

DEPARTMENT OF THE ARMY
U.S. ARMY QUARTERMASTER CENTER
AND SCHOOL (PROV)
ATTN: ATSM-ACZ-PB
FORT LEE, VIRGINIA 23801-5032

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 4820
FORESTVILLE, MD

OFFICIAL BUSINESS

Unsure of how to contact the major departments within the U.S. Army Quartermaster Center and School (PROV) when you need assistance or information about a specific functional area? The following addresses and phone numbers will help you contact the appropriate offices.

Address inquiries to:

COMMANDER
U.S. ARMY QUARTERMASTER CENTER
AND SCHOOL (PROV)
ATTN: (APPROPRIATE OFFICE SYMBOL)
FORT LEE, VA 23801

AUTOVON 687-XXXX
Commercial (804) 734-XXXX

Office titles and symbols are:

AIRBORNE AND FIELD SERVICES DEPARTMENT (ATSM-ABN-FSD)	2938/4427
ARMY CENTER OF EXCELLENCE, SUBSISTENCE (ATSM-CES)	2950-2798
DIRECTORATE OF COMBAT DEVELOPMENTS (ATSM-CD)	2832/2148
DIRECTORATE OF EVALUATION AND STANDARDIZATION (ATSM-EV)	5639/5227
DIRECTORATE OF TRAINING AND DOCTRINE (ATSM-DT)	2945/4644
GRAVES REGISTRATION CENTER (ATSM-GR)	3831/4673
PETROLEUM AND WATER DEPARTMENT (ATSM-PWD)	4842/5703
SUPPLY AND PROFESSIONAL DEVELOPMENT DEPARTMENT (ATSM-SUP-SP)	1716/5459

If you are unsure of which department to contact, the Directorate of Evaluation and Standardization of the U.S. Army Quartermaster Center and School (PROV) maintains a 24-hour **HOTLINE** for collecting feedback from the field. Here is that number:

AUTOVON 687-3767
COMMERCIAL (804) 734-3767