Quartermaster

PROFESSIONAL BULLETIN

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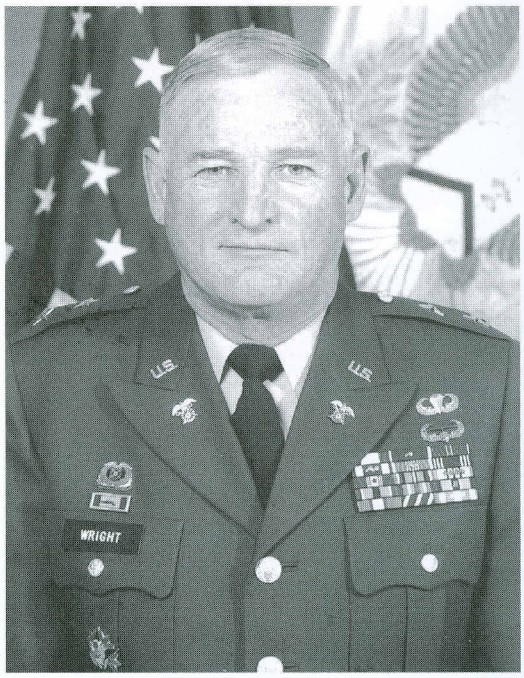
SUPPORTING VICTORY

Quartermaster Heritage and Values Edition

From The Quartermaster General



Major General James M. Wright

Values are the bedrock of our Army and of the Quartermaster Corps. The covers and special articles in this edition of the *Quartermaster Professional Bulletin* focus on Army values. Quartermasters are leading the way in the US Army Training and Doctrine Command with our History, Traditions and Values training at Fort Lee, VA. We have drawn together the collective expertise and energy of our great cadre in the 23d Quartermaster Brigade, our Corps Historian, and our Museum Director to develop a world-class program that imbeds our Army's seven core values into our training and classroom instruction.

We have collected excerpts from nearly 223 years of Quartermaster history and woven them into vignettes relating directly to each Army core value. Our advanced individual training students are immersed in these values and traditions to demonstrate clearly that they are part of a proud institution and a rich history. Drill sergeants have received training aids for teaching Army values and heritage, and platform instructors have likewise included these tools in their lesson plans. Lieutenants in the Quartermaster Officer Basic Course now have a writing and briefing requirement based on History, Traditions and Values instead of a technical subject with which they have had no experience. We are committed to inculcating these basic values into every soldier who passes through the US Army Quartermaster Center and School (USAQMC&S).

Our values training program will be provided to every Quartermaster leader in the field in the near future, so we can make this a Corps-wide phenomenon. I need Quartermaster commanders to institute this into their unit training programs to develop a sense of our heritage and values across the Corps. We need to build a fighting Quartermaster spirit in our soldiers that says, ***"If you ain't Quartermaster, you ain't."***

As we enter perhaps the busiest time of the year, I want to share some developments with you as you continue your superb service to our Army in the field. Many of the ongoing and emerging initiatives at the USAQMC&S will permeate our units Armywide, and I will continue to solicit your feedback on the quality of our products–the soldiers that we train and the programs and policies that we export.

The Quartermaster Functional Review to the Army's Deputy Chief of Staff for Personnel in February gave us the impetus to initiate long overdue fixes on two of our critical military occupational specialties: 92R (Parachute Rigger) and 77F (Petroleum Supply Specialist). (Refer to the Career News section of this edition of the *Quartermaster Professional Bulletin* for more information.)

As I continue my travels throughout the field, I am impressed by the work Quartermasters are doing. You demonstrate on a daily basis that we truly are the Warfighter's Logisticians, and I am tremendously proud of your efforts. My recent visit to Fort Bragg, NC, was uplifting.

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PROFESSIONAL BULLETIN

The Quartermaster General
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FRONT COVER: Dr. Steven E. Anders, Quartermaster Corps Historian, designed both the front and back outside covers.

INSIDE BACK COVER: Keith K. Fukumitsu, Quartermaster, researches and illustrates the battalion-size units featured with a page in each edition. LTC (Retired) Fukumitsu was formerly assigned as Chief of the Course Development Division, Directorate of Training and Doctrine, US Army Quartermaster Center and School, Fort Lee, VA.

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NCO Leadership Requires 'People Who Do The Right Thing'

Command Sergeant Major Larry W. Gammon

The tremendous success that our Quartermaster Corps and our Army has enjoyed in the past can be directly attributed to our great Noncommissioned Officer Corps. However, we can and must do better.

As an old saying goes, "The minute you stop going forward, you start going backward." Technology and doctrine have been changing rapidly and will continue to complicate the challenge of leadership. In some facets of our profession, we have applied "forward thinking" and vision; but, in many respects, we have trapped ourselves in the 1970s and 1980s, especially in leadership theory and training. Noncommissioned officers (NCOs) have raised some great managers (people who do things right), but we have not done as well in developing leaders (people who do the right thing).

There are two ways we can help ourselves become more effective NCOs: read more and also recommit ourselves to leading and training soldiers. By reading more and studying leadership, we become better NCOs. Just as technology has changed, so has leadership theory. NCOs need to be proactive rather than to wait for the Army to rewrite our manuals. Build your library now. *The Seven Habits of Highly Effective People*, *Principle-Centered Leadership*, *Leading at Mach 2*, *The One Minute Manager* and *How To Win Friends and Influence People* are the types of books that will contribute to our growth as leaders.

Biographies of great leaders can also have a tremendous impact. Although there are many choices, in this time of great change I cannot recommend any better than *General of the Army: George C. Marshall* and *My American Journey* by General Colin L. Powell. When you read to grow, you will study what you read for self-development. You will find yourself trying new concepts and ideas, removing limitations and finding the challenge of leadership more interesting and rewarding.

We as NCOs can and must recommit to our responsibility of leading and training our soldiers. Far too often today, we get caught up with issues far outside our circle of influence. Leaders who spend their day overly concerned with budget issues or who carp about policies already in place waste time, energy and opportunity. If Quartermasters go to war tomorrow, we will go with the soldiers and equipment we have today – think about this!

Training and Leadership

Training and leadership are full-time jobs. If you really want to "see" how big a job each is, take a piece of paper and write "Training" on the top left and "Leading" on the top right. Now list below each area the responsibilities you have to your soldiers. You will run out of paper long before you complete the list. Recommitting ourselves to leading and training is like clearing out a closet. We get rid of the junk and outdated ideas taking up space that prohibit us from storing important and current information, thoughts and ideas.

As the Army and the Quartermaster Corps moves into the 21st Century, the Quartermaster NCOs must have 21st Century vision and capabilities. Reading, studying and recommitting ourselves to our profession will prepare us for the move.

If there is a Quartermaster topic you want me to address, please let me know. Telephone DSN 687-3248 or (804) 734-3248. Write to Commander USAQMC&S, ATTN: CSM Gammon, 1201 22d Street, Fort Lee, VA 23801-1601. FAX to DSN 687-3343 or (804) 734-3343. E-mail to gammonl@lee-dns1.army.mil.

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(Continued from Page 2)

I highly encourage soldiers to use their Chain of Command and NCO Support Chain. If you ask me a question, I guarantee you a response. It may not be the one you are looking for, but you will get a response.

Command Sergeant Major Larry W. Gammon has served in a variety of leadership positions as Command Sergeant Major, 45th Corps Support Group (Forward), Schofield Barracks, Hawaii; Command Sergeant Major, 23d Quartermaster Brigade, Fort Lee, Virginia; Commandant, Noncommissioned Officer Academy, Fort Lee; Command Sergeant Major, 99th Forward Support Battalion, Fort Lewis, Washington; First Sergeant, Headquarters and Headquarters Company, 109th Forward Support Battalion, Fort Lewis; First Sergeant, 2d Support Command Corps Materiel Management Center, Stuttgart, Germany, and Platoon Sergeant, S4 Noncommissioned Officer in Charge. His military education includes Airborne School, the Sergeants Major Academy, First Sergeants Course, Senior Supply Sergeants Course, Noncommissioned Officer Logistics Course and Advanced Noncommissioned Officer Course.

(Continued from the inside front cover)

Everywhere I went, there were fired-up Quartermaster soldiers and leaders leading the way in high standards and professionalism in the contingency corps.

We at the USAQMC&S will continue to forge ahead to provide you with the finest, most motivated, value-oriented soldiers and leaders in the Army. Let's continue our great partnership and keep up the fires!

Major General James M. Wright, 45th US Army Quartermaster General, has held numerous command and staff positions. His previous assignments include Commander, 21st Theater Army Area Command, Germany; Deputy Chief of Staff, Logistics, United States Army, Europe, and Seventh Army and also Director of Logistics, Controller Staff, Exercise Atlantic Resolve '94; Director of Plans and Operations for the Deputy Chief of Staff, Logistics, United States Army; Commander, 1st Corps Support Command (COSCOM), XVIII Airborne Corps; Commander and Assistant Division Commander, Division Support Command, 7th Infantry Division (Light); Chief of Staff and later Deputy Commander, 1st COSCOM; Commander, 426th Supply and Service Battalion, 101st Airborne Division (Air Assault); Commander, Special Troops Battalion, 1st COSCOM; Commander, Logistical Support Unit, Multinational Force and Observers, Sinai; S1 (Logistics) Advisor, Advisory Team 25, United States Military Assistance Command, Vietnam; Commander, 25th General Supply Company, 95th Supply and Service Battalion, 3d Support Brigade, United States Army, Europe, and Seventh Army.

Quartermaster Home Page's Newest Address

The newest address for the Quartermaster Corps on the World Wide Web Computer Internet is http://www.lee.army.mil/quartermaster.

The Quartermaster Museum has totally revised its page located on the Quartermaster Home Page under History to provide new information and photographs on exhibits, collections, programs and services. It also contains a section on Quartermaster History and Traditions with information on everything from the Quartermaster Branch insignia to the Order of Saint Martin.

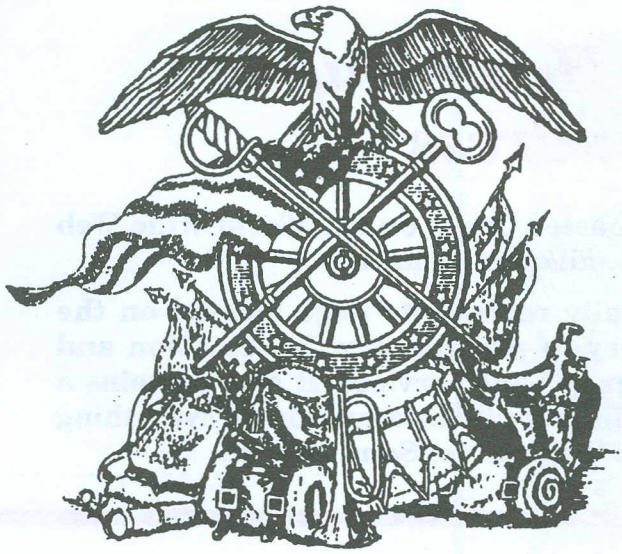
Heritage and Values FOUNDATION FOR THE FUTURE

Building Great Quartermaster Soldiers

Dr. Steven E. Anders, Quartermaster Corps Historian

Change. The past decade has been one of constant, almost unremitting change. It has seen, among other things: an end to the Cold War. Dismantling of much of the world's nuclear arsenal. A reduction of the US Army by some 630,000 spaces, along with the closing of over 700 bases at home and abroad. The introduction of Force XXI doctrine, a would-be Revolution in Military Affairs (RMA), and preparations for a fully digitized battlefield. Along with a cascading assortment of new technologies to support the Army After Next.

In a world so colored by change and uncertainty, where does one look for a measure of stability? For a rock solid foundation on which to stand?



Heritage and Traditions

One place to look is to the Past. To the Army's nearly 223-year history – its proud heritage and cherished traditions. Certainly the Quartermaster Corps has been a mighty contributor to that heritage.

What Quartermasters have accomplished both collectively and as individuals throughout America's past wars, more often than one might imagine, is the stuff of legend. At times truly heroic. Knowledge of those events cannot help but generate a sense of pride, and foster esprit among the current generation of Quartermaster soldiers. It is both inspiring and reassuring – in a "been there, done that" sort of way – to learn that your forebears dealt so successfully with the great unknowns of their day. That they somehow managed to put aside doubt and overcome even the most daunting of obstacles . . . all in the name of Supporting Victory.

The same goes for Army traditions. Soldierly traditions are part and parcel of what the Quartermaster Corps is all about – from the routine gestures of military courtesy, hand salutes, recognition of rank, bugle calls (from *Reveille* to *Taps*), respect for the colors, hail and farewell, dinings-in, and all the rest. Down to the very informal yet intuitively understood "Hooah!" Traditions such as these are what bind soldiers to soldiers, to their units and to their branches.

If someone mentions the 3d Infantry Regiment, you immediately think "Old Guard." Or the 7th Cavalry, it's "Garry Owen, *sir!*" In much the same way, Quartermaster units throughout the Corps have adopted mottoes reflective of their unique missions, precisely meaningful phrases that virtually shout out what they stand for, and announce to the world what they intend to bring to the battlefield. Mottoes such as: "The Providers," "Proud to Serve," "Life Line to Victory," "Vanguard for Support," and "Best Serving the Best."

"Values are the bedrock of our Army. They inspire us to do what is right, day in and day out, in peace and in war. They are what has made us different from our civilian counterparts. They are the keys to our success."

General Dennis J. Reimer
Chief of Staff of the Army
30 October 1997

Values Hold the Key

Along with heritage and traditions, values are central to the Army's past – and to its future. Ours is a "values-based Army." Values form the cornerstone, the foundation on which everything else rests. They give our lives purpose, meaning and direction. Define personal as well as national character. And give a moral justification for the Army's very being.

Seven core values form the bedrock of our Army: Loyalty, Duty, Respect, Selfless Service, Honor, Integrity and Personal Courage. Together they spell "LDRSHIP" (*pronounced "leadership"*). Every Quartermaster soldier should know and understand the importance of these seven fundamental values. They have guided the Corps for more than two centuries, and will no doubt help shape soldier thought and behavior in the future as well.

History yields countless examples of Quartermaster soldiers who have taken these values to heart, exhibited great personal courage, devotion to duty, a strong sense of loyalty, and all the rest. Here are just a few of their stories – presented in the form of historical vignettes – which serve as vivid reminders of the Corps' proud legacy.

Loyalty: Bear true faith and allegiance to the US Constitution, the Army, your unit, and other soldiers.

LOYALTY
AT BLOODY ANTIETAM

When the American Civil War broke out in the spring of 1861, boys on both sides of the Mason-Dixon Line, caught up in patriotic enthusiasm, rushed to join the Union and Confederate armies.

Battle of Antietam

In June of that year, 18-year-old William McKinley quit his job as a postal clerk in Poland, Ohio, and enlisted as a private in Company E of the 23d Ohio Volunteer Infantry – a unit destined to become one of the most famous in the war. It fought in 19 battles and, of its total rank and file of 2,095 men, 169 were killed in combat and another 107 died of wounds and disease.

Before his first year of service had ended, young McKinley was promoted to Commissary Sergeant. On September 17, 1862, at the Battle of Antietam – the bloodiest day of the Civil War, in fact the bloodiest day in American military history – Sergeant McKinley was just to the rear of the battlefield watching over the brigade's food and supplies. The men had eaten only a scanty breakfast, and he knew that as the day wore on the Buckeyes were growing weaker.

After gathering up a hand full of stragglers, Sergeant McKinley courageously led two mule teams with wagons of rations and hot coffee into the thick of battle. Working his way over rough ground, through a hailstorm of artillery and rifle fire, he ignored repeated warnings to retreat – and continued on. He lost one team of mules to Confederate gunners, but did not return to the rear of the brigade until his fellow soldiers had been properly fed under the most adverse conditions.

He earned that day the undying gratitude and respect of his comrades. "From Sergeant McKinley's hand," said the Commander afterwards, "every man in the regiment was served with hot coffee and warm meats, a thing which had never occurred under similar circumstances in any other army in the world."

For his coolness under fire, outstanding bravery, and **LOYALTY** to the unit and his fellow soldiers, young McKinley was that same week promoted to second lieutenant. By war's end he was a major – and 30 years later became President of the United States.

Duty: Fulfill your obligations.

DUTY
AT KHE SANH

Vietnam was America's longest war. One of the most bitterly fought battles during that war was the siege of Khe Sanh. Toward the end of 1966, numerous large scale North Vietnamese units began consolidating around the Demilitarized Zone (DMZ) separating North from South Vietnam. The Commander of US forces in Vietnam, General William C. Westmoreland, ordered Marine units northward – into a string of fire support bases just south of the DMZ. One of those bases was Khe Sanh.

All during 1967, Marines continued moving in to reinforce the tiny outpost. By January 1968 more than 6,000 Allied troops were on hand – dug in, ready to fight. But US intelligence reports indicated that some 15-20,000 North Vietnamese Army (NVA) regulars had them surrounded, virtually cut off from the outside world. The siege had begun.

Khe Sanh, Vietnam

At approximately 0530 hours on 21 January 1968, Communist gunners began hitting the camp with hundreds of rounds of rockets, mortars and artillery fire. One of the incoming rounds scored a direct hit on the camp's main ordnance dump – destroying nearly 1,500 tons of ordnance in a few minutes. The Marines immediately requested an emergency resupply of ammunition. But the only way in was by airdrop.

Members of the 109th Quartermaster Company (Aerial Delivery) began around-the-clock

operations. Quartermaster riggers loaded C-123s and delivered more than 130 tons of supplies during the next 36 hours – even flying and unloading at night by the light of Marine artillery flares. The operation became even more perilous as NVA antiaircraft guns opened fire. Between January and April 1968, when the siege was finally broken, Quartermaster riggers delivered nearly 12,500 tons of supplies, without which the Marines could never have survived.

There were many Quartermaster heroes during that tense period, as the country looked on. One such hero was Specialist Fourth Class Charles Charles L. Baney, a 20-year-old parachute rigger, whose C-130 crashed, killing him and all others on board during a low altitude supply drop at Khe Sahn. Spec 4 Baney's overwhelming sense of **DUTY**, and eagerness to help those trapped on the ground below, places him in the finest tradition of Quartermaster soldiers supporting soldiers.

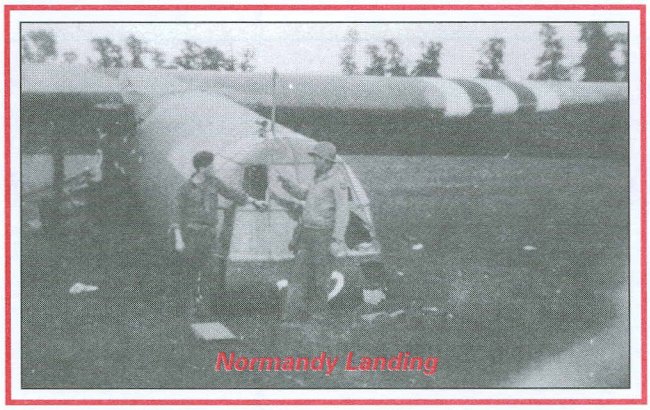
Respect: Treat people as they should be treated.

RESPECT
FOR DEAD AT NORMANY

In the months leading up to 6 June 1944 – D-Day, the date set for the World War II Normandy Invasion – tens of thousands of American GIs poured into England and awaited last minute preparations before crossing the English Channel. In all, more than 100,000 Allied soldiers were to be landed on the beaches of Normandy by the end of the first day. If successful, millions more would follow.

The invasion was to begin with a massive aerial assault by paratroopers of the 82d and 101st Airborne Divisions dropped behind enemy lines to secure vital roads and communication centers. Some would parachute. Others would go in gliders.

The 4th Platoon, 603d Quartermaster Graves Registration (GR) Company was assigned directly to the 82d Airborne. But none of these GR specialists had yet been jump-qualified. So the plan was for them to join in the seaborne assault and come ashore no earlier than D+1 or D+2. One of the specialists, Sergeant Elbert E. Legg, voiced the opinion that someone from the 603d probably ought to go in on the initial assault. He, having been the one to mention it, was promptly "volunteered" for the mission.


Normandy Landing

A few days later, on June 1st, Sergeant Legg moved in with the combat troops and briefly familiarized himself with the large wooden, Horsa-type glider that would carry his small group across the channel. Late in the evening on June 5th, the air base where he was staying came alive with furious activity – lines forming, last minute checks, everyone getting in position. The invasion was on!

Planes departed throughout the night. Many never returned. And it became clear to Sergeant Legg that this was the real thing. Hours later it was his turn. Into the glider they went. Eerie silence marked most of their journey – over the water, the coastline, past German defenses, the infamous French hedgerows, to the clearing beyond. His glider ("Number 32") was cut loose and down it went, crash-landing in an open field.

Discovering he was OK, Sergeant Legg wasted no time setting up a collection point and immediately began receiving the dead. More bodies followed. Then more. By the end of the first week nearly 350 American soldiers had been buried in the temporary cemetery at Blosville, France. Nearly 6,000 by the end of June were buried with all due honors.

Sergeant Legg's actions are a lasting reminder that American soldiers take care of their own, that they habitually treat with **RESPECT** their comrades in arms – both the living and the dead.

Selfless Service: Put the welfare of the nation, the Army, and your subordinates before your own.

SELFLESS SERVICE *IN THE GULF WAR*

On January 15, 1991, the soldiers of the 14th Quartermaster Detachment, a water purification unit out of Greensburg, Pennsylvania, were mobilized for duty in the Persian Gulf War – just one day before the initiation of air strikes against Baghdad, Iraq. They spent the next 30 days at Fort Lee, Virginia, learning to use the newest and most advanced water purification equipment, before arriving in Dhahran, Saudi Arabia, on February 19th. The next six days were spent on continued training, in preparation for movement to the field.

On the evening of the seventh night in country, the men and women of the 14th Quartermaster Detachment were relaxing in their temporary home, contemplating what the future might hold. At approximately 8:30 PM an Iraqi Scud missile slammed into their quarters, with truly horrendous effect.

Amid the rubble lay 28 dead Americans, 13 from the 14th Quartermaster Detachment. An additional 43 of the unit's soldiers suffered grievous injuries. The survivors returned home in March to a hero's welcome.

At a dedication ceremony the following year, Chief of Staff of the Army, General Gordon R. Sullivan, had this to say:

"The soldiers of the 14th Quartermaster Detachment were not battle-hardened warriors. On the contrary, they were in a unit whose mission was to preserve life by purifying water. The product of their labors would have sustained life. This quality – the ability to have compassion, the desire to help others – is the true essence of our nation.

"And the 14th Quartermaster Detachment has become a symbol of the broader sacrifice of our nation for what we believe. We must remember, heroism is not measured only by bravery in battle. Heroism is measured as well by a willingness to serve, is realized in the striving, and is proven by the risk of being in harm's way when you are most vulnerable.

"Make no mistake. The soldiers occupying a barracks in far-off Dhahran a year ago, especially those who made the supreme sacrifice, are heroes. . . . They answered the call of duty. They paid the ultimate price for freedom."

Dhahran, Saudi Arabia

The Reserve Component soldiers of the 14th Quartermaster Detachment epitomize what the Army means by the term **SELFLESS SERVICE**

Honor: Live up to all the Army values.

HONOR
PRESERVED AT CORREGIDOR

On 8 December 1941, within hours after the attack on Pearl Harbor, Hawaii, Japanese forces turned their full fury on Clark Field in the Philippines. Unable to wage an effective counterattack, the American commander, General Douglas MacArthur, ordered his 76,000 American and Filipino forces to consolidate on the Bataan Peninsula. There they would attempt at least to slow the Japanese advance and hold out as long as possible.

During the next 3 1/2 months, the Allies continued digging in on Bataan and neighboring Corregidor. Completely cut off from the outside world, Quartermasters of the 12th Quartermaster Regiment fought steadfastly to the bitter end – in a losing battle to keep their meager supplies from running out.

They died in the debris of warehouses and repair shops under merciless shelling and bombing. They fed troops from hopelessly inadequate food supplies. They slaughtered water buffaloes for meat, and in the last desperate days resorted to killing horses and pack mules. Built fish traps and distilled salt from sea water.

In coffeepots made from oil drums, they boiled and reboiled the tiny coffee supply until the grounds were white. So long as an ounce of food existed, it was used. More important, they delivered their goods right to the foxholes, if necessary – often fighting and dying as they went. When Bataan and later Corregidor fell, members of the 12th Quartermaster Regiment were prominent among the 7,000 American and Filipino victims who died on the 65-mile-long, infamous Death March.

12th Quartermaster Regimental Colors

Though captured, their honor remained firmly intact. An Army nurse, Lieutenant Beulah Greenwalt, very courageously wrapped the 12th Quartermaster's regimental colors around her and convinced her Japanese captors that it was "only a shawl." For the next 33 months, Lieutenant Greenwalt remained a prisoner of war with the other nurses in Manila, lived on a starvation diet and was denied all comforts. But through it all she held on to the flag – the regimental colors.

When the war ended in 1945, and the surviving prisoners of war were released, Lieutenant Greenwalt sought out the Regimental Commander, and presented him with the flag she had protected and cherished all that time. Both recognized the deed for what it was – a clear demonstration of **HONOR**.

Integrity: Do what's right, legally and morally.

INTEGRITY
JESUP SETS THE STANDARD

For more than four decades in the 19th century, from 1818 to 1860, the Quartermaster Corps was led by one man – Major General Thomas Sidney Jesup. Known as the "Father of the Quartermaster Corps," he was also a man of unshakable character and integrity. He had a habit of doing the right thing simply *because it was the right thing to do.*

Lieutenant Jesup

As a brand new lieutenant in 1809, Jesup was appointed brigade quartermaster on the Mississippi frontier, under the command of Brigadier General James Wilkinson. General Wilkinson had a somewhat unsavory reputation. Perhaps it was inevitable that the principled young lieutenant would eventually clash with his rather unscrupulous commander. That's exactly what happened in the summer of 1811.

While stationed at a cantonment in Baton Rouge, Louisiana, Lieutenant Jesup got permission from Secretary of War William Eustis to come to Washington to settle his quartermaster accounts. However, by the time he actually arrived in the nation's capitol months later, Jesup was informed by a War Department accountant that he was being personally charged for an item that rightly should have been charged to General Wilkinson. (The general's account, it turns out, was already overdrawn.)

The amount in question totaled a mere $79.00. Still, Jesup was incensed. Why should a junior officer be forced to pay for a senior officer's wasteful excesses – even if the latter happened to be a commanding general. Knowing this to be unfair, he referred the matter directly to the Secretary of War. General Eustis must have been impressed with Jesup's logic, tenacity and fundamental honesty, for he quickly sided in his favor.

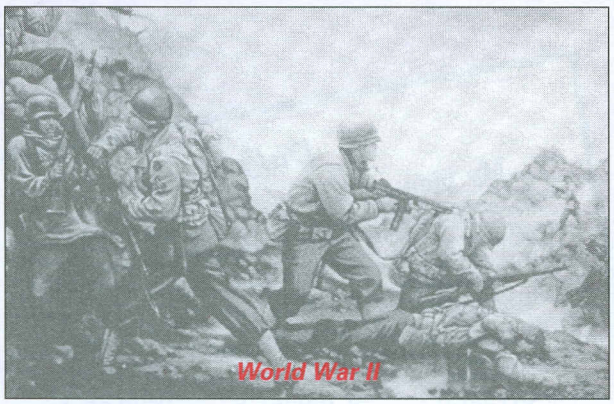
A decade after this incident, Jesup, by then a renowned veteran of the War of 1812, was appointed The Quartermaster General. One of his earliest acts was to draft a Code of Conduct for the Quartermaster Department that adhered to the highest standards of **INTEGRITY** and accountability. Until the day he died – some 42 years later – Jesup encouraged others, through precept and personal example, to follow his own high ethical standards.

Personal Courage: Face fear, danger or adversity (physical or moral).

PERSONAL COURAGE
COOK UNDER FIRE

When the 30th Infantry Regiment hit the beach at Anzio, Italy, in January 1944, one of those to go ashore as a Quartermaster-turned-Infantryman, was the First Cook assigned to India Company – Technician Fifth Grade Eric G. Gibson.

In the months before, Tech 5 Gibson worked out a deal with his commanding officer that whenever the company went into battle, he could serve as a rifleman in one of the Infantry squads and go out on patrol. But as soon as B-rations were available, he had to return to his regular duties in the kitchen. Under this arrangement, Gibson eventually wound up leading a pack train across several miles of rugged mountainous terrain in Sicily.


World War II

Later on as company scout, he located several enemy positions and managed to kill one German soldier and to wound another in succeeding firefights. While continuing in this dual capacity – as Company Cook and Number One Scout in the wake of Anzio – he repeatedly distinguished himself in combat along the Italian coastline.

Then on 28 January 1944, Tech 5 Gibson joined the ranks of the immortal. Around 1200 hours, near the village of Isola Bella, Italy, India Company came under withering enemy attack. Gibson, with a tiny squad of replacements, rushed out to secure the unit's right flank – and in so doing, destroyed four enemy positions, killing five and capturing two Germans. He then went out a full 50 meters in front of the squad and running, leaping, dodging automatic weapons fire, he single-handedly knocked out another position with his pistol.

He continued moving toward other bunkers, firing a submachine gun with almost every step forward, as enemy artillery began to zero in on his position. Nonstop automatic weapons rounds passed within inches of his body, yet he never paused in his forward movement. He crawled much of the last 125 meters right through a concentrated artillery and small arms barrage, and dropped two hand grenades into a German machinegun emplacement – killing two more and wounding another. And was in one final face-to-face engagement when an enemy round finally cut him down.

For his conspicuous gallantry and **PERSONAL COURAGE** under fire, Tech 5 Gibson was posthumously awarded the Medal of Honor – one of 33 Quartermasters to receive that high honor to date.

"The soldier's heart, the soldier's spirit, the soldier's soul, are everything. Unless the soldier's soul sustains him he cannot be relied on and will fail himself and his commander and his country in the end."

General George C. Marshall
Chief of Staff of the Army

Past Awareness and Future Expectation

As each of the preceding vignettes clearly illustrate, Quartermaster soldiers throughout history have fought and died according to the values held sacred by our nation and by our Army.

Their inner makings definitely made a difference. As General Marshall so eloquently put it: the soldier's heart, spirit and soul are everything. Which is really just another way of saying *values count*.

Army Fundamental Values

Quartermasters in the Officer Basic Course Have Their Say . . .

The expanded History, Traditions and Values program at the Home of the Quartermaster Corps, Fort Lee, VA, leads the way for the US Army Training and Doctrine Command in training young soldiers in the Army's seven core values. The acronym **LDRSHIP** (pronounced "Leadership") uses the first letter of each Army value: Loyalty, Duty, Respect, Selfless Service, Honor, Integrity and Personal Courage. The US Army Quartermaster Center and School immerses advanced individual training soldiers in the Corps' rich history and originates teaching aids for drill sergeants and platform instructors to use to tie Quartermaster heritage to the Army Fundamental Values. Second lieutenants in the officer basic course (OBC) now have a writing and briefing requirement based on History, Traditions and Values instead of a technical subject with which they have had no experience. Excerpts from the writing assignment for the first OBC class on the Army Fundamental Values follow:

Leadership

Loyalty is synonymous with my mentor, LTC Michael A. McFadden, Wisconsin Military General Studies Battalion Commander, who is loyal to subordinates and superiors alike. It is vital for a young officer in today's military to have a role model and mentor who holds Army values in high regard. LTC McFadden inspired me to be loyal and true to my beliefs. He taught me the importance of loyalty and the disappointment that accompanies a break in trust. I have learned many hard lessons throughout my life, but the most devastating is the broken trust of a friend or fellow soldier. Loyalty must be earned. Loyalty is priceless. Unfortunately, a soldier can never erase a disloyal act. Loyalty is the cornerstone for all that soldiers do.

— LT Amber Anastasia Platte

Duty

My idea of Duty has changed over the last several years. In high school, I learned from my civics textbook that duties are legal obligations and responsibilities are moral obligations. As an Army officer, I believe that Duty is much more than any definition could convey. To me, Duty means living every day as a US soldier. Duty requires the incorporation of all seven Army Fundamental Values into every aspect of my life. Duty demands that I be all that I can be.

— LT Torrey L. Theall

Respect

Respect is honoring those who already have traveled the roads that young soldiers are beginning to travel. These higher-ranking officers have earned the right to respect. Also, respect means taking into consideration the feeling and thoughts of the soldiers that we lead. Our job is to motivate our soldiers to achieve great heights in job performance. The key is to keep soldiers informed so that they can feel a part of the mission. This will build into Quartermasters trust in Army leadership and respect for the leader who respects each soldier as an individual.

— LT Alton R. Williams Jr.

Selfless Service

Selfless service requires actions that place individual needs and wants second to those of the whole. As Army soldiers, we may never have to give our life to save the lives of others, but as soldiers we have to place what we personally hold dear second to what will benefit our team. This type of Selfless Service may not seem as heroic or extreme as battlefield actions, but is equally important. If Quartermasters can serve selflessly in everyday duties, we will be able to make the ultimate sacrifice if ever needed.

— LT Joshua R. Clark

Honor

My inspiration and my historical example of Honor is Elva Ireland, my 83-year-old mother who raised me and my brothers and sisters of all races and nationalities. This quote from her best illustrates what honor means to me: "If you live an honest life, your honor and God will always guide you through life and be the foundation for your personal integrity. No one can take your dignity from you. Everyone will want to emulate your steadfastness." Hold true to your trustworthy character. Deal fairly and honestly with others. Ask yourself if you want your children to possess these characteristics. Be proud of who and what you are. Not only will you have high self-esteem, but everyone else will honor you as well.

I want to affirm that all seven Army Fundamental Values are equally important. My mother possesses each and every one of the values and bestowed them upon me. These values are intertwined and cannot stand alone. Honor is just one very significant piece of the picture.

— LT Paul E. Ireland

Integrity

Integrity is the most important of all the Army Fundamental Values. Integrity provides a foundation for each value and gives them all meaning by creating the standard of consistency. So long as we, as an Army, act with Integrity in all that we do, then the other values can be upheld. If soldiers do not act with Integrity, then there is no reason to serve selflessly or to act loyally and courageously. We would not have any honor and would not act with respect and with a sense of duty. By definition, Integrity causes us to maintain our beliefs at all costs. None of the other values would be binding without the underlying virtue of Integrity. Soldiers cannot find justification for action without the firm belief that what we are doing is right: that is Integrity.

— LT Sean A. Brady

Personal Courage

Personal Courage is a tangible value. The most physically courageous action I have ever taken is jumping out of an airplane at 14,000 feet. I was terrified. Therefore, maybe "fearlessness" is not a good definition for courage. Perhaps a better definition is taking action in spite of fear. This new definition is better suited for examples of moral courage. Moral courage can be as simple as a soldier who does not like to call cadence, but gets out there and calls cadence in spite of fearing that he will make a fool of himself. Personal Courage can be as complicated as disobeying an illegal order from a superior that a soldier respects. In that sense, Personal Courage is doing the harder right, as opposed to the easier wrong, which is often doing nothing. With a little thought, it is easy to see how these examples of Personal Courage tie into other Army Fundamental Values such as duty and selfless service. The more a soldier thinks about each value, the more all the values interrelate as a whole.

— LT Theodore S. West

Heritage and Values

TRADITIONS COME TO LIFE

At the Quartermaster Museum

Tim O'Gorman, Quartermaster Museum Director

At first glance it's not very interesting, this tin cup. It's plain, has a "US" stamped on the handle, but otherwise it's unadorned. It's known as the Model 1874 cup, the kind issued to soldiers in the late 1800s. But look at it more closely. What does it represent? How does this tin cup tell a story of Quartermaster duty, selfless service, and personal courage?

Imagine the period during which it was used, and then imagine a group of troopers of the 7th Cavalry fighting for their lives atop a bluff along the Little Bighorn River in Montana on a June day in 1876. Surrounded by a force of more than 3,000 Sioux and Cheyenne warriors, the 300 troopers fight for their lives, unaware that their Regimental Commander, LTC George Custer and 200 of his men, have already died to the last man barely three miles distant. Among this group, the remains of the 7th Cavalry, are Quartermasters, blacksmiths and saddlers, suffering along with the rest the wounds inflicted by the enemy and, by the second day of their ordeal, suffering from the heat. The men are desperate for water. Some are crazed. Others are willing to die for it.

Four troopers, among whom are Saddler Sergeant Otto Voit and Blacksmith Henry W.B. Mechlin, rise to draw the fire of the enemy. As they stand to receive and return the enemy fire, several other troopers scramble down the banks to the Little Bighorn carrying canteens, tin cups, and anything that will hold water to bring to their comrades on the bluff. The action does not last long; cannot last long. At least one of the four, Henry Mechlin, is wounded but water is brought to the 7th Cavalry. For the heroic actions on this day, 17 troopers are awarded the Medal of Honor. Among them are Saddler Sergeant Voit and Blacksmith Mechlin, two of the 33 Medal of Honor recipients of the Quartermaster Corps.

'How does this tin cup tell a story of Quartermaster duty, selfless service and personal courage?'

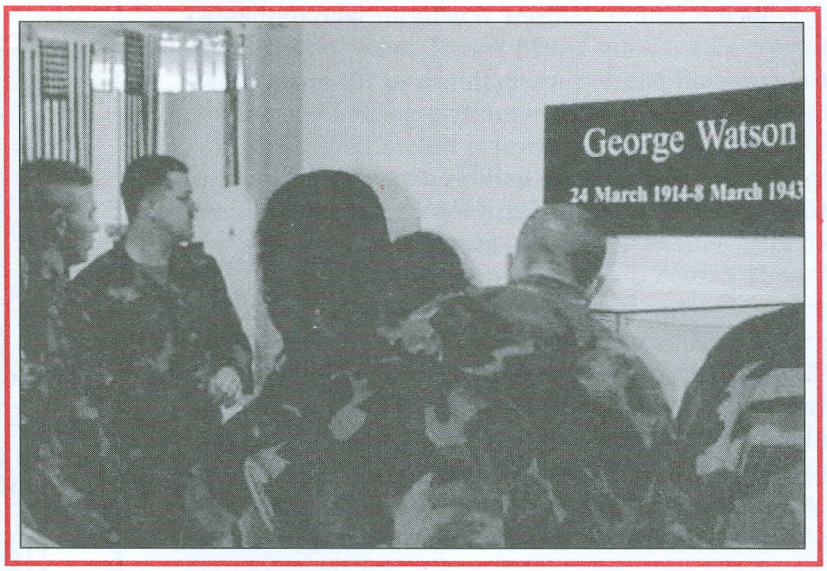
Sometimes in battle, basic necessities such as water are as important as ammunition. Sometimes, a tin cup can be as important as a weapon.

History, heritage and values, as taught at the Quartermaster Museum, are closely related. With the inauguration of heritage and values training at the Quartermaster Museum, examples in history are being used as a way to teach the meaning of the Army's seven core values. Museums collect and exhibit objects: objects tell stories. The story of Quar-

termaster courage at the Little Bighorn, as evoked by a tin cup, is but one of six specific examples used at the museum to tell a values story. Each story focuses around an artifact and the individual who might have used it. Each story tells of Loyalty, Duty, Respect, Selfless Service, Honor, Integrity and Personal Courage shown by Quartermasters.

Drill Sergeants Teach Traditions to Trainees

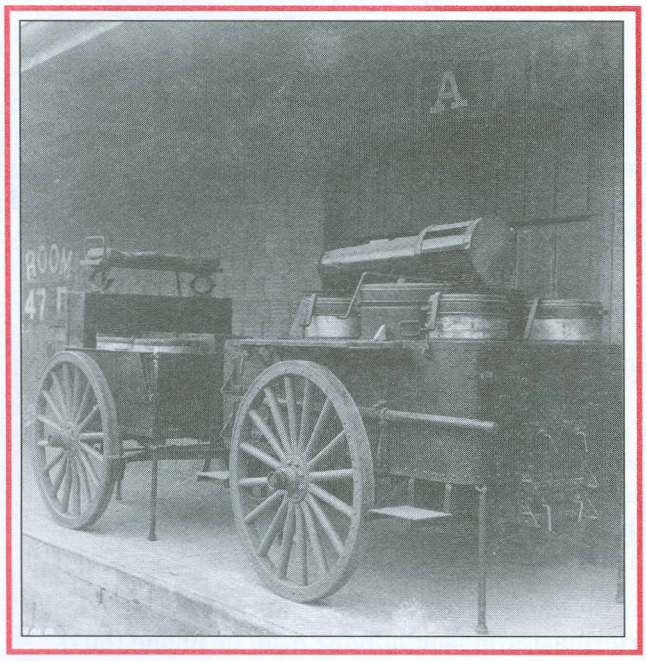
While the values and heritage training is given to all Quartermasters, officer and enlisted, the primary beneficiaries are the advanced individual trainees, newly arrived soldiers to the Corps who begin early to learn their history. The primary instructors are the drill sergeants of the 23d Quartermaster Brigade, the training unit of the US Army Quartermaster Center and School.



Newly arrived Quartermasters in advanced individual training at Fort Lee, Virginia, learn about their Corps' history early at the Quartermaster Museum.

Part I – Values

The class is structured in three parts. The class begins with a talk by The Quartermaster General, in a video format, about the meaning and importance of Army values. Students are then shown two artifacts and told how each tells them about Quartermasters and values. One of them, a Model 1874 tin cup, tells the Little Bighorn story. The other, the colors of the 12th Quartermaster Regiment, tells of the honor and loyalty displayed by the commander of that regiment when on the eve of the surrender of American Forces on Corregidor in 1942, he asked an Army nurse to take and care for the colors. For 33 months, the nurse kept the colors safe while she was a prisoner of war of the Japanese, an act of great personal courage. Upon her release, she returned the flag to the commander, and it was later donated to the Quartermaster Museum. Sometimes history is written with thread.



A World War I mobile field kitchen reminds Quartermasters of a cook's heroism.

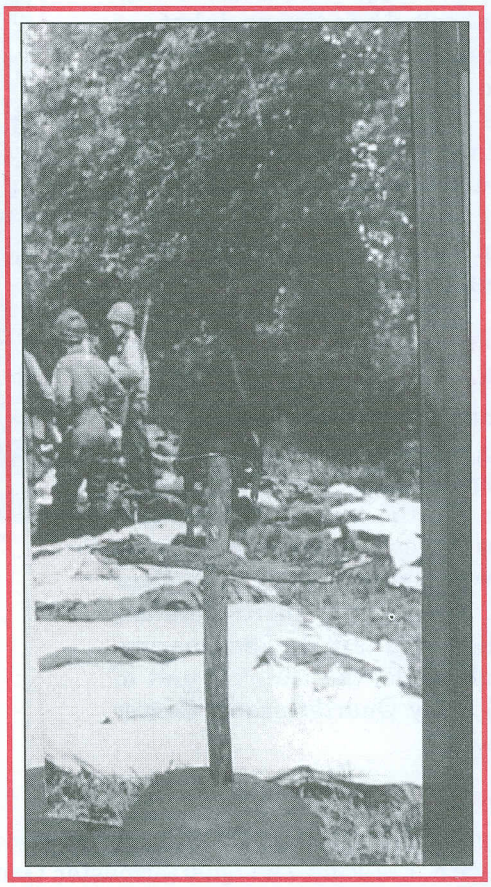
Part II – Heritage

In the second part of the heritage and values class, students are shown specific exhibits in the museum gallery that demonstrate values and heritage. Exhibits include the Medal of Honor awarded to PVT George Watson, a Quartermaster killed while saving the lives of his fellow soldiers in World War II, an act of loyalty and personal courage. A World War I mobile field kitchen tells the story of SGT Edward Greene, a cook who began carrying ammunition to his battery's guns on his own without being told, after his kitchen was destroyed during a barrage, a display of duty and selfless service.

Tech 5 Eric G. Gibson, a warrior who happened to be a cook during World War II, led a squad of men to a jump-off point at Anzio Beach in 1944 and, when brought under fire, personally attacked the enemy, killing and capturing several before he himself was killed. The M-1 Rifle on exhibit portrays the story of this Quartermaster Medal of Honor recipient, a story of duty, selfless service and personal courage. A World War II personal effects bag in the mortuary affairs exhibit begins the story of SGT Elbert E. Legg, a graves registration specialist who landed with the 82d Airborne Division behind the beaches of Normandy in the early morning of D-Day. Working alone and surrounded by a raging battle, Legg undertook the mission of establishing a proper cemetery as a final resting place for those being killed even as he worked. His story is one of respect and duty.

Part III – Rites of Passage

The stories that the advanced individual training soldiers have heard and seen are given present-day meaning in the third part of the program. Students are shown the Quartermaster Creed, a creed that summarizes the Corps' long history and contributions, followed by the drill sergeant relating the symbolism and meaning of the Quartermaster Regimental Crest. The class is then brought to attention, and each soldier comes forward to receive a Quartermaster Regimental insignia from an officer. After all have received their insignias, the soldiers repeat in unison the last verse of the Creed: "I Am Quartermaster, I Can Shape the Course of Combat, Change the Course of Battle. I Am Quartermaster, I Am Proud." This concluding Rite of Passage Ceremony officially brings the soldier into the Quartermaster Corps. The ceremony provides meaning to what has just been learned and impresses upon them the importance of the commitment being asked of them by their country.



Mortuary affairs exhibit shows duty and respect on the battlefield.

The training being conducted at the Quartermaster Museum is but one of many steps being taken to instill values and heritage among Quartermaster soldiers. It is also a step being taken so that soldiers can gain an historical identity of who they are and how they relate to those who have gone before them.

Museum Adds Exhibits

An exhibit entitled Duty to the Fallen: The Army's Mortuary Affairs Mission was the first in a series at the US Army Quartermaster Museum that eventually will showcase all the Quartermaster functional areas. Supply By Sky, an exhibit portraying the role and history of Quartermaster riggers, will open in May 1998. Other planned temporary exhibits will highlight the Corps' missions and the people who perform them in field services, supply logistics, petroleum and water supply and food services.

The US Army Quartermaster Museum is located in Building 5218, Avenue A, Fort Lee, VA. Visit the museum's web site at http://www.lee.army.mil/quartermaster/museum/index.html or phone (804) 734-4203. Museum hours are 1000-1700, Monday-Friday, and 1100-1700 on weekends.

In Search of . . . Quartermaster Mortuary Affairs Training

CPT Kristi McCullough *Thomas E.W. Goyne*

By the end of day one, the excavation team found the skeleton. Some of the pieces were not recognizable as bone, much less human remains, but they were. A sergeant and a specialist, using trowels, unearthed more items: a molar tooth, a zipper from a flight suit, and a tarnished dime dated "1965." All these were recovered some 50 centimeters below the surface in hard-packed red clay. This excavation site is not in Vietnam or Laos or on a far-distant Cambodian mountaintop, although it could be. This excavation, a search and recovery (S&R) of a simulated Vietnam-era plane crash, occurred at Fort Lee, VA, as part of the hands-on training and the courses for college credit available to soldiers of the 54th Quartermaster Company (Mortuary Affairs).

The 54th Quartermaster Company's field training exercise (FTX) at Fort Lee incorporates courses titled Site Investigation I and II. The excavation is led by an instructor at nearby John Tyler Community College who has a master of forensic science degree. As a site investigator, he works with the officers and senior non-commissioned officers (NCOs) at the 54th Quartermaster Company to design and implement the training that will help prepare the soldiers for such real-world missions. While easily getting good training in establishing grids and in planning evacuation operations, the Quartermaster soldiers with the military occupational specialty 92M (Mortuary Affairs Specialist) rarely have the opportunity to conduct a search, excavation and recovery from start to finish. These realistic courses are an essential part of readying the 54th Quartermaster Company for actual deployments overseas, with the mission of bringing fallen soldiers home.

Hitting the Books

To prepare for their mortuary affairs FTX, the soldiers at the US Army Quartermaster Center and School spend one semester "hitting the books." They study forensic archaeology and learn a myriad of related practical skills, such as taking notes, sketching, photographing, and maintaining an orderly, disciplined and safe S&R site. The students also participate in timed "critical observation" exercises to hone their visual skills and refine their search techniques.

Some of these drills take place at dusk, when the greens, browns and grays of the overgrown crash site at Fort Lee seem to blend as one to the eye. The clutter of leaves and the ribbons of dark shadows in the torn fuselage of an old Chinook helicopter make meticulous and systematic visual sweeps the key to solving the mystery that waits at the site, locked in the debris of the scene. Bone fragments are partially hidden in the wreckage. A chin strap can be seen only at a certain angle under a seat. A torn piece of flight suit is attached to an overhead cable, making the students conscious of also looking up when they search.

Staying Focused and Alert

A team of two students gets three minutes to search and record observations. They must stay focused and alert as precious time melts away. Afterward, they complete a rough sketch of the site from memory – no measurements and no photographs, using only what they remembered in that brief time. During the class discussion that follows, they compare notes and techniques and relate *what* they found *where* they found it – an eye-opening experience that helps them learn from each other.

Finally, when the mortuary affairs FTX begins, their leaders divide them into teams and assign duties and responsibilities. This excavation comprises 25 percent of their grade.

The college instructor who is the site investigator, with camera in hand, helps the Quartermasters and critiques their new-found skills. There is a minimal use of shovels and hoes because such crude tools could destroy the delicate artifacts needed to decipher the identities of crash victims. Students learn to use their trowels, pointed ones for excavating the floor of the site and squared trowels for corners and walls. The trowel work, often on hands and knees in the excavation pit, is slow and tedious, especially in cold weather, but the soldiers press on, knowing how important it is to recover all the evidence at the site.

With a careful scraping motion, soil is removed layer by layer into a plastic dustpan. Whenever an item is discovered, students use instruments other than trowels to remove the earth around the item. Paint brushes, dental tools, teaspoons and even fondue sticks are handy for this task. Next, the soil is poured into a labeled bucket and handed out of the pit to a waiting soldier. There is a constant flow of workers as they cycle buckets heavy with dirt to the sifting stations and then return empty buckets to the pit, only to be filled again with more painstakingly scraped dirt. At the sifting stations, the clumps of earth are crumbled and forced through a coarse screen to capture any small bone fragments or personal effects (PE) that may have been missed in the pit.

If the excavation involves multiple grid squares, the buckets from a particular grid are given plastic

Two teams of soldiers from the 54th Quartermaster Company and two pathologists from the Virginia Medical Examiner's Office concentrate on excavating four skeletons found at two separate sites. Once a skeleton is exposed, small tools, such as ordinary teaspoons and paintbrushes, can be used to remove the soil from the remains. The 'cross hairs' mark intersecting grid squares.

streamers of different colors and can even be further assigned to individual soldiers in a given grid square. For example, if a tooth is found in the dirt from a specific bucket, the tooth can be oriented back to the grid where a particular soldier was working and ideally within about a one-square-foot area.

The site investigator does not let the soldiers who are sifting go untested. Just before a bucket leaves the site, he might reach into his pocket and put a tooth or a fired cartridge case into the bucket of dirt. Then he waits. In several minutes a soldier calls out. The item was found, identified and recorded, proving that sifting works.

Then the documentation begins. A hurried excitement usually takes over at the FTX as soldiers move into action. Students make sketches and measurements, take notes, and click off photographs with quick precision. At the same time, an excavation-experienced officer and a senior NCO from the 54th Quartermaster Company observe the soldiers as they move through their paces collecting and packaging the bone fragments. Often in hushed tones outside the site, the mortuary affairs officer and NCO discuss the students' progress, nodding every so often, relating this site to others they have worked, some a half a world away in the steamy jungles of Southeast Asia.

Currently, most of the Army's S&R missions are conducted by teams based at the Central Identification Laboratory, Hawaii (CILHI) that maintains 13 standing teams. These teams travel the world, conducting surveys and excavations of crash and burial sites associated with the loss of US personnel. Forensic anthropologists from the CILHI's scientific staff supervise the archaeological techniques to recover human remains and material evidence from the excavation areas, hoping to find the evidence that will take another name off the missing in action rolls.

Today, the CILHI sends six teams to Vietnam and three teams to Laos as many as five to six times a year. The CILHI conducts other worldwide recoveries as resources allow. In the past several years, such recoveries have included locations as diverse as Australia, Russia, Tibet, China, India, Germany, the Netherlands, Czech Republic, North Korea, South Korea, Papua in New Guinea, and many islands in the South Pacific. It is a difficult duty because the CILHI teams stay in the field

With clipboards in hand, two Quartermasters at a mortuary affairs training exercise compare notes as they document two separate sites with skeletal remains.

. . . deep in that red Virginia clay that is the first training bed for the Quartermaster soldiers . . .

Sifting involves reducing clumps of dirt and roots to fine soil in order to search for minute items, such as teeth, buttons, and finger and toe bones.

an average of 30 to 45 days at a time on each recovery. The teams commonly spend more than 220 days a year in some of the most environmentally harsh areas of the world. However, the CILHI teams are committed to the successful completion of their mission, as are the soldiers of the 54th Quartermaster Company.

By the end of their FTX, soldiers of the 54th Quartermaster Company have recovered some 75 bone fragments, numerous PE, shell casings, shreds of aluminum, and avionics. Each item has been photographed, collected, catalogued and packaged. The FTX has been completed. The site is officially closed.

Nevertheless, the students' work is not over. They will spend the weekend completing the finished sketches of the site and studying. The next week is the final exam that presents every question as an in-depth discussion of site problems and how the student would expand a grid or deal with unforeseen difficulties such as distortions, interruptions and disturbances. This one evening of testing comprises 25 percent of a soldier's grade. Students have two hours. Thorough and complete answers receive the highest grade.

During the break between semesters, officers and senior NCOs of the 54th Quartermaster Company and the site investigator plot the strategy for the next class. Mission-critical needs are prioritized, textbooks are evaluated and ordered, and the process of preparing more sites begins. The bar will be raised: a mass grave is planned next time. Ten manikins wearing uniforms of the opposing forces will be excavated. They are buried, not on snow-covered farmland in Bosnia or in the dark-forested hillsides of Eastern Europe, but right here at Fort Lee, deep in that red Virginia clay that is the first training bed for the Quartermaster soldiers dedicated to bringing fallen comrades home.

CPT Kristi McCullough is an Instructor and Doctrine Writer, Mortuary Affairs Center, US Army Quartermaster Center and School, Fort Lee, Virginia. She has a bachelor of arts degree from the University of Virginia, Charlottesville. She is a graduate of the Quartermaster Officer Advanced Course, Petroleum Officer Course, and Mortuary Affairs Course. She previously served with the 1st Infantry Division, Fort Riley, Kansas, and the 2d Infantry Division, Camp Casey, Korea.

Thomas E.W. Goyne, Site Investigator, is on the adjunct faculty of John Tyler Community College, Chester, Virginia, for site investigation and English classes. He has a bachelor of arts degree from the University of Richmond, Virginia, and a master of forensic science degree from George Washington University, Washington, DC.

Aerial Delivery and Field Services Web Site

The web site for the Aerial Delivery and Field Services Department, US Army Quartermaster Center and School at Fort Lee, VA, now includes rigging manuals and sling load forms for downloading by soldiers in the field. Available are airdrop rigging field manuals, sling load rigging manuals, Airdrop Review and Malfunction/Safety Analysis reports, safety of use messages, forms for submitting Airdrop Malfunction Reports and Airdrop Summary Reports and Recommended Changes to Publications, information specific to the Air Force, Sling Load Inspection Forms, dates for the Sling Load Inspectors Course, an overview of the department, and links to other useful sites. The address is http://www.lee.army.mil/quartermaster/adfsd.

Teletraining Network (TNET) Program Army Center of Excellence, Subsistence

MAJ Rachel Danielson

In the training arena, Distance Learning is one new buzz phrase heard more often at the US Army Quartermaster Center and School (USAQMC&S), Fort Lee, VA. The Army Center of Excellence, Subsistence (ACES) Training Directorate is providing as much training to the field as possible, within the limits of current resources, while maximizing the needs of the field.

NCO Academy Support

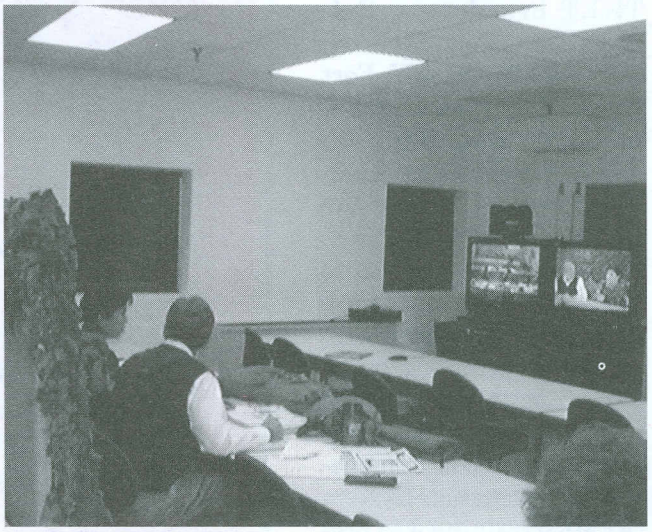
During FY98, ACES is pursuing training opportunities through video teletraining. More specifically, ACES has been expanding training by using the Army's Teletraining Network (TNET). The outstanding TNET facilities and technical support provided by the NCO Academy at Fort Lee make all broadcasts possible.

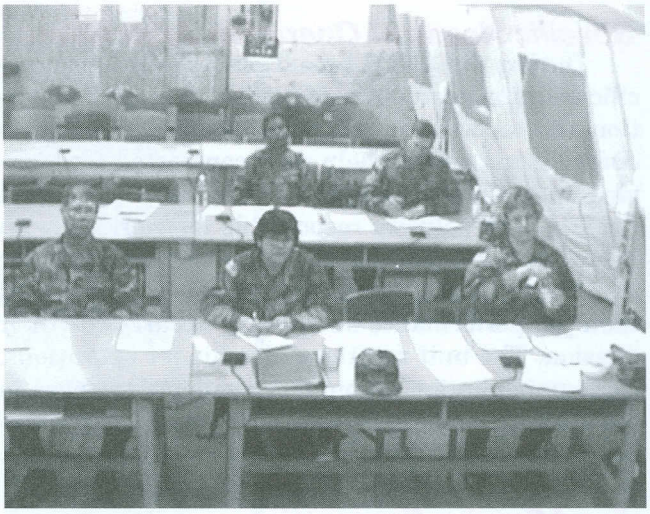
In the past, a soldier wanting to attend a course either went on temporary duty status or waited until an instructor traveled to his location for training. Now, with satellite technology and Distance Learning, military and civilian personnel from all over the world can remain at their duty stations and attend a course.

Every soldier needs training. However, obstacles such as class allocations, budget constraints and mission requirements prevent many soldiers from attending schools. With Distance Learning, soldiers and units can benefit from training while continuing to support the mission within the limits of today's military budget. TNET also allows civilians and soldiers of all ranks and all military occupational specialties (MOSs) to receive training in subjects they normally would not.

What Exactly Is TNET?

TNET is simply broadcasting from a TNET site by television to one or more TNET or video teleconference (VTC) sites. TNET is very different from simply broadcasting from one VTC site to another because the TNET instructor can use multimedia presentations, and the TNET student can see the instructor and one of the receiving sites simultaneously. There are two television sets side by side at the receiving TNET site. One television set shows the instructor and one voice-activated television shows whichever receiving site has a student speaking or whichever has the TNET participant who last spoke. TNET also enables the instructor and students from all the sites to maintain continuous dialogue. During a class, interaction with all sites is easy despite the great distances between sites.

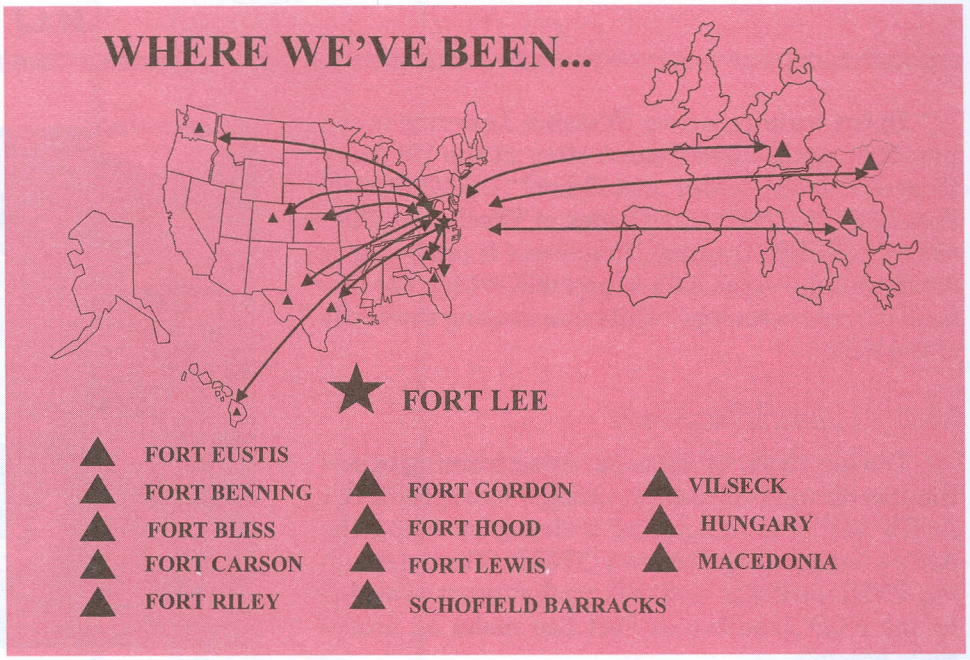




Two side-by-side television sets at each TNET site allow the instructors at Fort Lee, Virginia, (top) and the Quartermasters (bottom) in Tazsar, Hungary, supporting Operation Joint Guard to see each other simultaneously. One voice-activated television in Hungary shows the student who last spoke at the receiving site.

ACES has been the forerunner at the USQMC&S in presenting TNET broadcasts to field locations. Initial ventures with TNET linked Fort Lee with several installations in the continental United States

(CONUS) and Europe. Performance nutrition and sanitation classes were presented during the first TNET broadcasts. Soldiers from Fort Stewart, GA; Fort Drum, NY; Fort Hood, TX; Fort Carson, CO; Fort Benning, GA; and Schofield Barracks in Hawaii were among the first to link up with ACES. Response from the units was very positive. During January 1998 because of responses from the field units, TNET broadcasts were again presented to various sites. Army Food Management Information System (AFMIS) training was presented to units in Europe and CONUS. Two broadcasts accommodated the scheduling needs of the units. During a short period of time, ACES has linked up with various units at locations throughout CONUS and outside the continental United States (OCONUS). TNET training allows ACES to train soldiers of all ranks while meeting the needs of the field.



Specific Needs of Operation Joint Guard

During the ACES broadcast last January, specific training needs were identified during the question and answer session. The leaders in *Operation Joint Guard* needed help with contracted food service operations throughout Hungary, Bosnia and Croatia. The soldiers responsible for working with the contracted food service operations lacked the training in dealing with contractors. This hindered their job performance and ability to carry out their mission. The unit rotations also hinder operations. Each unit rotation encounters similar challenges in adapting to the new mission and the associated learning curves during the soldiers' first months on station.

Food Service Contracting

The ACES Training Directorate quickly coordinated a contracting officer's representative (COR) TNET broadcast tailored to meet the needs of *Operation Joint Guard* food service personnel. Last February 12 and 13, four broadcasts were presented to the staff at Tazsar, Hungary. An 80-hour COR certification course and an 8-hour refresher training session were presented. During this class, the specific *Operation Joint Guard* contingency contract background was discussed along with the current situation involving full food service contracts throughout *Operation Joint Guard*. Also, the contract statement of work was discussed along with the organizational structure of the commercial contractors and all military food service personnel involved in the mission. Other subjects during the two days included fundamentals of contracting, performance work statements, contract administration, files, surveillance plans, ethics and modifications.

During this broadcast, food service personnel from *Operation Joint Guard* attended training at Tazsar, Hungary. The V Corps food service sergeant major also attended training with a linkup at Vilseck, Germany. The sergeant major's expertise and background with *Operation Joint Guard* contributed an added value to the training. The soldiers in *Operation Able Sentry* in Macedonia were also scheduled to link up and train. However, last-minute mission requirements prevented this. Active interaction between the students and instructors was an indicator of the educational training conducted throughout the two days.

Soldiers Very Positive

The after action review was overwhelming. Overall, comments from the soldiers were very positive. The soldiers commented that ACES could accommodate their specific needs, including a last-minute request to split the training into two days. The need

for refresher training was apparent and also highlighted by the unit rotations during this extended operation. With TNET, another successful training session was conducted by the USAQMC&S for the soldiers in *Operation Joint Guard*.

ACES TNET Training Goals

The ACES' goals for FY 98 are to continue to provide professional development and functional classes using all facets of delivery. TNET is one way to forge ahead in adapting to new ways to train, support and sustain the Total Force.

Current TNET Training

During FY 98, ACES plans to continue to present more TNET training. The following subjects are currently planned:

Sanitation Refresher Training (*Operation Joint Guard*)	26 Feb 98
Contracting Officer's Representative (*Refresher Training*)	March/April
Sanitation Certification	May
Introduction to New Field Feeding Equipment	June/July

Sanitation refresher training is specifically presented to *Operation Joint Guard* personnel, but all training sessions are open to any unit. Three sanitation certification sessions are being presented. This course will certify soldiers according to Technical Bulletin Medical 530. A presentation on new field feeding equipment will introduce the new Modern Burner Unit (M2 Burner replacement) along with other improvements to Army field feeding equipment. Other classes are available upon request. The ACES focus is on quality, service and satisfaction in support of the warfighter, wherever the soldier may be.

How Does My Unit Link Up?

To link up for a class or request a particular class for a unit, contact the ACES Food Management Training Directorate, MAJ Rachel Danielson at DSN 687-4463 or (804) 734-4463 or E-mail to

danielr1@lee-dns1.army.mil.

Also telephone SFC Delbert Wagner at DSN 687-3369 or (804) 734-3369.

Points of contact are also identified at the ACES site on the Quartermaster Home Page at

http://www.lee.army.mil/quartermaster.

Once a class date and time have been established, ACES works with the unit's TNET site coordinator to ensure availability. The unit coordinator assists the instructor with any administrative details such as student handouts and makes sure soldiers are available for training during the broadcast. Coordination continues with the unit representative as dates and times are adjusted to meet the scheduling conflicts at various sites. The rest is up to the ACES Food Management Training Directorate. It is that simple.

Total Training Accomplishments

To date, ACES has trained more than 300 soldiers during the initial TNET broadcasts. The need for refresher training and training on new equipment, procedures and policies is apparent from the units' responses throughout the Army. ACES also is encouraged by the comments from the field after each broadcast. It is evident that Distance Learning is here to stay. By exploiting technology and situational understanding, ACES will continue to train, support and sustain the Total Force.

MAJ Rachel Danielson is Executive Officer and Chief of the Food Management Training Directorate, Army Center of Excellence, Subsistence, US Army Quartermaster Center and School, Fort Lee, Virginia. She is a graduate of the Quartermaster Officer Basic and Advanced Courses. She has a bachelor of business administration degree from the University of Texas, Pan American. She formerly was S3/Logistics Operations Officer, Defense Personnel Support Center Europe and Commander, Headquarters and Headquarters Company, 1st Combined Arms Support Battalion, Fort Bliss, Texas. Other assignments included S4, 2-1 Air Defense Artillery (ADA) Battalion, 11th ADA Brigade, Fort Bliss, and S4 Task Force 2-1, XVIII Airborne Corps, Saudi Arabia. MAJ Danielson has held various other staff and leadership positions with the 34th Support Battalion, 6th Cavalry Brigade, Fort Hood, Texas.

Soldiers put recruits through their paces during the canines' basic training course in 1950 at the Darmstadt (Germany) School for dogs.

The Quartermaster K-9 Corps

MAJ Kevin Born

On 13 March 1942, the Quartermaster Corps began training dogs for the Army's "K-9 Corps." The phrase "K-9 Corps" became a popular title for the War Dog Program in the 1940s, and found wide informal usage both inside and outside the military. Not long after the attack on Pearl Harbor, the American Kennel Association and a new group calling itself "Dogs for Defense" mobilized dog owners across the country to donate quality animals to the Quartermaster Corps. Dogs donated by a patriotic public to the Army saved the lives of many soldiers in combat.

Initially, more than 30 breeds were accepted. Later, the list was narrowed to five: German Shepherds, Belgian Sheep Dogs, Doberman Pinschers, Farm Collies and Giant Schnauzers. First estimates were that only about 200 dogs would be needed, but that soon changed. Dogs for Defense worked with qualified civilian trainers, who volunteered their services without pay, to train dogs for the program. As requirements increased, reception and training responsibilities were transferred to the Quartermaster Remount Branch. This branch had years of experience procuring and training horses and mules. Dogs for Defense continued its highly successful campaign to solicit donations of dogs. In Autumn 1942, the program was expanded to procure and train dogs for the Navy, Marine Corps and Coast Guard as well. Eventually, these branches procured and trained their own dogs.

The first War Dog Reception and Training Center was established at Front Royal, VA, in August 1942. Additional centers operated by the Quartermaster Corps were located at Fort Robinson, NE; Cat Island, Gulfport, MS; Camp Rimini at Helena, MT; and San Carlos, CA. Small, temporary training centers were set up at Beltsville, MD, and Fort Belvoir, VA, to train mine detection dogs. This task was later transferred to San Carlos.

The Quartermaster Corps also trained dog handlers, most of whom were Quartermaster soldiers. These soldiers were also responsible for developing all doctrine for training and use of War Dogs. The Quartermaster Corps even developed a technical manual: TM 10-396, War Dogs, 1 July 1943.

Total training time for a dog was 8 to 12 weeks. At the training centers, dogs underwent rigid military training. A "basic training" period was initiated where dogs were trained to carry out certain fundamental commands, such as sit, stay and come. They were also accustomed to muzzles, gas masks, riding in military vehicles and gunfire. After completion of

basic training, each dog went through one of four specialized training programs:

Sentry Dogs – These dogs worked on a short leash and were taught to give warning by growling, alerting or barking. They were especially valuable for working in the dark when attack from cover or the rear was most likely. The sentry dog was taught to accompany a military or civilian guard on patrol and give him warning of the approach or presence of strangers within the protected area.

Of the 10,425 dogs trained, around 9,300 were used for sentry duty. Sentry dogs were issued to hundreds of military organizations such as coastal fortifications, harbor defenses, arsenals, ammunition dumps, airfields, depots and industrial plants. The largest group of sentry dogs (3,174) was trained in 1943 and issued to the Coast Guard. These dogs were used for beach patrols guarding against enemy submarine activities.

Scout or Patrol Dogs – In addition to the skills for sentry dogs, scout or patrol dogs were trained to work in silence to aid in the detection of snipers, ambushes and other enemy forces within a particular locality. Only dogs with superior intelligence and a quiet disposition were selected for scout dog training. The scout dog and his Quartermaster handler normally walked point on combat patrols, well in front of the Infantry patrol.

Scout dogs could often detect the presence of the enemy at distances up to 1,000 yards, long before men became aware of them. When a scout dog alerted to the enemy, the dog would stiffen its body, raise its hackles, prick its ears and hold its tail rigid. The presence of the dogs with patrols greatly lessened the danger of ambush and tended to boost morale.

Messenger Dogs – The most desired quality in these dogs was loyalty, since the dogs must be motivated by the desire to work with two handlers. They learned to travel silently and take advantage of natural cover when moving between the two handlers.

Mine Dogs – These dogs, also called the "M-Dog" or mine detection dog, were trained to find trip wires, booby traps, metallic and nonmetallic mines. Units were sent to North Africa. However, the dogs had problems detecting mines under combat conditions.

Combat Duty

By early 1944, when the US military went on the offensive in both the Pacific and European Theaters, the emphasis shifted to supplying dogs for combat. In March 1944, the War Department authorized the creation of Quartermaster War Dog Platoons and issued special tables of organization and equipment

On the job in 1943 at the Quartermaster depot in Columbus, Ohio

(TOEs) for that purpose. Fifteen platoons were activated in World War II. Of these, seven saw service in Europe and eight in the Pacific.

A prime example of the effectiveness of the dog in combat was the caliber of performance of dogs in the islands of the Pacific. Dense vegetation and the continuous semidarkness of the Pacific Island jungles afforded ideal conditions for the enemy to infiltrate the American lines and conduct reconnaissance and ambushes. Scout dogs were instrumental in taking this advantage away from the enemy. No patrol led by a War Dog was ever ambushed or fired upon without warning. In contrast, "dogless" patrols routinely suffered casualties, usually as a result of ambush or surprise attacks.

A number of dogs trained by the Quartermaster Corps established outstanding records in combat overseas. At least one dog was awarded combat med-

als by an overseas command. These medals were later revoked because presenting these decorations to animals was contrary to Army policy. In January 1944, the War Department relaxed these restrictions and allowed publication of commendations in individual unit General Orders. Later the Quartermaster General issued Citation Certificates to dog owners for war dogs that had been unusually helpful during the war. The first citation recognized eight dogs that were members of the first experimental War Dog unit in the Pacific Theater. Certificates were also issued for dogs killed in action and upon discharge of a dog.

Chips, Most Famous War Dog

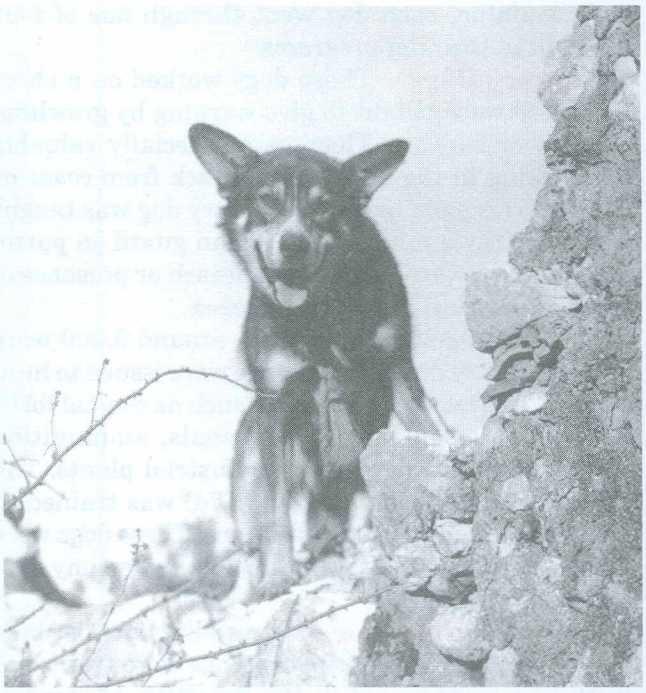
Probably the most famous War Dog was one named Chips. Chips was donated by Edward J. Wren of Pleasantville, NY, and was trained at Front Royal, VA, in 1942. Among the first dogs shipped overseas, Chips was assigned to the 3d Infantry Division and served with that unit in North Africa, Sicily, Italy, France and Germany. His assignments included sentry duty at the Roosevelt-Churchill Conference in Casablanca in January 1943.

Although trained as a sentry dog, Chips was reported on one occasion by members of Company I, 30th Infantry Regiment, to have broken away from his handler in Sicily and attacked a pillbox containing an enemy machine gun crew. Chips seized one enemy and forced the entire crew to surrender. He was also credited by the units for alerting them of enemy presence on numerous occasions. In recognition of his service, Chips was awarded the Distinguished Service Cross, Silver Star and the Purple Heart. All were later revoked. Chips died seven months after returning home because of complications from war injuries. In 1993, Disney produced a television movie about Chips called "Chips the War Dog."

Another dog was Dick, a scout dog donated by Edward Zan of New York City. Dick was cited for working with a Marine Corps patrol in the Pacific. This dog not only discovered a camouflaged Japanese bivouac, but also alerted soldiers to the only occupied hut among five. Dick's alert preceded a surprise attack which resulted in annihilation of the enemy without a single Marine casualty.

Returning War Dogs to Civilian Life

At the end of the war, the Quartermaster Corps put into operation a plan for return of war dogs to their civilian owners. Dogs were sent to a reprocessing section for rehabilitation to civilian life. Dogs were trained that every human is friendly. They were tested for such things as reaction to people riding around them on bicycles or placed in an area with a great amount of noise. Before return, each dog was given a final check by a veterinary officer. The government paid for the shipment of the dog to the owner. Those dogs unwanted by the original owners were sold to the public by the Treasury Department, with the assistance of Dogs for Defense. It took more than two years to return all borrowed dogs.



Chips, the dog hero of the 3d Infantry in World War II, was wounded in Italy while invading a machine gun nest.

Post World War II

After World War II, the Army determined that dogs used for pack and sled service, mine detection and messengers were no longer needed because of advances in technology. However, the sentry dogs and the silent scout dogs continued to be of great value. The German Shepherd was chosen as the dog most suitable for these duties because of its temperament, intelligence and endurance. In 1946 the Army decided to purchase dogs outright and no longer to return dogs to their previous owners at the end of their military service.

The end of 1946 saw the beginning of the Quartermaster Corps "Dog Training Branch" at the US European Command (EUCOM) Quartermaster School in Lenggries, Germany. Dogs trained at Lenggries were used as sentry dogs at airfields, ammunition points and supply depots throughout Germany and France. These dogs saved the Army

millions of dollars, since pilferage at installations with sentry dogs was almost nonexistent.

In July 1948, dog training within the United States was transferred to the jurisdiction of Army Field Forces. The same year the "Dog Receiving and Processing Center" at Front Royal, VA, was moved to Fort Riley, KS. In 1951, this responsibility was given to the Military Police Corps. In 1952, the dog center was moved again from Fort Riley to Fort Carson, CO. By then, the only war dogs the Quartermaster Corps trained were in Germany, being used for sentry duty. From 1956 to 1957 the Quartermaster Corps was called upon to procure dogs for the Air Force as sentry dogs. This effort was to relieve manpower shortages in guarding airfields, materiel and equipment.

Postscript

Dogs continued to serve the armed forces with distinction in other conflicts. In the Korean War, the Army used about 1,500 dogs, primarily for sentry duty. Soldiers of the 26th Infantry Scout Dog Platoon saw action in more than 500 patrols, earning the Meritorious Unit Citation and numerous individual awards for valor. During the Vietnam War, about 4,000 dogs were employed. Of these, 281 were listed as killed in action. Most recently, dogs were deployed to the Persian Gulf conflict.

The oldest memorial to War Dogs in the United States is at the Hartsdale (New York) Pet Cemetery. This memorial was dedicated in 1922 to honor Red Cross Dogs used in World War I. In 1994, a War Dog memorial was dedicated at the US Marine Corps War Dog Cemetery on Guam, to honor the dogs that served in the Pacific Theater during World War II. An effort is currently underway to petition the US Postal Service for a stamp honoring military working dogs.

MAJ Kevin Born has a bachelor's degree in history from the University of Nebraska-Lincoln. He compiled this and other articles on current and former Quartermaster functions for the Quartermaster Museum Web Page (http://www.lee.army.mil/quartermaster/museum/index.html) while working as a volunteer at the Quartermaster Museum. He is currently assigned as a doctrine writer with the US Army Combined Arms Support Command, Fort Lee, Virginia.

(Above) A canine from the Quartermaster War Dog Platoon strains at the order to attack as he and his handler track enemy soldiers hidden in the jungles of Pacific Islands in 1944.

(Left) A handler and his dog from the 58th Scout Dog Platoon pause while working with a 101st Airborne Division (Airmobile) unit in 1969 near Camp Evans, Korea.

Task Force Eagle Fuel Managers Think Outside the 'Box' in Bosnia

CPT John S. Hamilton

Army doctrine provides parameters to guide the planning and execution of complex military operations. Such doctrine is intended as an experience-proven guide, not an all-encompassing "box" from which the soldier cannot deviate. Task Force Eagle (TFE) fuel managers thought outside the "box" in directing bulk fuel support during *Operation Joint Endeavor* in Bosnia-Herzegovina. TFE was a division-plus task force of more than 20,000 soldiers and civilian contractors. TFE's area of responsibility (AOR) covered more than 13,000 square kilometers and included distances of up to 35 kilometers from the brigade support area (BSA) to forward operating bases. The size of the AOR, distances between operating bases, and poor trafficability of the road network internal to the AOR forced TFE to look for nondoctrinal means to store and distribute fuel to the forward-based units.

Task Force Eagle's Fuel Goals

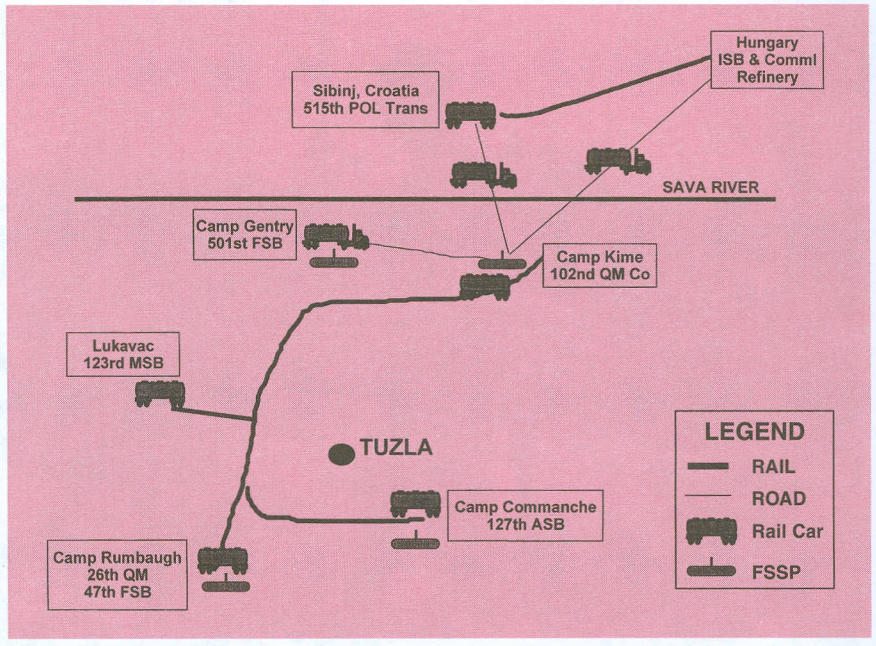
Initially, all direct support (DS) storage capacity (with the exception of 5,000-gallon tankers in the forward support battalions (FSBs)) was in the 123d Main Support Battalion located at the Task Force Rear in Lukavac, Bosnia-Herzegovina. The Lukavac site was located in a partially active coal factory with limited space and roads that could not efficiently handle the vehicle size or quantity of traffic generated by a large logistics base. In developing the fuel distribution system for TFE, goals were to limit the distance traveled by civilian contractors and TFE support elements, increase storage capacity forward in the event resupply was hampered (minimum of three days of supply), and reduce traffic around Lukavac.

The first step was to increase the storage capacity in the BSAs. The FSBs both had 50,000-gallon capacity in their M969 tankers (5,000-gallon capacity each) and nothing more. That represented only slightly more than one day of supply through the first half of the operation. The current modification table of organization and equipment (MTOE) does not authorize the equipment necessary to store multiple days of supply at the BSA or further forward.

Operations From Fixed Locations

Of course, in wartime, operating on a linear battlefield with units on the move, logisticians might not want the FSB weighed down by several days of supply. However, *Operation Joint Endeavor* involved operating from fixed locations in semipermanent base camps. Equipment was pulled from the main support battalion (MSB) and corps support battalions (CSBs) to place 20,000-gallon fuel system supply points (FSSPs) in the BSAs operated by the FSBs. With the FSSPs, both BSAs had three days of supply. This provided the flexibility to limit resupply to every other day from the MSB. Also, an FSSP at a forward operating base in 1st Brigade Combat Team supported the air troop of 1st Battalion, 1st Cavalry Regiment.

To increase distribution capability, with the added value of further improving storage, 5,000-gallon tankers from the MSB were transferred to the FSBs. This had the greatest impact in the 2d Brigade Combat Team area where base camps were the farthest from their BSA. The average straight-line distance from the BSA to forward operating bases was 25 kilometers. The 47th FSB, supporting the 2d



The Iron Horse System

Brigade Combat Team, pushed the MSB tankers forward to the combat battalion's support platoons, increasing the storage capacity at each battalion by at least one day of supply. On several occasions, weather, political and threat situations limited unit movements between base camps to minimum essential personnel and vehicles. Having extra storage and distribution capability was absolutely critical to fuel support at the brigade and battalion levels and could not have been performed with the organic equipment available.

Rail System Activated

The third action by TFE required the activation of the rail system internal to Bosnia-Herzegovina. There is an extensive rail system throughout the former Yugoslavia that was vital to the industrial base before the war. During the current war, the rail lines were destroyed or damaged wherever they crossed the lines of confrontation. Except for very localized use around factories, the rail system was inactive. Fortunately, the system was still intact internal to the TFE AOR and ready for use with very minor repairs. The TFE goals were to reduce traffic around Lukavac (specifically 5,000-gallon and larger tankers) and increase storage capacity in the four areas of largest consumption (1st Brigade Combat Team, 2d Brigade Combat Team, Aviation Brigade, and Task Force Rear). The resulting system was called "Iron Horse."

The Iron Horse system originated in the north at Camp Kime (1st Brigade Combat Team sector) and delivered to three sites in the Tuzla Valley (Lukavac and Camps Commanche and Rumbaugh). At the railhead adjacent to Camp Kime (approximately 2.5 kilometers from the perimeter), the 102d Quartermaster Company received JP8 by commercial fuel tanker delivery from Dumbovar, Hungary. The fuel was downloaded to a 300,000-gallon FSSP inside the perimeter of Camp Kime and moved to the railhead by an assault hoseline. At the railhead, the 102d Quartermaster Company emplaced a smaller FSSP (100,000 gallons) to facilitate the transload from the assault hoseline to the railcars.

Contracted Rail Tank Movement

Movement of the rail tank cars from Camp Kime was contracted to the Bosnian Rail Authority. At Lukavac, Company A, 123d MSB received the rail tank cars and distributed the fuel primarily by supply point distribution directly from the rail tank cars, both bulk and retail. At Camp Commanche, home of the Aviation brigade, 127th Aviation Support Battalion operated a 60,000-gallon FSSP resupplied by Iron Horse. Generally, the rail tank cars were downloaded to the FSSP immediately and the cars were pulled away. However, railcars were held without downloading when operational requirements called for increased storage capacity or if the FSSP had insufficient ullage. At Camp Rumbaugh the rail tank cars were the only storage capacity. The 26th Quartermaster Company operated the fuel point (bulk distribution only) directly from the rail tank cars in support of the 2d Brigade Combat Team and other units on an area basis.

Key to Success

A key to success was maintaining flexibility in the system through two elements written in the contract with the Bosnian Rail Authority. First, the delivery quantity was set at "no greater than" 100,000 gallons per day. The contract specified a "no greater than" quantity but not a minimum quantity so fuel managers were able to vary the shipments as the consumption fluctuated. Consumption, heavily influenced by weather and events tied to the local elections, ranged from 110,000 gallons per day at the end of the deployment phase (March 1996) to 30,000 gallons per day during most of the sustainment phase (July through October 1996). Secondly, there were no demurrage (detaining) charges associated with the rail tank cars. The rail cars could be held at the delivery sites indefinitely waiting for download so they became a large part of fuel storage capacity. At Camp Rumbaugh, rail tank cars became an FSSP. At Camps Punxatawney and Commanche, rail tank cars provided significant augmentation to the existing storage capacity.

Iron Horse met or exceeded each of the goals set out during planning. Tanker traffic in and around the Tuzla Valley was virtually eliminated, and storage capacity in TFE was more than doubled. During *Operation Joint Endeavor*, fuel moved in large quantities without putting soldiers on the road. Innovative thinking and teamwork across all echelons of the TFE logistical system, from planning to execution, ensured fuel was always available, when and where needed.

CPT John S. Hamilton has a bachelor of science degree in business management from Florida State University. He is a graduate of the Combined Logistics Officer Advanced Course, Petroleum Officer Course, Aerial Delivery and Material Officer Course, Quartermaster Officer Basic Course, Jumpmaster Course, and Ranger Course. His previous assignments include Platoon Leader, 407th Supply and Transport Battalion; Platoon Leader, 782d Main Support Battalion, Fort Bragg, North Carolina; Aide-de-Camp, Defense Personnel Support Center; and General Supply Officer, 1st Armored Division. He is currently Commander, Company A, 123d Main Support Battalion, 1st Armored Division.

The Army's Inland Petroleum Distribution System

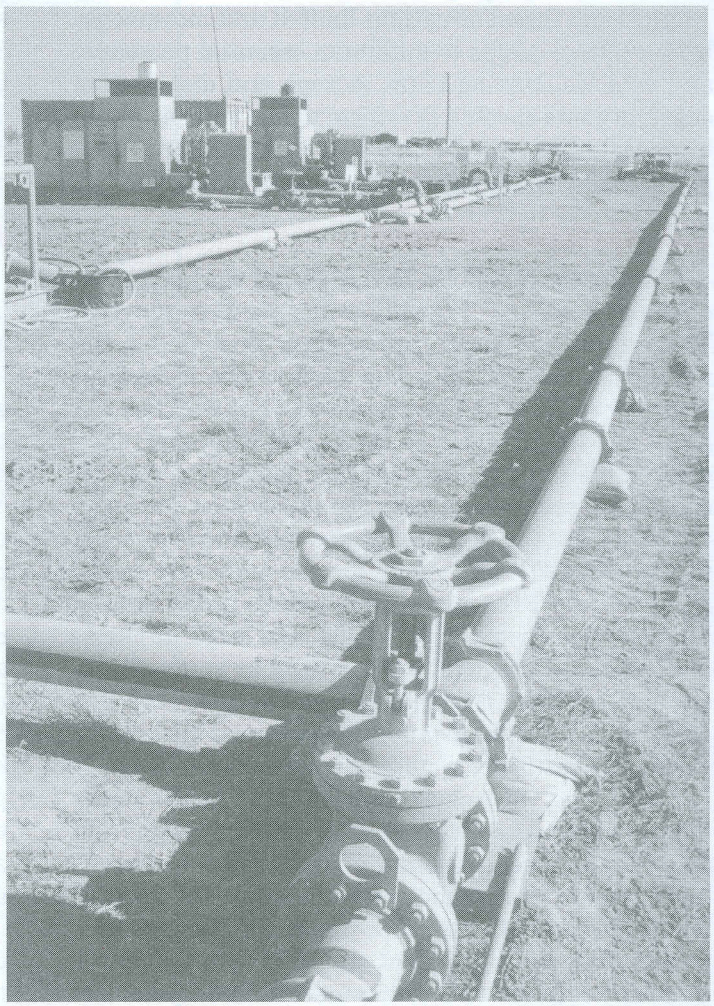
LTC Keith E. Mattox

> . . . before the shooting begins. The bravest men can do nothing without guns, the guns nothing without ammunition; and neither guns or ammunition are of much use in mobile warfare unless there are vehicles with sufficient petrol to haul them around. . . .
> Field Marshall Erwin Rommel

Field Marshall Rommel's remarks of more than 50 years ago are still relevant on today's battlefield. Success of combat operations depends, to a large degree, on petroleum units providing quality fuel at the right time, at the right place and in the right quantity. Fuel, or the lack of it, proved to influence the success of battles during World War II. Rommel had to call off the seige of Tobruk in North Africa, for example, because he "was desperately short fuel, ammunition, food and vehicles." He finally took Tobruk, but it was only with captured British fuel.

During the Battle of the Bulge, shortages of fuel continued to plague the German Army. General Hasso-Eccard von Manteuffel, Commanding General, Fifth Panzer Army, commented:

> It was not until the 26th (of December) that the rest of the reserves were given to me – and then they could not be moved. They were at a standstill for lack of gasoline – stranded over a stretch of a hundred miles – just when they were needed.



A Typical IPDS Pump Station

The importance of fuel to turn the tide of battle was not restricted to the German High Command. British Prime Minister Winston Churchill summarized the fuel situation during World War II when he commented, "Above all, petrol governed every moment."

Quantities of fuel used by units in World War II are dwarfed by today's requirements. Today, highly sophisticated, fuel-hungry engines require more fuel than those of previous wars and also challenge the military logistician charged with providing fuel to forces whenever and wherever required.

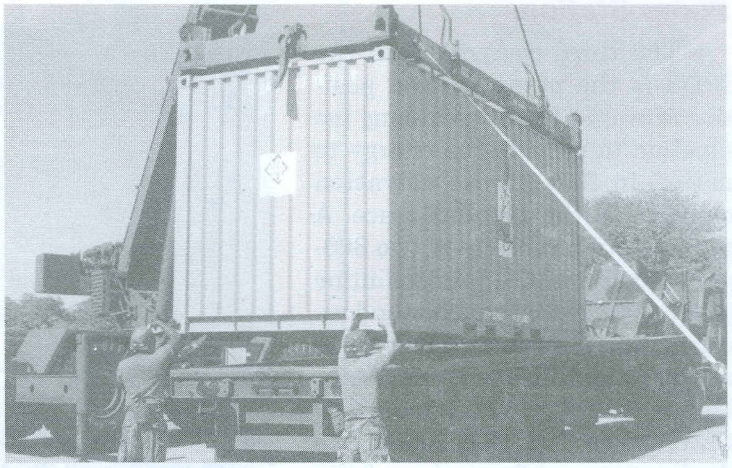
Inland Petroleum Distribution System

The US Army recognized in the mid-1970s that a system to support modern mobile warfare with vast amounts of fuel was virtually nonexistent. The US Army Quartermaster Center and School at Fort Lee, VA, initiated a study to examine the requirements for a wartime bulk petroleum distribution system. As a result, in the mid-1980s, the Army assumed responsibility for developing an inland fuel storage and distribution system. This system became known as the Inland Petroleum Distribution System (IPDS).

The IPDS was developed to provide bulk fuel support to military forces when deployed anywhere in the world. The system is designed as a lightweight, rapidly deployable, general support, bulk fuel storage and pipeline system that can interface with a host nation's fuel source, such as a refinery, or over-the-shore with the Navy's Offshore Petroleum Dis-

charge System (OPDS) vessels or Maritime Prepositioned Force (MPF) ships using Marine Corps floating hoseline.

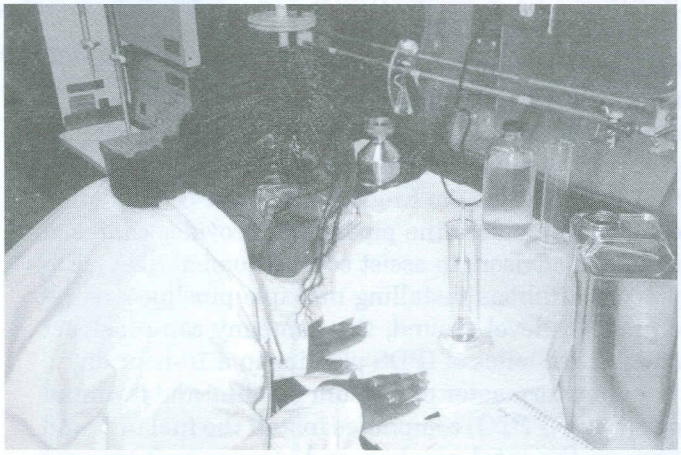
The IPDS is designed in modules and is packaged in 20-foot International Standards Organization (ISO) containers, making it readily deployable. The IPDS is maintained as operational project stocks stored at Sierra Army Depot in California, Sagami Army Depot in Japan, and afloat in the Indian Ocean. The system's flexible design provides the logistics planner with the necessary freedom to develop a pipeline system that can support the tactical scenario under given topographic conditions. The three primary components of the IPDS are the fuel units, pipeline, and pump stations.



The IPDS modules are packaged in 20-foot containers for ease of handling and rapid deployment.

Fuel Unit

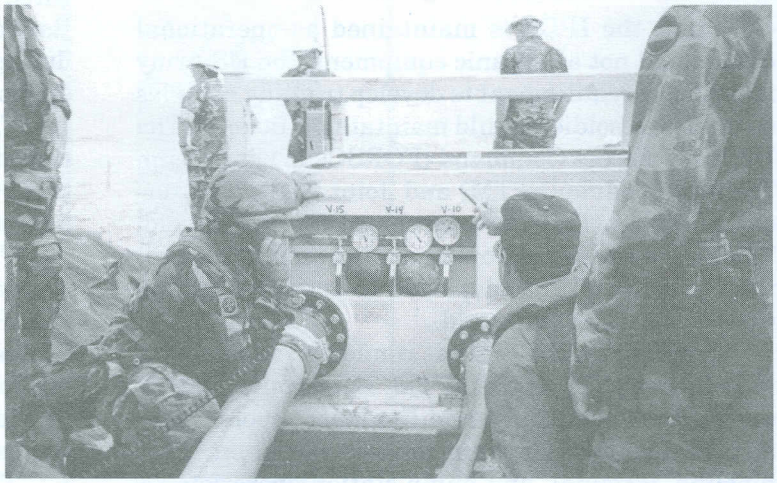
Fuel supplied from a source is pumped inland through a pipeline to storage terminals configured into assemblies called fuel units. Each fuel unit consists of six 210,000-gallon Bulk Fuel Tank Assemblies (BFTA) with a storage capacity of about 1.23 million gallons. Extremely flexible, a fuel unit can be used as an independent unit or combined with other units, depending on the requirement. Three fuel units used together form an assembly known as the Tactical Petroleum Terminal (TPT). A typical TPT has a storage capacity of 3,780,000 gallons and covers about one square mile. The fuel unit is connected to the high-pressure pipeline by a pipeline connection assembly that reduces the pressure of the flow to a level that can be accommodated by the fuel unit components.



The 240th Quartermaster Battalion conducted daily tests of IPDS fuel in its mobile laboratory during Roving Sands '97.

Pipeline

Since bulk petroleum makes up over 70 percent of the tonnage of supplies moved in a theater, pipelines significantly reduce road congestion and are the most economical and rapid means of transporting large quantities of fuel. The high-pressure pipeline of 740 pounds per square inch (psi) used in the IPDS is constructed of six-inch diameter, 19-foot-long aluminum pipe joints with single machine-grooved ends. Hinged snap-joint couplings, fitted with integral gaskets, join the joints. The pipeline is packaged in five-mile sets of pipe in ISO containers that also include the auxiliary components such as valves, vent assemblies, culvert material, repair overcouplings, pipeline anchors and elbows to allow for turns and expansion or contraction.



The beach termination unit connects the Army's IPDS with the Navy's Offshore Petroleum Discharge System.

Pump Stations

The third component of the IPDS is the pump station positioned every 6 to 10 miles along the pipeline to provide the energy to maintain flow across elevation changes in the pipeline trace. A pump station consists of two 800-gallons per minute (gpm) mainline pumps, a scraper launcher and receiver, and a strainer. The pumps are being modified at Sierra Army Depot to fit onto 20-foot ISO flatracks so that they match the deployment configuration of the other two IPDS components.

A switching manifold controls movement of fuel within a terminal.

Concept of Employment

The IPDS is designed for transport to the theater of operations and installation by military units. Engineer units survey the pipeline trace, install the pipeline and pump stations, and prepare fuel storage sites. An Engineer pipeline construction company emplaces the pipeline or provides cadres of technical advisors to assist several combat heavy Engineer battalions installing multiple pipelines, as required. On level ground, this company can construct about three miles of IPDS pipeline in a 10-hour day.

Quartermaster petroleum pipeline and terminal operating (PPTO) companies install the fuel unit and operate the total pipeline and storage system once completed. Each PPTO company can operate up to 90 miles of pipeline and three fuel units.

Training and Exercising the IPDS

Since the IPDS is maintained as operational stocks, and not as organic equipment, the US Army identified a requirement to develop training modules so units and soldiers could maintain proficiency. The US Army Forces Command (FORSCOM) Petroleum Training Module (FPTM) and Joint Training Exercise Module (JTM) were developed to fill this void. The FPTM trains soldiers and units on IPDS operation, and the JTM is deployed to support training exercises around the world.

Training on the IPDS is conducted annually at Fort Pickett, VA, on the FPTM. Both active and reserve PPTO companies and Engineer pipeline construction companies train for two weeks on IPDS pipeline, terminal, and pump station operations. A contractor maintains and operates the IPDS training program for FORSCOM.

The JTMs were developed to exercise the IPDS in support of worldwide training events. The 240th Quartermaster Battalion, 49th Quartermaster Group, exercised the module during Market Square '96, a Joint Logistics Over-the-Shore (JLOTS) training exercise at Fort Story, VA. During this exercise about two million gallons of product were discharged from the Navy's OPDS tanker, *SS Mount Washington*, to a beach termination unit and distributed inland through 8.3 miles of IPDS pipeline.

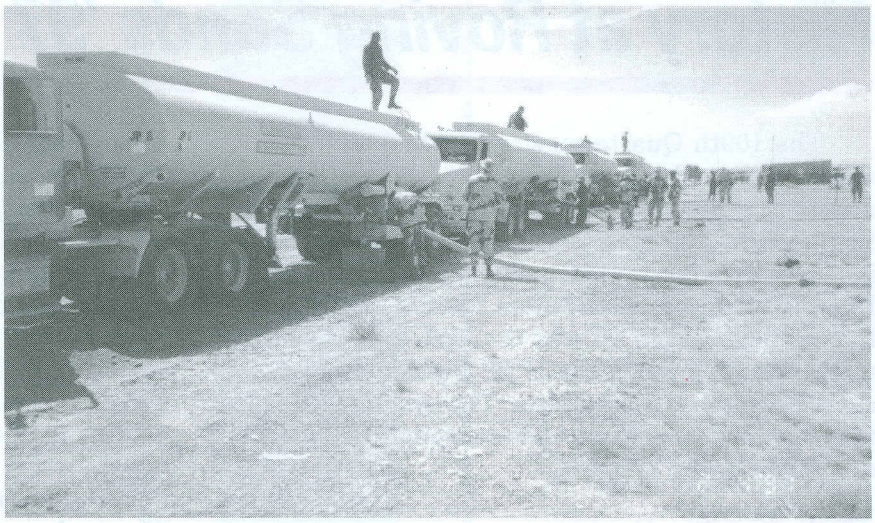
The JTM was also employed by the 240th Quartermaster Battalion during Joint Training Exercise Roving Sands '96. Three BFTAs were installed to store the large volume of JP8 fuel required by the three squadrons of fighter aircraft operating from Roswell Industrial Air Center, Roswell, NM. Finally, during Tandem Thrust '97 in Australia, the JTM was employed to pump product from a Navy tanker inland. These exercises were significant training events that demonstrated the flexibility and reliability of the IPDS. These exercises were also a precursor to the next exercise involving the JTM, Roving Sands '97.

The significance of Roving Sands '97 is profound. It was the first time that fuel was introduced into the IPDS pipeline during an exercise in the United States. Roving Sands is tabbed as the world's largest Joint Air Defense Exercise and is held annually in the surrounding areas of Fort Bliss, TX, White Sands Missile Range, and Roswell, NM.

The 240th Quartermaster Battalion, 49th Quartermaster Group, deployed to Roswell from 15 March to 6 May 1997 to support the exercise and demon-

strate the capabilities of the IPDS. The JTM deployed during Roving Sands '97 had a 630,000-gallon capacity, in the form of three BFTAs, and could receive, store and issue fuel to all types of aircraft and tactical vehicles.

The 240th Quartermaster Battalion was joined by the 808th Engineer Company, a Reserve Component unit from Houston, TX, whose soldiers installed the two miles of IPDS pipeline and emplaced two pump stations. The 109th Quartermaster Company, 240th Quartermaster Battalion, simultaneously established head and base terminals and then connected the two terminals with the IPDS pipeline.



The 416th Transportation Company's 7,500-gallon tankers downloaded fuel at Roswell Industrial Air Center during Roving Sands '97.

The 210,000-gallon BFTAs at the terminals were filled with JP8 originating from the Alamogordo Defense Fuel Supply Point (DFSP), about 123 miles southwest of Roswell. A truck platoon from the 416th Transportation Company, 260th Quartermaster Battalion, Hunter Army Airfield, GA, used 7,500-gallon tankers to line-haul fuel to Roswell. Once the BFTAs were filled and fuel met specification, support to the customer began.

The system employed during Roving Sands '97 was designed so that the base terminal, head terminal and pipeline could operate independently, if necessary. This design feature prevented a catastrophic failure in one subsystem from affecting the entire operation. Once the system was deemed operational by testing with water, soldiers trained on pipeline operations using JP8.

The IPDS has proven to be a sound and flexible petroleum storage and distribution system capable of being deployed to a theater of operations, emplaced, operated and dismantled without significant operational problems or damage to the environment. It is ready for worldwide deployment and is a key component in the success of force sustainment, particularly in an undeveloped theater of operations.

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Pipeline Field Manuals Online

FM 10-416 (Petroleum Pipeline and Terminal Operating Units) and FM 10-67-1 (Concepts and Equipment of Petroleum Operations) became available 3 Apr 98 on the US Army Combined Arms Support Command (CASCOM) Home Page. The Quartermaster Training Division, Training Directorate, CASCOM at Fort Lee, VA, posted these two field manuals for public use as well as FM 42-414 (Tactics, Techniques, and Procedures for Quartermaster Field Service Company, Direct Support).

The Quartermaster Training Division does not maintain its own computer Web Site, but is responsible for several subpages under CASCOM's Home Page. These Quartermaster pages contain training information such as programs of instruction, training support packages, field manuals, frequently asked questions, links to other sites with training material, and some Quartermaster clip art.

These Quartermaster pages may be found at http://www.cascom.army.mil/quartermaster/. For assistance with problems in accessing or downloading products from these pages, E-mail to hallt@lee-dns1.army.mil.

Quartermaster Company Helps Make IPDS History at Roving Sands '97

LT Mark E. Parsons

The 109th Quartermaster Pipeline and Terminal Operating Company from Fort Lee, VA, became a part of a historical "first" during Joint Exercise Roving Sands '97 in Roswell, NM, by safely pumping more than one million gallons of fuel through the Inland Petroleum Distribution System (IPDS) pipeline. Roving Sands '97 was the first time that fuel was pumped through the IPDS pipeline during an exercise in the United States. The system first was tested with water before soldiers trained on pipeline operations using JP8 fuel.

IPDS Pipeline Design

The IPDS is designed as a lightweight, rapidly deployable pipeline and terminal system that can be used in undeveloped theaters of operation. The IPDS can interface with an existing host nation fuel source, such as a refinery, or with the Navy's Offshore Petroleum Discharge System (OPDS). Modular in design, the IPDS can be tailored for any locality or operation.

The 109th Quartermaster Company can operate up to 90 miles of pipeline, 6 pump stations, and 1 tactical petroleum terminal (TPT). A TPT can receive, store and issue more than 3.7 million gallons of fuel. The 109th Quartermaster Company began training for Roving Sands '97 four months before the actual deployment. The training at Fort Pickett, VA, was vital to the unprecedented accomplishment of pumping fuel through the IPDS's tactical pipeline at Roving Sands '97.

A unique aspect of the training was the actual construction of the pipeline. By doctrine, the Engineers lay the pipeline and the Quartermaster units operate it. In this training simulation on the US Army Forces Command (FORSCOM) Petroleum Training Module at Fort Pickett, the 109th Quartermaster Company did both. By constructing the pipeline at Fort Pickett, the Quartermaster Company was confident when repairing or changing the pipeline at Roving Sands '97.

Fill and Test Phase

When the pipeline was complete, the fill and test phase began. The line was tested and repaired, then tested again. The pipeline repair team practiced fixing leaks. The dispatcher ran the pipeline through its paces by pumping water, launching and receiving scrapers that clean the pipeline, and evacuating the system. An air attachment was created in order to evacuate the pipeline by using an air compressor and a scraper. Air evacuation was very successful.

After the training, the 109th Quartermaster Company was ready to provide bulk petroleum fuel

Before pumping operations at Joint Exercise Roving Sands '97 in Roswell, New Mexico, a Quartermaster staff sergeant checks the dispatching plan for timing and accuracy.

in support of the largest Joint Air Defense Exercise in the world. Upon touchdown at Roswell Industrial Air Center, NM, soldiers in the 109th Quartermaster Company quickly began their mission. The mission's concept was simple, but with simultaneous operations. The 109th Quartermaster Company constructed the head terminal during pipeline construction. Once completed, the Quartermaster soldiers constructed the base terminal and began general support (GS) bulk petroleum fuel operations along with conducting pipeline operations.

Head Terminal

With the berms prepared and the International Standards Organization (ISO) containers positioned, the company started preparing the head terminal for operation. Within three days, the operation was ready to receive, store and issue up to 400,000 gallons of fuel. The head terminal consisted of two 210,000-gallon (5,000-barrel) bulk fuel tank assemblies (BFTAs). In addition to the BFTAs, the head terminal had a fuel dispensing assembly (FDA) to issue fuel to customers and a truck-tanker receipt manifold (TTRM) to receive fuel into the BFTAs.

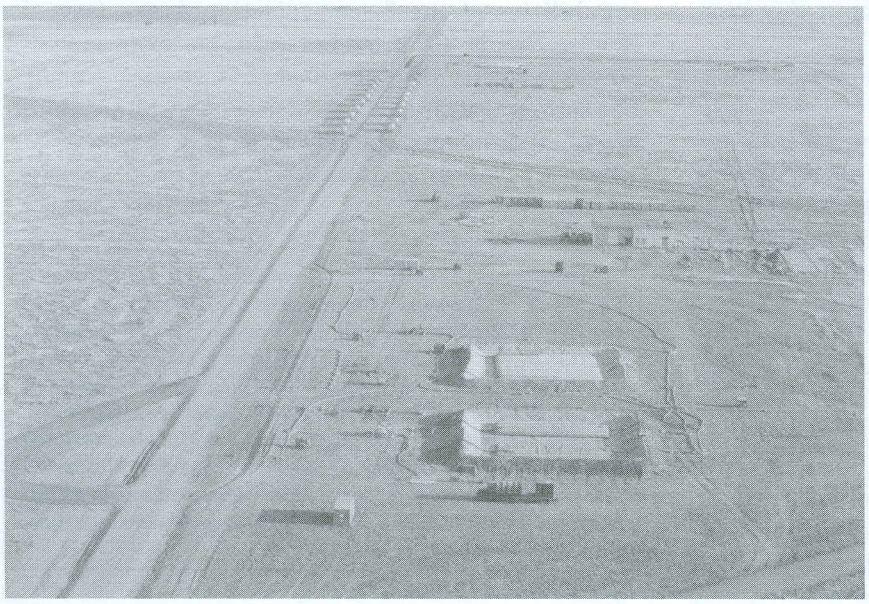
After constructing the head terminal, the company was ready to perform its primary mission during Roving Sands '97. The company's mission was to provide GS bulk fuel support to direct support customers, including the 43d and 300th Area Support Groups and the Marine Wing Support Squadron 274. The US Marine Corps Wing Support Squadron, tasked to refuel various US Navy aircraft at Roswell, was the 109th Quartermaster Company's largest customer, receiving more than 800,000 gallons of fuel during the exercise.

While the 109th Quartermaster Company prepared the head terminal, the 808th Engineer Company constructed a two-mile pipeline and installed two 800-gallons per minute pump stations. The 808th Engineer Company, a Reserve Component unit from Houston, TX, constructed the pipeline and was evaluated during its annual Operational Readiness Exercise (ORE). The 808th Engineer Company completed tasks within two days, providing precision work that resulted in no leaks during operation.

Base Terminal

After completion of the head terminal, the 109th Quartermaster Company concentrated on establishing the base terminal. The mission at this terminal was quite different from the head terminal. The base terminal consisted of only one 210,000-gallon collapsible fuel tank but also had two 50,000-gallon collapsible tanks in one berm. This terminal's mission was to receive about 100,000 gallons of fuel into the 210,000-gallon petroleum fuel tank for initial pipeline operations. One of the two 50,000-gallon tanks was used to store 30,000 gallons of water that was used to pressure-test the pipeline before fuel was introduced into the system. The other 50,000-gallon collapsible tank was used to catch the fuel/water mixture that would be created during the operation.

After initial checks of the pipeline, water was introduced into the IPDS. The water had two pur-



The 1997 base terminal for the world's largest Joint Air Defense Exercise consisted of one 210,000-gallon fabric fuel tank and two 50,000-gallon fuel tanks used to store contaminated fuel in the desert.

poses. First, the water was used to pressure-test both the pump stations and the two miles of IPDS pipeline for any leaks.

Secondly, water was used in the IPDS pipeline to conduct scraper and evacuation procedures. Soldiers practiced these operations with water instead of fuel.

After determining that the IPDS was pressurized, fuel went into the system from the base terminal. Soldiers put a scraper into the IPDS to push the 15,000 gallons of water out of the system. Fuel pushed the scraper which, in turn, pushed out the water. This water was reused to push the fuel out of the pipeline at the end of Roving Sands '97. Since the company's primary mission was to provide fuel to customers, the fuel at the base terminal was not allowed to mix with the fuel at the head terminal until it had passed all quality surveillance tests.

While the 109th Quartermaster Company set up the head terminal, the 808th Engineers unpacked and emplaced over two miles of pipeline for the Inland Petroleum Distribution System.

Significant Operations

After passing all tests with the fuel, the company conducted many significant operations. The entire system (base terminal, head terminal, and two miles of IPDS pipeline) now could receive, store and issue fuel to customer units, transferring fuel from one terminal to the next (or both at the same time) through the pipeline and receiving fuel from the TTRM and issuing fuel to the pipeline simultaneously.

Army field manuals state how to put the fuel in the IPDS, but do not specify how to take the fuel out. The 109th Quartermaster Company devised a way to extract the fuel from the IPDS without any loss and, at the same time, keep the system environmentally sound. The method was simple. The water originally used to pressurize the pipeline was used again to push the fuel out of the system. Again, a scraper went into the pipeline. The water was used to push the scraper that, in turn, pushed the fuel out to the 210,000-gallon petroleum fuel tank. The next problem was getting the water contaminated with fuel out of two miles of IPDS pipeline. This was accomplished by injecting 100 pounds per square inch of air behind the scraper to push the water into one of the 50,000-gallon collapsible fuel tanks.

Then, the 109th Quartermaster Company was selected by the FORSCOM to test another first during Roving Sands '97. Quartermaster soldiers tested an Army prototype to recycle contaminated water. If successful, this prototype could save the Army thousands of dollars in future operations. The prototype is a backwash system that will enable the Army to treat contaminated water instead of spending money disposing of such water through local contracting.

Valuable Experience

More than one million gallons of fuel were safely pumped through the pipeline. The IPDS and the soldiers of the 109th Quartermaster Company, 240th Quartermaster Battalion, and 49th Quartermaster Group (Petroleum and Water), Fort Lee, VA, stand ready to provide bulk petroleum support worldwide, directly enhancing the Total Army readiness and capabilities of the force-projection Army. Overall, Roving Sands '97 provided valuable experience in how to provide first-class combat service support. Continued training in petroleum operations will allow Quartermaster soldiers to do just that.

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Prime Vendor

MAJ Gabriel Musat *CPT Teresa A. Johnson* *CPT Damon R. Ragsdale*
CPT Paul M. Struck *CPT Jeffrey D. Witt* *CPT Marc Wheeler*

Beginning with the budget cuts of 1995, the Department of Defense (DOD) has aggressively pursued methods to reduce expenditures and increase efficiencies within the Armed Forces. Research in the mid-1990s revealed that commercial industry was very successful in balancing costs to efficiencies: a goal the military wants to attain. This article will discuss the Prime Vendor program for Class I (rations) supplies, focusing on the program's advantages and on complaints from the field.

In 1995, the DOD conducted the Food Inventory Demonstration Project. This project examined whether or not commercial distributors could adequately supply dining facilities and Troop Issue Subsistence Activities (TISAs). The project showed that transportation, distribution, warehouse and inventory requirements were greatly reduced. At the same time, adding commercial vendors increased customer response, increased the variety of products and improved the quality of food.

Commercial vendors increased soldier response.

As a result of these findings, Congress mandated the conversion of the project into the Subsistence Prime Vendor Program. The Army implemented this new storage and procurement system at Fort Stewart, GA, in April 1995. Prime Vendor uses local and regional contractors to deliver food directly to installation dining facilities and TISAs. Once food is ordered, the system allows delivery times of two to three days, bypassing the extended storage of items in warehouses. This program was completely fielded in the continental US (CONUS) units by the end of 1997 and will be fielded outside CONUS (OCONUS) units by the end of 1998.

Originally, the Pentagon procured all of the military's food. The Armed Forces Product Evaluation Board, composed of dietitians from all branches of the service, evaluated all new food. They based their selection process on the least expensive products that met dietary requirements. Neither taste nor freshness was an issue. Once purchased, the food was stored at depots for long periods. Then the food from depots was transported to general support warehouses and ultimately sent to the TISA to wait until reissue to individual dining facilities. In some cases, this resulted in food stocks remaining on the shelves for several years. Long storage times and transportation between the different levels of warehouses greatly increased food costs. Lengthy procurement and contract processes allowed food service managers to choose from only 900 items when planning a menu.

In contrast, Prime Vendor allows food managers to construct a menu based on more than 26,000 items offered on an electronic data base. Prime Vendor also involves the end users (soldiers), by having them taste-test a potential contractor's product. If the food meets nutritional requirements and the testers like it, the food is added to the electronic data base.

Also, the food selection process no longer must take place at the DOD level. It can occur in the dining facilities where soldiers actually eat. Managers can plan menus based on what customers want instead of whatever the installation TISA has available. Dining facilities can now serve fresh fruits, vegetables and larger varieties of meat on a regular basis. The direct delivery process has drastically reduced costs. TISAs are only necessary to support mobilization and field exercises. General support warehouses have been entirely eliminated. To limit waste, the electronic menu process permits more accurate assessments for food requirements.

As expected, the soldiers had a more than positive response. Many are reassured by seeing brand-name products similar to what they had eaten at home or in local restaurants. Soldiers who eat three meals a day in the dining facilities experience more variety and quality in their only option for meals. Other soldiers who normally opt to spend money in local restaurants can now eat meals of the same quality, variety and nutritional value without the additional costs.

Civilian food vendors have been responsive to the needs of the military dining facilities as well. They quickly locate nonstocked, requested items and add them to the electronic catalog. Food service ad-

visors add the items to the Master Item File for the Army facilities to use. Manufacturer's representatives go to the facilities with demonstration items and displays. Vendors also attend installation menu board meetings on any given post to explain and demonstrate new items to the facility managers. These managers can quickly incorporate new items, such as premade salads and personal pizzas, to the menu. These premade items benefit the facilities by reducing the time required for meal preparation when the facilities are understaffed or the personnel must be divided between garrison and field operations. Prepared items also enable food service workers to devote more time to customer service, cleaning and soldier training.

Prime Vendor also allows limited field training support. For example, Fort Bragg, NC, operates a ration breakdown point. Vendors can deliver rations to a fixed site in the training area where the items are further divided and transported to the field units.

This system goes hand-in-hand with the new "a la carte" dining system to which the Army facilities are converting. The brand-name items and the preconfigured entrees are very adaptable to the "take what you want, pay for what you take" idea of the "a la carte" program. Prime Vendor's ability to provide samples and item display enhances the "a la carte" facility's ability to display and "sell" featured items.

Prime Vendor means serving soldiers brand-name products.

With all the advantages of Prime Vendor, there have still been complaints from the field. Managers believe a lack of knowledge comes from so many changes implemented in such a short time. Managers are now faced with choosing ingredients and brand-name items when planning menus.

Before, managers did not advertise food: it was merely prepared and fed. However, food service organizations use advertising to increase the demand or desire for the products being served.

Food service workers also must make more decisions about the food they purchase. They can choose from foods prepared from scratch, partially prepared and fully prepared, with the difficulty in preparation as the major deciding factor.

One individual complained that the system is not flexible enough in regard to bag lunches. In reality, orders are placed three times a week for delivery 48 to 72 hours later. The problems in flexibility are unique to that individual's dining facility.

Another complaint is higher prices. The system is updated every week and Prime Vendor operates in separate modes. While in the shopping list mode, a customer cannot see the price of the menu or the item. The perception that the military is buying brand-name products and therefore paying more is not true. Perhaps more food is requested because of the increase in the number of soldiers eating in dining facilities, which would increase costs.

The only slight shortfall to Prime Vendor is the added communication links between the dining facility manager and the contracted vendor. The dining facility places orders, lodges complaints and requests service through the TISA and the Defense Personnel Support Center to the contractor. The dining facility should be empowered to deal directly with the vendor about orders and all customer-related concerns. This will enable quick problem resolution and increased support. Direct communication will also reduce the number of steps in the process by reducing the paperwork with so many agencies.

If the vendor can provide the needed support, should the military remove the redundant infrastructure of the TISA system to reduce costs further? At this time, the Army will not allocate funds for Prime Vendor to support field locations.

In summary, Prime Vendor for Class I supplies is the DOD's solution to increase efficiency while reducing costs. Although complaints have been few, this new procurement system offers many advantages, including fresher, better-tasting and better quality products for dining facilities. Food managers can now construct menus based on more than 26,000 items available on an electronic data base. Manufacturer's representatives provide displays for the facilities. More importantly, soldiers play an integral role in the food selection process.

The authors are Quartermaster graduates of the Combined Logistics Officer Advanced Course 97-9/10 at Fort Lee, Virginia.

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ATTENTION QUARTERMASTERS!!!

Do You Want To See Your Unit Featured in the *Quartermaster Professional Bulletin*?

Here's How:

- First, your unit must be or have been at one time a Quartermaster unit.
- Currently, only battalion-size units are being featured, such as S&S, S&T, support battalion, corps support battalions, and petroleum battalions.
- Send a copy of the unit's official lineage and a line drawing (preferably the US Army Institute of Heraldry drawing) of your unit crest. Indicate the specific colors on the crest, including the color of the lettering, if any.
- If available, include the unit's narrative history to give the artist an indication of a historical context to portray the unit in action. If the unit's history has a particular event for illustration, please indicate this. Also include any other information that may help the illustrator, such as photographs or good-quality photocopies.
- Send the above information with a point of contact and telephone number to the QUARTERMASTER PROFESSIONAL BULLETIN, USAQMCS OQMG, ATTN ATSM QMG B, 1201 22D STREET, FORT LEE VA 23801-1601.

Previously featured units illustrated by Keith K. Fukumitsu, Quartermaster:

Summer 1992	26th SPT BN	Spring 1993	262d Quartermaster BN
Autumn 1992	407th S&S BN	Summer 1993	64th SPT BN
Winter 1992	530th S&S BN	Autumn 1993	46th SPT BN
		Winter 1993	240th Quartermaster BN
Spring 1994	559th Quartermaster BN	Spring 1995	426th SPT BN
Summer 1994	561st S&S BN	Summer 1995	11th ACR SPT SQN
Autumn /Winter 1994 (WWII Commemorative Issue)		Autumn 1995	193d SPT BN
		Winter 1995	13th CSB
Spring 1996	24th SPT BN	Spring 1997	101st Quartermaster BN (Massachusetts ARNG)
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For information on obtaining copies of previous unit pages, contact LTC (Retired) Keith K. Fukumitsu, c/o Editor, *Quartermaster Professional Bulletin*.

FARP Safety and the 77F (Petroleum Supply Specialist)

MSG Melvin Kendricks

Petroleum supervisors and aircraft refuelers are well trained in most potential hazards of forward arming refueling operations. Hazards at a Forward Arming Refueling Point (FARP) include the following:

- Environmental Situation – Grounding and Bonding
- Safety Procedures – Personnel Protection Equipment
- HAZCOM/HAZMAT – Emergency Procedures

However, one hazard is neither taught nor trained: how to recognize an aircraft that is out of control. Shortly before the Persian Gulf war in the early 1990s, I remember observing a hot refuel mission by a 3/5 Platoon, a platoon nicknamed "III/V" or "3/5" for the Quartermaster and Ordnance classes of supply. Soldiers with military occupational specialties 77F (Petroleum Supply Specialist) and 55B (Ammunition Specialist) support Aviation battalions. That day in Southwest Asia, one Apache helicopter came into the FARP for fuel. During the aircraft's approach to the FARP, the 3/5 Platoon leader noticed the aircraft was having problems. Acting on his experience as an UH-60 Blackhawk pilot, he immediately motioned to the refueler, who was acting as a ground guide, to evacuate the area. Neither the refuelers nor the ground guide realized what was happening. The 3/5 Platoon leader had never told his soldiers about the hazards of out-of-control aircraft.

How do Quartermasters train aircraft refuelers to recognize this dangerous situation? Leaders first need to conduct a risk assessment by identifying **all** the potential sources of danger possible while performing the aircraft refueling mission. This includes all implied tasks during aircraft refueling. One excellent method is to assemble *experienced* personnel, such as pilots, to help the 3/5 platoon identify hazards, assess them and then determine actions to control those hazards. During a FARP operation, personnel need constant reminders of the following procedures to watch for an aircraft with control problems:

- Maintain eye contact with the aircraft at all times.
- Listen for high-pitched sounds.
- Look for sudden up and down movements.
- Stay a safe distance away while guiding the aircraft.
- Always factor the wind speed for potential hazards.

MSG Melvin Kendricks is organizing the first Enlisted History Office at the Home of the Quartermaster Corps, Fort Lee, Virginia. He has an associate's degree in general studies from Central Texas College. He is a graduate of the Basic Noncommissioned Officer Course (BNCOC), Advanced Noncommissioned Officer Course, and the Senior Petroleum Course. His previous military assignments include Aircraft Refueler at Fort Polk, Louisiana; pipeline and tank farm operations, Fort Richardson, Alaska; Instructor for Advanced Individual Training and BNCOC, Fort Lee, Virginia; Platoon Sergeant, 348th Supply and Service Company, Korea; 3/5 Platoon Sergeant, Fort Polk, Louisiana; First Sergeant, Headquarters and Headquarters Company, 1/5 Aviation Battalion, Fort Polk; assignment to Apache Training Brigade, Fort Hood, Texas; Noncommissioned Officer in Charge of Material Management Center/Directorate of Logistics, Camp Doha, Kuwait; and duty with Readiness Group Redstone, Redstone Arsenal, Alabama.

PROFESSIONAL READINGS

The Professional Readings section of the *Quartermaster Professional Bulletin* encourages the professional development of all Quartermasters. Titles are selected from the Quartermaster School Professional Reading List and the Department of the Army Contemporary Military Reading List, as well as other notable sources. Short reviews from the field are always welcome. The following book reviews are excerpts from reports by recent graduates of the Quartermaster Officer Basic Course at Fort Lee, VA.

Special Men: A LRP's Recollections

Dennis Foley, Ivy Books: New York, 1994.

The author, LTC Dennis Foley, US Army (Retired) was a long range patrol (LRP) platoon leader, LRP company operations officer and a LRP company commander in Vietnam. He was also a Special Forces A and B team commander. This book focuses on the way that the Army shaped him and on the people who helped him along the way. He gives an optimistic, yet tough, view of Army operations during the Vietnam war.

This book's stand on ethics is clear. LTC Foley made it a matter of personal pride to do the best that he could in everything, from his start as a trainee platoon sergeant in basic training to his highest personal standards throughout Officer Candidate School. When the author went to Vietnam on the first of many tours, he took command of an unauthorized, experimental unit called the Tiger Force, a precursor to the long range reconnaissance patrol units to come. He turned the Tigers into a unit envied for its discipline and military bearing. He let the noncommissioned officers do their jobs, while learning from them and from other officers at the same time so that he could pass his knowledge onto others later. He made a positive impact on almost every young officer who served under him, which came from his great willingness to learn from others. In today's Army, he would still be an inspiration to young officers with his fairness, willingness to give of himself for others and his ethical stand on life. If soldiers could pattern themselves after a leader such as LTC Foley, this smaller Army could provide a more quality environment for the care of soldiers and for the mission fulfillment, both in wartime and in peace.—*LT David A. Feldner*

Crusade

Rick Atkinson, Houghton Mifflin Company: Boston, 1993.

The author, who won a Pulitzer Prize for a series of articles he wrote about the West Point Class of 1996, was a military columnist for the *Washington Post* newspaper during the Persian Gulf war in the early 1990s. The author explains how the decisive victory in the Southwest Asian desert resulted from effective planning, movement and use of an international force under one unified command. He addresses all elements of both the air and ground war with supporting facts. Atkinson clearly feels that the Persian Gulf victory resulted from effective use of command and the resources present in the theater of operations. He also describes the effective use of smart munitions to minimize the loss of life suffered by the Allied Forces.

This book focuses mainly on the weeks of actual war and briefly discusses the buildup. The author makes many references to the logistics support operations, as well as planning considerations, that contributed to success. He also addresses the sustainment method that armed forces used during the war – the forward push method – and truly understands the important role of logisticians. Atkinson elaborates on the logistics push with examples of locations and also the composition of these forward logistics bases. His book provides an excellent overview of today's fast-paced Army. The author paints a picture of how a smaller force can destroy a statistically larger enemy through intricate planning and effective execution.— *LT Christoper D. Lange*

Training With Industry at Ippoliti Inc.

CPT Steven L. Allen

As the Army moves toward implementing the Force XXI Division, the individual soldier still has this one basic need: to be clothed. The technological advances in the clothing and textile industry are similar to automation necessary to support the Division XXI digitization. The Army's technological advances will help improve anticipatory logistics and will include the ability to provide accurate real-time information through the Internet or another satellite-based system along with Total Asset Visibility of the produced items.

Before my Training With Industry (TWI) tour, I had no idea what to expect from this assignment, especially within the clothing and textile industry. Most Quartermaster officers have little exposure to this industry unless they have been in a rigger or renovation unit. The TWI program provides the Army with officers who have a background in the clothing and textiles industry that ultimately supports the soldier with dress clothing and individual equipment.

Manufacturer of Uniforms

I performed my TWI tour with Ippoliti Inc., a uniform manufacturer in Philadelphia, PA. Ippoliti Inc. traces its roots to the early 1900s. Nicholas Ippoliti Sr. was the company's president in the 1940s, and Nick Ippoliti Jr. currently is the president and chief executive officer.

The company manufactures a variety of products and supply accessories, such as hats and shirts, but concentrates on coats, trousers, slacks and skirts. The company employs up to 225 people at one time, with fluctuations based on the amount of garments needed during a calendar year.

Electronic Data Interchange

Electronic Data Interchange (EDI) allows two computers to communicate with each other. EDI, a business standard, uses the X12 computer language for communication between systems. Ippoliti Inc. uses EDI to receive electronic delivery orders from an indefinite type of contract that allows planning the weekly production schedules. EDI also increases accuracy on the delivery orders as well as invoicing and payment processing. After receiving electronic delivery orders, the next step is to interface the EDI delivery order transmissions into the company's internal network system. With additional software, hardware and data base construction, this interface could transmit data from original EDI transmissions and create a paperless delivery order tracking system.

Ippoliti's president and chief executive officer tells the author how to construct a uniform high collar dress coat.

Computer-Aided Design

Ippoliti uses a megabyte system for developing and maintaining garment patterns. The system has built-in features that allow for maximum pattern layout with minimum waste of fabric during the cutting process. Computer-aided design provides superior accuracy to the production process. This design automation is compatible with Ippoliti's computer-aided cutting process and ultimately provides quick response for delivery orders.

Computer-Aided Cutting

Ippoliti Inc. uses two high-speed cutting machines to cut all the required pieces of fabric for sewing. One machine is used for cutting single orders for the small percentage of special measurements, such as tall or short, in the apparel industry. The other machine is used for a large number of items requested in a delivery order. The cutting machine cuts the fabric, spread along the cutting table, 400 percent faster than human counterparts.

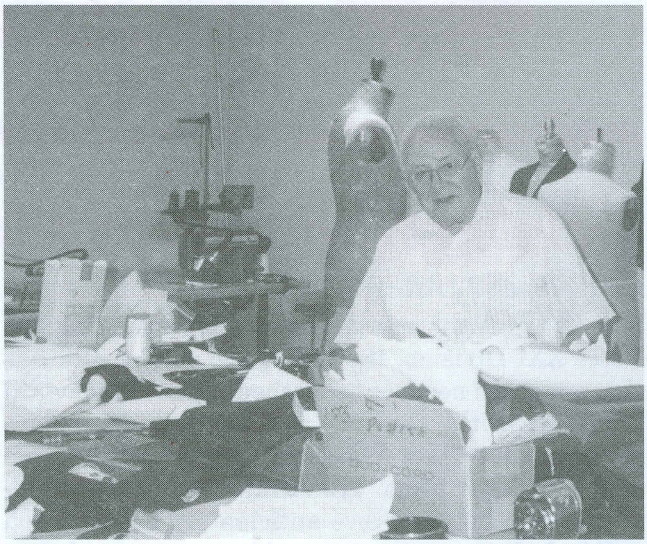
Computer-Aided Manufacturing

Ippoliti Inc. uses the ETON unit production system to move cut fabric swiftly through the assembly process. The system reduces production throughput time by 33 percent. This automation allows the plant workers to access information about specific garments or lot numbers in the system for tracking and recording production information. Ippoliti was one of the first tailored coat manufacturers in the United States to install computer-aided manufacturing.

Moving Into the 21st Century

As the Army moves into the 21st Century, technology will be the driving force to clothe the soldier at the right place at the right time. With the advent of body scanning – a three-dimensional, high-speed photograph of the body – it will only be a matter of time to perfect this data to scan a new soldier at a recruiting station. This scanning data will then be transmitted via the Internet or other EDI to a defense support office for size analysis and the date the recruit will need the garment. The stock size will be automatically transmitted to the procurement office for contract solicitation. Any special measurements also will be automatically transmitted to the procurement office. Awarded contracts will then reflect quantity and size requirements to a manufacturer through stock size data or special measurement data from the original body scan.

The manufacturer would receive periodic or real-time electronic delivery orders through EDI, so garments are constructed as required. Once the garment is complete and ready for shipment, EDI will again transmit the billing and payment information through electronic funds transfer and also transmit data for the shipping industry. Garment tracking would be available to the military support office for accurate real-time location. The final destination is the clothing initial issue point and into the soldiers' hands for final fitting and, most important, a uniform that is comfortable, durable and available before graduation from basic training



The corporation's former president designs a new pattern to increase efficiency in the overall production process.

As a Class II (general supplies) bag issue item, uniforms bring into consideration the resupply of certain clothing items on the battlefield. The Combat Service Support Control System (CSSCS) digitization of Division Force XXI may provide the asset visibility at all levels for this clothing on the battlefield.

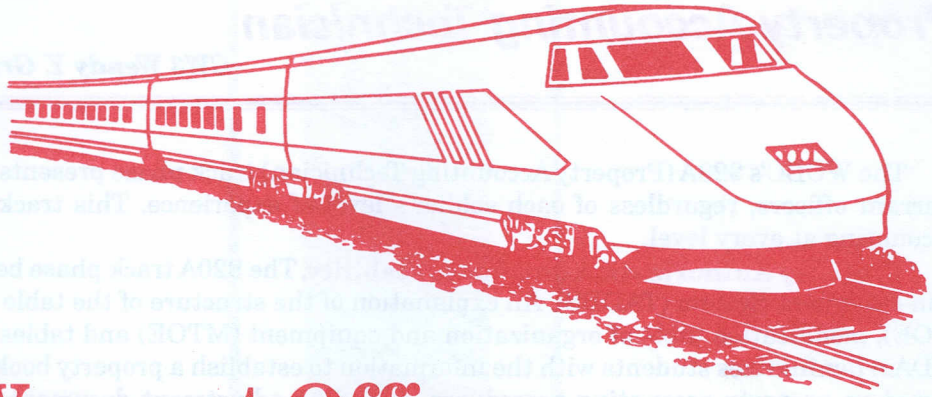
Value of TWI Experience

After completing my TWI assignment, I was assigned to the US Army Combined Arms Support Command as a combat developer for Army dress clothing and individual equipment. My TWI experience better prepared me for this assignment with a basic understanding of the clothing and textile industry. It also helped me understand the similar qualities of fabric and other clothing-related items that the different military services share. The moves to acquire commercially available fabrics off-the-shelf, as well as the standardization of certain garment patterns, already are in progress. Both initiatives will enhance the military uniforms and ultimately reduce the cost over time in the procurement cycle.

I strongly recommend this TWI program if offered in the future for visibility of logistics in the clothing and textile arena. Together, the clothing and textile industry and the technological advancements

(Continued on page 57 of the Career News section)

ON TRACK



At the Warrant Officer Basic Course

CW3 Antonio Ocasio

Welcome to the Warrant Officer Basic Course (WOBC)! The WOBC is designed to certify newly appointed warrant officers in military occupational specialties (MOSs) 920A (Property Accounting Technician), 920B (Supply Systems Technician), 922A (Food Service Technician), and 921A (Aerial Delivery Systems Technician). The WOBC certifies 150 to 200 warrant officers annually in 3 to 4 Active Component sessions and 1 Reserve Component session.

Upon arrival at the US Army Quartermaster Center and School, Fort Lee, VA, students process into Company E, 244th Quartermaster Battalion, and the Warrant Officer Division (WOD), Logistics Training Department. The formal training involves four weeks of common core subjects and a five-week technical track phase. The class remains together throughout the common core phase. After completing the core phase, the students break down into their specific MOSs and report to MOS track phase instructors.

The Quartermaster General speaks on the state of the Corps.

During the common core phase, Quartermasters train in combat service support, maintenance management, petroleum and water, financial management, Quartermaster specialties, property accountability, prescribed load list and wholesale logistics. The Quartermaster specialties annex is particularly dynamic, covering leading-edge initiatives such as the Global Combat Support System-Army (GCSS-Army), Velocity Management, Force XXI, Force Provider, and the Global Positioning System (GPS). The pace is brisk. Every student must perform in at least one leadership position. These positions include class leader, squad leader, adjutant, assistant adjutant, academic committee, physical fitness committee, social committee, and publications officer who doubles as the class historian. The class leader and squad leader positions change every three weeks, but all other positions are permanent. Each student is evaluated in every area of the Academic Evaluation Report.

Students receive written as well as formal briefing assignments. The track phase instructors assign and later grade the MOS-specific briefing topics.

Property Accounting Technician

CW3 Wendy Y. Grice *CW3 Danny O. White*

The WOBC's 920A (Property Accounting Technician) track phase presents a challenge to newly appointed warrant officers, regardless of each soldier's level of experience. This track phase explores property book accounting at every level.

Property Authorization and Accountability. The 920A track phase begins with The Army Authorization Document System (TADDS). An explanation of the structure of the table of organization and equipment (TOE), modification table of organization and equipment (MTOE) and tables of distribution and allowances (TDAs) familiarizes students with the information to establish a property book account. The students are also tested on property accounting procedures, including adjustment documents and hand receipt procedures. After the basics of property accountability, students learn how to create and maintain a property book account with the Army's automated property book accounting system, the Standard Property Book System-Redesign (SPBS-R). The next instruction consists of preparing the property book, determining the items that require property book accounting, and learning the property book officer's duties. Students see how adjustment documents are used, who initiates the documents, and the processing flow of these documents for an accountable audit trail. Also, instructors discuss inventory procedures, impact credit card purchasing and property cataloging. The students train and test on applying all manual procedures to the automated property book. The student receives practical experience at inputting data, reviewing output, managing the property book, producing reports, and providing logistical information to commanders. The SPBS-R annex ends with a comprehensive practical exercise that emphasizes understanding the interface between the SPBS-R, Standard Army Retail Supply System (SARSS), Unit Level Logistics System (ULLS)-S4 and ULLS-G/A. The students' interpretation and application of the SPBS-R systems along with interfacing systems enhances the bottom line: property accounting support to the command. The final examination is a five-hour comprehensive test. The WOBC students are fully certified and highly trained to accept their first assignments as customer-oriented property accounting technicians.

WOBC students receive technical clarification.

Supply Systems Technician

CW3 Antonio Ocasio

The WOBC's 920B (Supply Systems Technician) track phase strongly challenges all newly appointed warrant officers regardless of their experience level. A retooling of this phase, which began in 1996, is producing a technician who can better handle the constantly evolving supply support environment.

Supply Support Activity (SSA) Management. This annex begins with an SSA introduction, authority to operate an SSA, personnel and equipment authorizations, the stock record officer (SRO), and the assump-

tion of a stock record account (SRA). The stock record, its components and the basic required master files are discussed in detail. The SSA is then broken down into sections and explored individually. Understanding the mechanics of each section within an SSA will allow a 920B technician to manage any SSA. Four hours are devoted to functional codes. The precise interpretation and application of functional codes maximizes the Quartermaster's ability to provide timely supply support. The annex ends with a comprehensive practical exercise and exam.

Quartermasters staff an issue point at the 558th Transportation Company's supply support activity at Fort Eustis, Virginia.

A new warrant officer conducts research.

The Standard Army Retail Supply System-1 (SARSS-1). The student is then introduced to the SARSS-1 system. The blocks of instruction parallel the operational sequence at an actual SSA. Topics include introduction and system interfaces, system access, parameters, transactions-in and communications, processing customer requests, processing receipts, location survey and maintenance, inventories and adjustments, transactions-out and closeout, as-required processes and miscellaneous reports. The Material Release Order Control System (MROCS) and Automated Manifest System are then discussed and demonstrated. The SARSS-1 annex ends with a comprehensive, hands-on, practical exercise. The students put all this training into practical application when they travel to the 558th Transportation Company's SSA at Fort Eustis, VA. WOBC students staff every SSA section, working hand-in-hand with the 558th soldiers.

No supply training is complete without an understanding of the wholesale system. In coordination with the Defense Supply Center Richmond's (DSCR's) public affairs office, the students receive a command briefing, a tour of the massive distribution facility, and an informative walk through DSCR's Defense Reutilization and Marketing Operation (DRMO).

The Standard Army Retail Supply System-2A (SARSS-2A). Students become familiar with the SARSS-2A level, emphasizing the key functions that affect them. These functions include parameters, issue referral, local purchase, reparables management and document history.

Hazardous Materials Overview. At this point, the students receive a hazardous materials overview. This annex is very detailed and intense. The often-neglected process of hazardous materials management comes painfully into play when hazardous materials become hazardous waste with shelf life expirations. The Hazardous Materials Training Office, Army Logistics Management College at Fort Lee, familiarizes WOBC students with this critical topic.

WOBC students process receipts with the MROCS.

Students upload excess for turn-in to the installation supply division.

Management Techniques. Finally, the 920B students learn some basic, time-tested management techniques. They receive a "care package" of four to five diskettes with many helpful tools that include the following:

- Internal and external standard operating procedures
- Monthly SARSS-1 process schedule
- Copies of instructional slides to train soldiers
- Training and cross-training matrix
- Common memoranda and waiver requests
- Samples of causative research documentation
- Sample Officer Evaluation Report support form
- Armywide 920B telephone/E-mail roster

The 920B students are now fully trained, certified and ready to take on their first assignments as supply support technicians.

Food Service Technician

CW3 Thomas O. Mell

The WOBC's 922A (Food Service Technician) track phase leads the way in training for food service operations into the next century. Training is "real world." The days of sitting in a classroom "highlighting" a regulation and taking a test are gone.

The track phase for food service technicians begins with an introduction to the Army Food Service Program and duties and responsibilities of a newly assigned 922A warrant officer. Students immediately receive two course projects that first morning. That afternoon and for the rest of the fifth week, students review Army Food Management Information System (AFMIS) training. That segment provides hands-on AFMIS training at all levels of responsibility. Many 922A students feel AFMIS is the toughest week of WOBC.

The sixth week has three days of food service sanitation training and certification. A critical part of this new program is learning how to establish a Hazard Analysis Critical Control Point (HACCP) Program in Army dining facilities. The rest of the week is filled with course project preparation and information briefings by department heads from the Army Center of Excellence, Subsistence, US Army Quartermaster Center and School. The week wraps up with a three-hour Army Food Service Program update presented by the Army Food Advisor in the rank of CW5.

Week seven is totally devoted to various classes discussing every major topic in the Army Food Service Program. The training is food-focused and customer-driven. These subject areas include manpower requirements and staffing, hazardous communication, dining facility design and equipment, installation budgeting, records management, food service contracting, and menu and recipe development. These all-important subjects are tested either during the course or during the warrant officer's new duty assignment.

Week seven begins with two days of advanced nutrition training and menu planning. The third day is devoted to Class I (rations) contingency planning and operations. A major focus is doctrinal support issues and real-world contingency planning responsibilities. Instruction keys on an operation's predeployment and deployment phase and includes theater distribution issues. The end of the eighth week includes conducting garrison and field dining facility evaluations, presenting course projects and producing an actual meal. The final few days of the phase include customer service training and a field trip to Marriott International Headquarters, Washington, DC. The field trip to one of the Army's Training With Industry corporations is designed so that students can experience, evaluate, educate and compare civilian food service management practices and how these skills, techniques and practices can be applied to the Army Food Service Program.

Today's Army Food Service Program is rapidly changing. Initiatives such as Prime Vendor, "a la carte," "Branding" and improved automation systems require food service technicians who are current, proactive and open to new ideas. The Army Food Management Training Division at Fort Lee constantly seeks ways to keep pace with customer demands. One of two recent programs includes partnering with the National Restaurant Association's Education Foundation, which gives soldiers access to current industry management training materials. This partnership allows drawing valuable comparisons between commercial industry and the current Army Food Service Program. Another new project is the partnership with the Army's Prime Vendors and marketing Prime Vendor food merchandising products and systems in the Army Food Service Program. The 922A instructional goal is to best prepare the Army's food service warrant officers with all the necessary tools and knowledge to support victory in every situation.

Aerial Delivery Systems Technician

CW5 Lester K. Mason Jr.

The WOBC's 921A (Aerial Delivery Systems Technician) track phase challenges today's young warrant officer to understand and identify the operational aerial delivery capabilities needed for future requirements. The track phase begins with an introduction that leads into a fifth week of learning about duties and responsibilities, airborne/airdrop technical doctrine, manpower and equipment staffing standards, rigger field structure, and enlisted personnel assignments.

The sixth week consists of an introduction to the Quartermaster light airdrop, Quartermaster heavy airdrop, Quartermaster equipment repair and miscellaneous airdrop units. Students also receive training on how the joint airborne/air transportability training unit provides aircraft support for all airdrop units. The students will finish their sixth week learning about the proper requirements for malfunction investigations and reporting, new equipment systems, and systems still in the testing phase.

The seventh week begins with hands-on refresher training on the packing of heavy cargo parachutes, rigging of special airdrop systems, installing the extraction force transfer coupling system, cargo parachute releases, joint airdrop inspection techniques, equipment recovery procedures, and an introduction to sling load training. The 921A students learn the six elements and all airdrop planning phases to conduct an airborne operation. They receive an airdrop planning exercise for resupply and sustainment. This is a weekend exercise.

The eighth week consists of parachute pack management training and a pack management exercise. Students will also receive hands-on refresher training on the packing of all personnel, small cargo, and extraction parachutes. This training also includes packing the extraction line bag.

The ninth and final week consists of refresher training on the maintenance, repair and adjustment of all sewing machines used to repair airdrop equipment. Students also train on parachute maintenance backlogs. Included in the maintenance training is the care and maintenance of the automatic parachute ripcord release. To conclude their final week, all students participate in a parachute jump. In the future, combat units will require more rapid force projection and airdrop operations. To meet the aerial delivery challenges on the modern battlefield, the US Army Quartermaster Center and School will prepare airdrop systems technicians, through realistic training and effective management, to support combat units in victory.

Quartermaster Functional Review

The Quartermaster Functional Review, briefed to the Army's Deputy Chief of Staff for Personnel (DCSPER) at the Pentagon on 11 Feb 98, is a biannual event on the personnel issues affecting the Corps. The Functional Review process began in August 1997 by soliciting concerns from Quartermaster leadership throughout the Army as well as the US Army Quartermaster Center and School (USAQMC&S). Only unresolved issues within the Corps that required the DCSPER's support survived the screening process. The Office of the Quartermaster General and other action officers will continue to work the remaining issues offline. The Quartermaster General has directed that each of the 52 original topics remain on the table until resolved or addressed, and the field will receive feedback on each issue's status. In the end, two key personnel-related issues were presented to the DCSPER.

77F (Petroleum Supply Specialist)

The problem statement for 77F was "Low authorization levels for 77F in combat service support (CSS) units, particularly in DISCOMs and Corps Support Groups, coupled with increasingly heavy mission requirements and other constraints unique to these units, such as pregnancy rates, represents a significant readiness issue." CSS units are authorized one 77F soldier per refuel vehicle (versus two per refuel vehicle in Armor, Infantry and Artillery units), so the ability of CSS units to conduct sustained tactical operations in all facets of their mission and still staff each tanker with two soldiers is severely curtailed. Also, 29 percent of all 77F positions in the Army are currently coded male-only. As a result, a survey of 13 fuel-intensive commands (division support command, corps support group, Armored Cavalry Regiment) showed that nearly 44 percent of their support units consisted of females. This in itself is not a problem. However, the survey also showed an average pregnancy rate of nearly 20 percent among female 77F soldiers in these units, almost three times the published Army average. Again, pregnancies in themselves are not the core issue. When a 77F becomes pregnant, she is unable to work around fuel products and is essentially lost to the 77F military occupational specialty (MOS) for nearly one year. Therefore, the pregnancy profile is far more significant to petroleum, oils and lubricants (POL) sections than most other medical profiles.

The 77F Bottom Line: The combination of lower authorization levels, a relatively high concentration of female soldiers (with higher pregnancy rates), and the high operating tempo of many of these units result in a significant readiness challenge for much of the CSS community. An analysis of the ideal "fix" for this problem (authorizing a second 77F in each refueling vehicle in CSS divisions and corps support battalions) was not a solution in today's constrained force structure. This would require an additional 642 slots Armywide – an unacceptably high bill.

The Quartermaster General asked the DCSPER to increase the Program Guidance for 77F soldiers from 97 to 100 percent to offset some shortfalls and make more soldiers available for distribution. The DCSPER agreed to pursue this course of action, indicating he would support a new Program Guidance of 99 percent that would ultimately provide about 150 more soldiers in this 97F MOS.

The DCSPER also agreed to relook the positions coded as male-only. In light of the nonlinear battlefield on which most 77F soldiers must operate and the developments of the Force XXI Division (the forward support company), Quartermasters briefed that a large percentage of these positions can be opened to women. This would broaden the base of distribution of all 77F soldiers and not leave many CSS units with disproportionately high numbers of females. Finally, the USAQMC&S Fort Lee, VA, is reevaluating the standards of

physical performance currently published for this MOS. If the standards are valid, the school will develop a program within the 23d Quartermaster Brigade to certify that all 77F soldiers can meet the physical performance standards before leaving the training base.

92R (Parachute Rigger)

The Army has a critical shortage of Skill Level 10 parachute riggers because of low accessions, high pre-attrition rates, and high dropout rates from basic combat training (BCT) – particularly Airborne School. The Army is currently at 85 percent strength in MOS 92R, and only 76 percent in Skill Level 10. In FY97, the US Army Recruiting Command (USAREC) only achieved 77 percent of its mission in this MOS, and the status thus far in FY98 indicates that the shortfall will continue. Attrition before even attending BCT is also a problem, as are losses during BCT. Most significant, however, has been the problem of failures at Airborne School that historically accounts for some 50 percent of all attrition of parachute riggers.

The 92A Bottom Line: The 92R MOS is one of only two in the Army that has soldiers attend Airborne School immediately after BCT. Given the average fitness level of today's recruits, coupled with the standards for graduation from BCT (150 points on the Army Physical Fitness Test), sending these soldiers to Airborne School after BCT is a recipe for failure. There is simply not enough time to prepare these young soldiers for the physical and mental demands of Airborne School in only eight to nine weeks.

A number of options to attack this problem were analyzed. Quartermasters considered bringing the 92R candidates to Fort Lee after BCT to attend the Rigger Course advanced individual training (AIT) before going to Airborne School. Sending them through the entire 10-week Rigger Course would provide considerably more time to prepare them physically, but the problems associated with non-airborne-qualified parachute rigger students proved unworkable. Another consideration was splitting AIT at the five-week mark and then sending the 92R students to Fort Benning, GA, for Jump School. However, the impact on the training cycle, sister service students, and the course integrity were too significant to overcome.

The DCSPER and other key agencies support the final course of action, which now is being worked through the US Army Training and Doctrine Command. Under this option, all 92R soldiers will attend BCT at Fort Jackson, SC.

Upon arrival at BCT, all 92R soldiers will be "batched" in a squad, squads or platoon and run through basic training in essentially a COHORT unit. Airborne-qualified drill instructors will lead these soldiers. The Army Physical Fitness School at Fort Benning will develop a realistic, focused physical training program for these students, and the cadre at Fort Jackson will strive to bring the 92Rs to a higher standard of fitness (at least the Army minimum) before graduation.

More Physical Fitness Training for 92R Soldiers

After BCT and an assessment of their level of fitness to that point, all 92R soldiers will come to Fort Lee for a three-week Fitness Training/Airborne Orientation Course to further prepare them for success in Airborne School. Assigned to the Airborne Company of the 23d Quartermaster Brigade as "holdovers," these soldiers will go through a carefully designed training program (again, with input from the Army Fitness School). Once assessed as ready by the cadre at Fort Lee, these 92R soldiers will leave as a group for Fort Benning. If they are determined as seriously unfit and unlikely to succeed at Airborne School after their COHORT experience, then the USAQMC&S will decide on reclassification or some other appropriate action. The most cost-effective means to address the 92R problem, the combination of these approaches provides a longer timeframe and a more focused team-building approach that should greatly enhance these soldiers' chance of success. The goal is to make these 92R soldiers feel a part of something special and better equip them for the rigors of Airborne School.

Quartermasters have made considerable headway on this 92R issue. USAREC has supported efforts to recruit quality soldiers for this MOS. Thus far in FY98, USAREC is well ahead of last year's pace with a concerted effort to reduce high pre-attrition rates. USAREC recently raised the level of authority to release recruits from their contracts from company to battalion commander.

The USAQMC&S is developing a brochure welcoming 92R recruits to the Quartermaster Corps and detailing the challenges ahead for them as Parachute Riggers. Because they have chosen a unique path and one that most of their contemporaries are unwilling to try, The Quartermaster General wants the 92R soldiers to feel a sense of pride and belonging from day one. USAREC will assist in getting these brochures to future riggers.

The commanding general of Fort Jackson agreed with the USAQMC&S proposal. On February 2, the BCT site began batching all 92R soldiers into appropriately sized elements (squad through platoon) under the leadership of enthusiastic, airborne-qualified drill sergeants. This COHORT experience will begin the process of better preparing Quartermaster soldiers for success at Airborne School. Again, the Army Physical Fitness School is helping Fort Jackson develop a first-class physical training program, as for the USAQMC&S cadre.

At the Functional Review, the DCSPER supported this 92R initiative and agreed to allow an additional three weeks of fitness training and airborne orientation at Fort Lee. The USAQMC&S is finalizing arrangements with TRADOC to make this a reality. While a detailed training program is being developed, course schedulers are assessing the implications for the current training pipeline and the timetable for launching this pilot program. The USAQMC&S intends to run this pilot for 18 to 24 months to gauge the impact of this new training path for 92R soldiers. Planners feel that the combined efforts of USAREC, the BCT site, and the 23d Quartermaster Brigade and the Aerial Delivery and Field Services Department at Fort Lee will make a significant impact on 92R readiness Armywide.

Professional Development

As the Army continues to draw down, we at the Quartermaster branch, US Army Total Personnel Command (PERSCOM) would like to update Quartermasters about some new changes, developments and trends in the assignment and professional development areas. For more information about officer and noncommissioned officer issues, access the Quartermaster Home Page by typing http://www.lee.army.mil/quartermaster and then look up the appropriate Quartermaster Branch Newsletter from PERSCOM. To help enlisted soldiers keep track of PERSCOM's new communication tools, the Enlisted Personnel Management Directorate distributed a wallet-sized information card that lists a soldier's career manager's phone number, E-mail address, FAX number, and telephone interactive voice response system (IVRS) instructions and phone number. Enlisted soldiers can get their pocket cards at their servicing personnel center.

Noncommissioned Officer (NCO) Branch Chief Notes

LTC C. S. Vakas, Chief, Quartermaster Enlisted Personnel Management Branch
vakasc@hoffman.army.mil

The PERSCOM team trips to Alaska, Hawaii, Korea and Germany during the past few months provided excellent opportunities for us to see you in the field where you work. Nothing beats our face-to-face discussion with more than 1,000 Quartermaster soldiers, and we have since sent hundreds of E-mail notes back to the field with specific answers to questions.

My first priority continues to be taking care of Quartermaster soldiers and their families. Service to you is most important to us in the Quartermaster Enlisted Personnel Management Branch. Each and every Quartermaster soldier deserves the best, and the 27 senior NCOs and Department of the Army civilians who work for me are committed to providing you first-class assignment and professional development support.

We also must ensure the proper worldwide distribution of Quartermaster soldiers. This leads to some inevitable challenges as we balance soldier wants with Army needs. We continue to make about 1,250 assignments every month. Your input is a vital part of the assignment process. Let us know what you want and we will always consider you preferences. Frequently, our telephone lines are busy, but we are always interested in you and will make the time to discuss your assignment and professional development needs. Please be persistent and also consider using our alternative contact procedures discussed in this Career News section as an ***Operation Engage* Update** by CPT Bruce E. Cox, Deputy Branch Chief.

The recent PERSCOM team trips have been a great forum for communication. Our *PERSCOM Online* newsletter is a good source of continuously updated information. We have established direct web linkages to and from the Quartermaster Home Page (http://www.lee.army.mil/quartermaster) for your convenience. Also, note that you now can send E-mail directly to the specific assignment managers and professional development NCOs who represent you by clicking on their underlined names once you enter *PERSCOM Online*. E-mail is a great alternative to the telephone. You should receive an E-mail reply within two normal work days.

Please make sure to include your complete name and social security number. Also provide your complete E-mail address in the body of your note and a work telephone number in case we need to call you.

Finally, please note our normal spring staff rotations, so you will see some new names on our staffing chart located in our branch newsletter. Do not hesitate to call them with your issues. As always, we take our work very seriously. I want you all to understand our true measure of success is the daily contribution that PERSCOM makes to your career satisfaction.

Operation Engage Update

CPT Bruce E. Cox, Deputy Branch Chief, Quartermaster Enlisted Personnel Management Branch
coxb0@hoffman.army.mil

Operation Engage is the PERSCOM program aimed at improving communication with soldiers in the field. We know and appreciate the effort that contacting the Quartermaster branch can be. There are many ways to contact your assignment manager and professional development NCO, and we in the branch are dedicated to improving the communication process with each and every soldier. As with any organization located in the Washington metropolitan area, the branch employees work different shifts. Although the telephones are available 0700 through 1700, your specific assignment manager or professional development NCO may not be in the office for that entire period. This is why we offer many other alternatives to improve communication.

Telephone

The telephones in the Quartermaster Enlisted Personnel Management Branch are available 0700 through 1700, Monday through Friday. In our PERSCOM Online newsletter (www.perscom.army.mil) is a current telephone and E-mail roster for the branch staff. We also published the telephone and E-mail roster in the previous edition of the *Quartermaster Professional Bulletin*. The branch's main telephone number is DSN 221-5883 or (703) 325-5883. Call the automated branch directory at DSN 221-5415 or (703) 325-5415. PERSCOM has an interactive voice response system (IVRS) which is available 24 hours a day. This system is designed to provide NCOs with an immediate response in the areas of assignments, schools and retention. The telephone number for the IVRS is DSN 221-3763 or (703) 325-3763, and 1-800-FYI-EPMD, which is 1-800-394-3763.

Facsimiles (FAXes)

Quality facsimiles are acceptable for many of the personnel action requests submitted. The 24-hour FAX number is DSN 221-4521 or (703) 325-4521.

E-mail

E-mail is the newest addition and improvement to communicating with soldiers. We provide E-mail addresses on the Internet for every assignment manager and professional development NCO. The E-mail roster is in the Quartermaster *PERSCOM Online* branch newsletter at www.perscom.army.mil. This address provides access to the enlisted management career branches. When you select the Quartermaster/Chemical Branch, you will find the telephone/E-mail roster for every assignment manager and professional development NCO. In some cases, you may simply want to send your E-mail to the branch E-mail for forwarding to the appropriate manager. The branch E-mail address is EPQMC@Hoffman.army.mil. The branch is committed to responding to E-mail within two normal working days of receipt. Please provide your name, rank, social security number, military occupational specialty and work telephone number on your E-mail message.

Personal Visits

We always enjoy meeting one on one with you. If you are in the Washington metropolitan area and have a few minutes, please stop by. We are located at 2461 Eisenhower Avenue, Alexandria, VA 22331. Please pay close attention to the parking rules. We have provided detailed travel instructions on the Internet. The address for this information is www.perscom.army.mil/enlist/qmennew.htm. We are not far from the Woodrow Wilson Bridge, and we are located immediately off the Washington, DC, beltway.

Mail Correspondence

PERSCOM and, of course, the branch receive a large quantity of mail. The mail system is very good and can be trusted – contrary to what you may have heard. The correct address for the branch is Commander, PERSCOM, ATTN: TAPC-EPM-L, 2461 Eisenhower Avenue, Alexandria, VA 22331.

We understand that it can be very difficult at times to contact branch but each assignment handled here is "one soldier, one assignment, and one assignment manager." With more than 40,000 soldiers assigned to the Quartermaster Corps, persistence is a necessity. The assignment managers and professional development NCOs want to talk to you to help determine how best to address each individual situation. We encourage your use of one or all of these PERSCOM communication methods. Stay in touch.

Project Warrior: Tactical Mentors to the Force

CPT Bruce E. Cox, Deputy Branch Chief, Quartermaster Enlisted Personnel Management Branch
coxb0@hoffman.army.mil

During the past few years, many branches of the Army have focused on the Project Warrior program. Project Warrior seeks to maximize the knowledge gained by NCOs and officers chosen as observer/controllers (O/Cs) at an Army training center and to put that knowledge to work afterward at a US Army Training and Doctrine Command (TRADOC) school. Only the highest-quality files are screened for soldiers to participate in Project Warrior, and the selection process is highly competitive. Normal assignment rotation for a Quartermaster in Project Warrior is a two-year tour as an O/C at one of the Army's major training centers (National Training Center, Joint Readiness Training Center, Combat Maneuver Training Center, Battle Command Training Program), followed by reassignment to Fort Lee, VA, or another TRADOC school on a case-by-case basis.

To become an O/C at a major training center, NCOs must meet several criteria and complete a difficult screening process. Reserved for NCOs in the rank of staff sergeant through master sergeant, the program looks for soldiers who have recently served in table of organization and equipment (TOE) units. Also, an NCO must have had platoon sergeant time (staff sergeant (promotable) and sergeant first class) or first sergeant time (sergeant first class (promotable) and master sergeant). Generally, the files of the chosen Quartermasters are among the best the Corps has to offer.

Assignment to a training center is a difficult but highly rewarding experience. O/Cs participate in and evaluate unit rotations each month. O/Cs are typically involved in a rotation cycle for 15 days, as evaluated units complete their monthly rotations. After a rotation, O/Cs participate in the detailed staffing tasks of preparing for the next unit's rotation. Specific criteria for acceptance as an O/C are outlined in AR 614-200, Section II, 8-8.

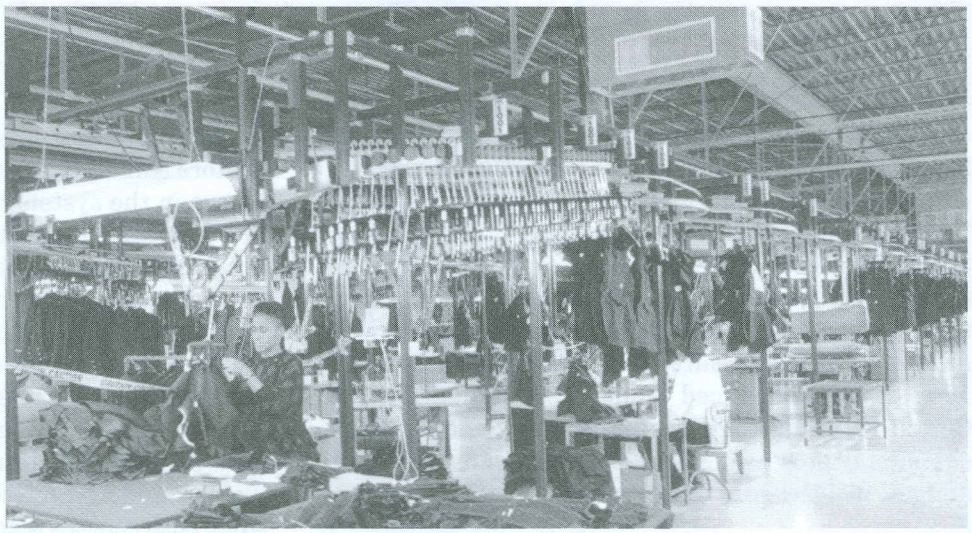
The second phase of the Project Warrior program takes shape as the training center tours of the O/Cs come to a close. During this phase, NCOs are assigned to a TRADOC school where they will help develop emerging doctrine and refine existing doctrine. Some soldiers will be assigned as platform instructors who incorporate their field expertise with the existing curriculum. Others may work in battle labs or write about logistics lessons learned. This assignment will round out the four-year commitment with a two-year stabilization at the TRADOC school where stationed.

NCOs assigned to O/C duty in the past were not necessarily part of Project Warrior, and their permanent change of station assignments were not necessarily to a TRADOC school. However, all NCOs now assigned to O/C duty do fall under the Project Warrior program and will serve a two-year utilization tour after completing their two-year O/C tour. The knowledge gained by these tactical mentors is critically important to the leadership of the Quartermaster Corps. By supporting the framework of Project Warrior, O/C field-tested experts can share their expertise, positively influence the thinking process of our leaders, and help develop doctrine to enhance the Quartermasters' ability to fight, support and win on the battlefield.

Interested, high-quality NCOs should consult AR 614-200 to confirm eligibility based on specified guidelines. Selection as an O/C is normally based on TOE experience (heavy division – National Training Center/ light division – Joint Readiness Training Center). If you meet the eligibility requirements for an O/C tour, contact your branch manager to inquire about open positions.

(Continued from page 46 of the Career News section)

for this industry will clothe the Division Force XXI soldier with the right garment in the right place at the right time.



The manufacturer's unit production system quickly moves fabric cut for uniforms through the assembly process.

CPT Steven L. Allen is a Combat Developer for Army Dress Clothing and Individual Equipment, Material Modernization Division, Quartermaster Directorate, US Army Combined Arms Support Command, Fort Lee, Virginia. He has a bachelor of science degree in industrial technology from the University of North Dakota, Grand Forks. His military education includes the Infantry Officer Basic Course, Bradley Infantry Fighting Vehicle Course, TOW (Tube Launched, Optically Sighted, Wire-Guided missile) Leader Course, Quartermaster Officer Advanced Course, Support Operations Course (Phase II), Airborne, Air Assault, Aerial Delivery Management Officer Course, and the Combined Arms and Services Staff School. His previous assignments include Bradley Platoon Leader, TOW Platoon Leader and Company Executive Officer, 1st Battalion, 16th Infantry Regiment, 1st Infantry Division, Fort Riley, Kansas; Support Operations Officer and S2/3 Operations Officer, 710th Main Support Battalion; and Commander, Headquarters and Company A, 210th Forward Support Battalion, 10th Mountain Division, Fort Drum, New York.

Enlisted History Office

The Regimental Command Sergeant Major has established an enlisted history office at the Home of the Quartermaster Corps to collect, store and access historical documents on noteworthy personnel to keep for use by future researchers. More extensive documents on Quartermaster officers already are maintained in the Quartermaster Historian's office.

In the case of enlisted Quartermasters, too often records relating to important projects are destroyed shortly after completing an action. These documents include notes, messages, memoranda, briefing charts, official reports, telephone logs and photographs. Regimental CSM Larry W. Gammon has placed the first "enlisted historian" in Room 118, Mifflin Hall at Fort Lee, VA. CSM Gammon's office also is located in Mifflin Hall. MSG Melvin Kendricks is actively interviewing retired Quartermaster enlisted soldiers and noncommissioned officers and seeking the records of key "personnel who have moved on."

MSG Kendricks said that Quartermaster personnel too often complete missions successfully, but leave no tangible record explaining who was involved, what issues were at stake, and why certain decisions were made. The results: future decision-makers are deprived of an opportunity to learn from the past.

MSG Kendricks would like to reach anyone who knows Quartermaster enlisted soldiers, past or present, who have made a difference in the success of the Quartermaster Corps. Phone MSG Kendricks at (804) 734-4743 or DSN 687-4743; E-mail to kendricm@lee-dns1.army.mil; or write to him at this address: COMMANDER, USAQMC&S, ATTN ATSM QMG, 1201 22D STREET, FORT LEE, VA 23801-1601. To contact CSM Gammon, phone (804) 734-3248 or DSN 687-3248 or E-mail to gammonl@lee-dns1.army.mil.

QUARTERMASTER UPDATE

Unit Level Logistics System (ULLS) Help

SSG Marty Diskin

The ULLS-S4 automates company, battalion and brigade S4 tasks, which allows a quick and accurate response to multiple logistics requirements. After Department of the Army approval in April 1996, ULLS-S4 is being fielded throughout the Army. The Quartermaster NCO Academy began training this new system in October 1996 in the Basic Noncommissioned Officer Course (BNCOC) and in October 1997 in the Advanced Noncommissioned Officer Course (ANCOC). The system has six functional areas: supply processes, hand receipts, component lists, budget, utilities and the tutorial.

Who To Call

Quartermasters often request information about ULLS-S4 sustainment training. Several resources to assist with ULSS-S4 problems and training are within arm's reach. Units may contact the Customer Assistance Office at Fort Lee, VA, at DSN 687-1051 or (804) 734-1051.

Within the ULLS-S4 system itself, simply pressing the **F1 key** may give the answers to all questions. The F1 key provides a help screen with explanations and options for any data field. Also, operators can access the *End Users Manual* from anywhere in the system by pressing the F6 key.

Perhaps the best tool available to a trainer is the embedded *Tutorial*. It is an easy-to-use, menu-driven system that trains current or potential operators. The tutorial is easily incorporated into MOS training for operators and supervisors.

Another valuable resource is the recent graduates of the NCO Academy at Fort Lee, since the academy has been training BNCOC for more than 18 months and ANCOC for more than 6 months. At this time, both courses teach all Operator/Supervisor New Equipment Training. This makes these NCOs invaluable assets as in-house subject matter experts, as well as excellent choices for establishing a battalion or brigade training program.

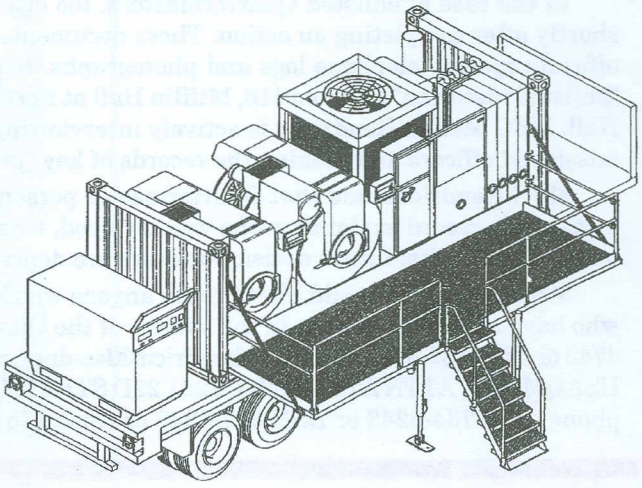
Occasionally, the short route to fixing a problem is all too obvious. Use the resources within reach to help with problems and training on ULLS-S4. Direct questions to the Customer Assistance Office at DSN 687-1051 or (804) 734-1051 or to SSG Marty Diskin at DSN 687-6563 or (804) 734-6563.

SSG Marty Diskin is the Senior Small Group Leader for soldiers with the military occupational specialty 92Y (Unit Supply Specialist) at the Basic Noncommissioned Officer Course at Fort Lee, Virginia. He has held a variety of supply positions in units, including 4-68 Armor, Fort Carson, Colorado; Field Artillery and Air Defense Artillery, Fort Campbell, Kentucky; 72d Signal Battalion, Karlsruhe, Germany; United Nations Command Security Force-Joint Security Area, Panmunjom, Korea; and the 4-228 Aviation in Panama and Honduras.

The Army's New Field Laundry

The days of the M85 field laundry are numbered. The Laundry Advanced System (LADS) is well on its way to replacing the Army's current field laundry on a one-LADS to four M85s-basis. The Army awarded a performance-based contract in July 1997. The first of two prototypes rolled off the production line in January 1998.

The most important improvement over the M85 is increased reliability. A draft Maintenance Allocation Chart identifies 157 activities, 87 percent at the organizational level. This will allow a field services company to control the maintenance of company equipment. Spare parts will be available directly from



A soldier removes processed laundry from the LADS 200-pound capacity washer/dryer.

the private contractor. The Army is using the same contractor to develop *and* produce LADS.

Quartermasters familiar with the M85 know wet-weather clothing is required during the transfer of clothes from the washer to the extractor to the dryer, with 60 pounds per cycle. Each LADS will process 400 pounds of laundry per hour – dry to dry. The LADS washes, extracts and drys 200 pounds of laundry in each of two drums, using mesh bags of clothing. Each LADS will deploy with a 3,000-gallon water tank. One full tank will support laundry operations for three days. The LADS reuses and recycles the laundry water.

The LADS consists of two drums, a thermal fluid heater and a distillation system, all mounted on an 8-foot x 8-foot x 20-foot ISO-configured flatrack. The LADS will operate while mounted on a 30-foot flatbed trailer (M871). A 30-kilowatt tactical quiet generator, mounted over the trailer's rear axle, will supply the power to operate the LADS up to 7,500 feet above sea level.

The LADS represents savings in operational and support costs. Water consumption drops from over 20,000 gallons per day (for four M85s) to less than 500 gallons per day. Wastewater drops from about 20,000 gallons per day to 20 gallons per day. The 20 gallons is concentrated "sludge," which is anticipated as "nonhazardous" waste. Any hazardous waste will result from contaminants on the laundered clothing, not the laundry process. Mechanics' overalls or other grossly contaminated clothing could result in the generation of hazardous waste. Laboratory testing will identify system limitations. Fuel consumption per LADS is estimated at 16 gallons of JP8 per hour. Although this may seem high, it is less than the equivalent consumption of the four M85s being replaced by the LADS. The LADS will be fueled by a 600-gallon trailer-mounted fuel pod. This eliminates the risk of cross-contaminating laundered clothing with diesel fuel.

Diesel fuel heats a thermal fluid in the LADS. The thermal fluid is the heat source for the still and the dryer cycle. This eliminates diesel fumes from the processed clothing.

LADS will not process chemically or biologically contaminated clothing. It will, however, be able to launder the Army's newest chemical protective suit, the JSLIST. The LADS will also reapply waterproofing to Gore-Tex clothing.

The deployment concept calls for two LADS to the brigade support area for a 72-hour mission along with a shower team. The laundry will operate 20 hours per day, processing 400 pounds of clothing per LADS per hour. Soldiers are allowed to turn in 15 pounds of clothing. Quick calculations show that more than 50 soldiers will be serviced per hour: more than 1,000 soldiers per day.

Two Quartermasters with the military occupational specialty 57E (Laundry and Shower Specialist) and one supervisor per 10-hour shift will operate the LADS. The dry-to-dry laundry system allows the laundry personnel to spend most of their time processing (receiving, bagging, returning) clothing. Operators will spend about 5 minutes per hour emptying and refilling the laundry drums and also restarting the next laundry cycle.

A major improvement to the LADS is written into the contract. The contractor for the prototypes will also build the production models and provide the logistical supply support and depot-level maintenance. A single source for repair parts and expert knowledge of the LADS will be available. Soldiers already have recommended these changes to the prototype: improved access to the laundry drain, a better laundry door handle, and improved tie-down for the laundry drums during transport.

To see the LADS, contact the LADS Project Officer, Soldier Systems Command, Natick, MA. Telephone DSN 256-5064 or (508) 233-5064, FAX to X5553 or E-mail to JGIVEN@NATICK-AMEDO2.ARMY.MIL. The command is interested in training soldiers and soliciting units to participate in testing scheduled through August 1998.

FM 10-416 (Petroleum Pipeline and Terminal Operating Units) Ready for Field

FM 10-416, scheduled for April 1998, will supersede FM 10-207 (Petroleum Pipeline and Terminal Operating Company), published in October 1981. This new field manual provides general data and operational information for commanders and key personnel of the Headquarters and Headquarters Company, Petroleum Pipeline and Terminal Operating Battalion and the Petroleum Pipeline and Terminal Operating Company. It discusses their organization, employment, field operations, training, and coordination with other units.

Petroleum and Water Old-Timers' Reunion This Autumn

The Petroleum and Water Old-Timers' Reunion will begin this September 18, at Fort Lee, VA, by honoring the 97th Quartermaster Battalion. More information about the biannual reunion will be mailed soon. The Petroleum and Water Department maintains a roster of attendees, but needs help in keeping it current. Call DSN 687-1329 or (804) 734-1329 or write to Commander, US Army Quartermaster Center and School, Petroleum and Water Department, ATTN: ATSM-PWD-A, 1241 Grant Avenue, Fort Lee, VA 23801-1801.

PWD Updating Web Site

The Petroleum and Water Department (PWD) is updating its worldwide web site with more topics of interest to the field, including safety, operations, equipment and general information. These computer files will have operational and training topics from the US Army Quartermaster Center and School (USAQMC&S), the Army Petroleum Center and the Tank and Automotive Command. Also, users can download the Automated Fuel Accounting Program.

A Potable Water Planning Guide will help identify requirements, assess capabilities, and identify water purification, storage and distribution requirements. This includes supporting military, enemy prisoners of war, civilian internees/refugees, and Force Provider projections for operations.

Keep checking the USAQMC&S Home Page at http://www.lee.army.mil/quartermaster. For questions about the PWD web site, phone DSN 687-1332 or (804) 734-1332. Write to Commander, US Army Quartermaster Center and School, Petroleum and Water Department, ATTN: ATSM-PWD-A, 1241 Grant Avenue, Fort Lee, VA 23801-1801.

Worldwide Mortuary Affairs Conference This Summer

The Mortuary Affairs Center (MAC), US Army Quartermaster Center and School, will host a mortuary affairs conference this August 27-28 at Fort Lee, VA. The conference has these purposes: promote understanding of new changes, discuss and hopefully resolve concerns from the field, promote an understanding of mortuary affairs operations from point of death to final disposition, and discuss how the 54th Quartermaster Company will be integrated into the force structure.

The target audience includes (but certainly is not limited to) representatives from the unified commands, other services, joint chiefs of staff, logistics directorates, Headquarters, Department of the Army, Army corps and divisions, Reserve Component, and anyone else who wants to come. For more information, telephone DSN 687-3748 or (804) 734-3748 or E-mail mccullok@lee-dns1.army.mil.

Quartermaster School Accreditation

The Accrediting Commission of the Council on Occupational Education (COE) will continue accreditation of the US Army Quartermaster Center and School (USAQMC&S) for six years, until the end of 2003. The USAQMC&S trains Army, Navy, Marine and Air Force personnel not only to military standards, but also to nationally recognized educational standards.

The COE is a national agency that accredits public and private civilian vocational, occupational and technical schools, as well as many military centers and schools. The COE is chartered by the US Department of Education. The COE grew out of the Southern Association of Colleges and Schools-Council on Occupational Education Institutions, which had been the USAQMC&S accrediting agency from 1975 until 1995. In 1995, the COE was chartered to accredit not just the Southeastern US, but all vocational, technical and occupational education below the college degree level on a nationwide basis.

As an accredited COE member, the USAQMC&S is nationally recognized as a provider of quality education. This recognition enhances Quartermaster students' ability to receive equivalent credit for courses at many colleges and universities around the county. The USAQMC&S has been further recognized by the American Council on Education for specific credit hours that most Quartermaster graduates should receive when applying to these colleges and universities. Many Army, Navy and Marine Corps

schools are accredited by the COE. Not all TRADOC schools are accredited by COE at this time, but many are looking into the possibility since COE went nationwide.

Model Warehouse Training

The Logistics Training Department (LTD), US Army Quartermaster Center and School, has implemented the new Materiel Release Order Control System (MROCS) in its Automated Logistical Specialist Course (MOS 92A10) beginning with the FY98 classes. This training gives the students in-depth knowledge and hands-on practice by using the Portable Data Collection Device with the Standard Army Retail Supply System-Level 1 (SARSS-1).

The MROCS allows real-time processing of transactions related to receiving, location survey, inventory, stock picking, customer pickup and shipping operations. The students also receive training on properly handling and maintaining the MROCS equipment. A total of 35 hours is devoted to this training, mostly hands-on performance in the warehouse. This equipment should reduce processing time and greatly improve accuracy. The students have shown great interest in this new training and use of the new equipment.

In addition to the advanced individual training, the LTD has increased the SARSS-1 training in the Warrant Officer Basic Course to include the MROCS interface operations. This includes two days in the classroom/warehouse and a one-day field trip to Fort Eustis, VA, for hands-on experience in an actual supply support activity warehouse. So that this training is as widespread as possible, the LTD is working closely with the NCO Academy at Fort Lee to ensure that the Advanced Noncommissioned Officer Course (ANCOC) and Basic Noncommissioned Officer Course (BNCOC) receive supervisory/managerial training on the SARSS/MROCS applications. Most of LTD's officer classes also receive overview training.

Worldwide Food Service Workshop

The Army will host a worldwide workshop for food service and subsistence supply personnel in Philadelphia, PA, 14-16 May 98. Installation, division and brigade food advisors, troop issue subsistence supply personnel, and other food program managers will attend. Attendees will receive updates on new automation, major changes to regulatory procedures, and new rations. Also, workshop participants will provide input on future policies and systems. The workshop will immediately follow the Defense Supply Center Philadelphia Customer Conference, 11-13 May 98, in Philadelphia.

Subsistence Prime Vendor Update

Subsistence Prime Vendor has now been fielded at all installations across the continental United States. Contracts have been awarded for Hawaii, the Caribbean, and Europe. Also, contracts for both the Northern and Southern Zones of Europe were awarded, and completion of fielding is planned by the end of July 1998. During August and September 1998, cataloging, training and implementation in Alaska will all take place. Plans are underway for contracting, training, and implementation for support to Korea.

Joint Service Operation Rations Forum

When the Joint Service Operations Rations Forum (JSORF) met February 4-5 in Richmond, VA, the attendees heard that initial results from the Unitized Group Ration-A (UGR-A) Field Test at Fort Hood, TX, were very acceptable. Fort Hood will use the UGR-A for all field exercises.

These Meals, Ready to Eat menu components were approved: minestrone soup, western style beans, red beans and rice, blackeyed peas, vegetarian gumbo, spicy bean medley, and snacks of marshmallow and graham treats and oatmeal cookies, fruits, raspberry applesauce and dehydrated cherries and apples.

Ongoing Army Tests of New Ration Concept

Testing of the new Unitized Group Ration-A (UGR-A) was recently completed at Fort Hood, TX, by units within the 1st Cavalry Division and the 4th Infantry Division during field training exercises. The UGR-A concept aims to provide quality food to the soldiers, reduce labor and reduce impact on the logistics handling.

Although reluctant at first, soldiers welcomed the UGR-A at Fort Hood as an innovative way of packaging and delivering the A-Rations that most prefer. Subsistence handlers of the perishable subsistence platoon said the concept would definitely improve logistics. Food service specialists praised the mix of "good, easy-to-prepare" menus. Starting in February 1998, units at Fort Hood regularly consumed UGRs-A as the "A" in the ration mix. Evaluators from the Army, Air Force and Defense Logistics Agency visited training areas throughout the test to observe the new concept. Testing at Fort Stewart, GA, was 23 Feb to 6 Mar 98.

Distance Learning for Petroleum and Water Soldiers in the Field

The Petroleum and Water Department, US Army Quartermaster Center and School, and Carnegie-Mellon University in Pennsylvania are developing two new CD-ROM training aids as part of the Army's Classroom XXI Distance Learning initiative. Both CDs will provide instruction at the 10-, 20- or 30-level and apply to either individual or classroom training. With most of the Army's petroleum and water units located in the Reserve Component, these CDs will become training tools throughout the Army.

Scheduled for completion in late Spring 1998, the first CD will cover the Inland Petroleum Distribution System (IPDS), particularly important to petroleum pipeline and terminal operating units. This training module will allow units to sustain high-quality training programs, since IPDS equipment is located in depot stocks around the world and not available for daily training.

The second CD-ROM, scheduled for completion in Summer 1998, will cover the 3,000-gallon per hour Reverse Osmosis Water Purification Unit (ROWPU), the Army's water purification workhorse. This training module will give realistic training opportunities to soldiers, both in the Active and Reserve Components.

For more information, write to Commander, US Army Quartermaster Center and School, Director, Petroleum and Water Department, 1241 Grant Avenue, Fort Lee, VA 23801-1801. Telephone DSN 687-2820 or (804) 734-2820 or E-mail to astm-pwd@lee-dns1.army.mil.

Modular Base Petroleum Laboratory

The Army is in the final stages of testing the Modular Base Petroleum Laboratory (MBPL) – a significant step forward in military petroleum testing. Incorporating improved technology, the MBPL enables petroleum laboratory specialists to perform both quality assurance tests and complete quality surveillance tests of not only bulk petroleum, but also oils and lubricants. Once fielded, the MBPL will become the hub for testing petroleum products within a theater of operations.

Self-contained within two M-971/XM-822 semi-trailers, the MBPL consists of the mobile petroleum laboratory in one trailer and equipment for complete base laboratory testing in the second trailer.

Developed to replace the Army's petroleum base laboratories that require fixed facilities, the MBPL will be transportable by air and ground, all-weather capable, and operational for 90 days without resupply. More than a base petroleum laboratory on wheels, the MBPL will use some of the latest technology in petroleum testing. Equipment includes the fluorescence X-ray spectrometer; phase automatic freeze, cloud, and pour point tester; state-of-the-art automatic distillation apparatus; automatic flash point tester; and a state-of-the-art low temperature viscosity tester, just to name a few.

To support the Army's rapid movement into the Information Age, the petroleum community is working on sending test results directly into an onboard computer system within mobile laboratories. The Army will evaluate the compatibility between the MBPL's computer system and the Laboratory Information Management System (LIMS). The LIMS is a computer-based system designed to identify and track a sample from receipt at the laboratory through the testing process and, finally, report the results automatically. Currently operating in a variety of depots, LIMS has the potential of incorporation into the MBPL, which will advance petroleum test tracking well into the 21st Century.

Museum to Feature Quartermaster Riggers

"Supply By Sky," an exhibit portraying the role and history of Quartermaster riggers, will open 15 May 98 at the Quartermaster Museum. The exhibit, scheduled to run for one year, is sponsored by the Aerial Delivery and Field Services Department, US Army Quartermaster Center and School. It is the second in a series of exhibits at the museum highlighting the Corps' missions and the people who perform them.

The exhibit explores the operational history of aerial delivery and parachute rigging. It begins in World War II with the operations to supply Allied Forces in the China-Burma-India Theater and in Northern Europe and progresses to the more recent humanitarian relief operations in Bosnia. Since 1950, the Quartermaster Corps has been responsible for the Army's parachute rigger training and for aerial supply. Quartermaster parachute riggers, distinguished by their red caps and working by the motto "I Will Be Sure Always," perform their mission with utmost skill and attention. Airborne soldiers place their lives daily in the hands of Quartermaster-trained riggers.

Quartermaster rigger units, such as the 8081st Quartermaster Air Supply and Packaging Company that rigged the supplies during the Korean war and the 109th Quartermaster Company (Air Delivery) that packed the supplies dropped during the siege of Khe Sahn in the Vietnam war, are highlighted. With

the use of artifacts, the exhibit will trace the evolution of aerial supply rigging techniques and the changes in containers used to drop supplies.

The Quartermaster Museum is located in Building 5218, Avenue A, Fort Lee, VA. Hours are 1000-1700 Monday through Friday and 1100-1700 on weekends. For information, visit the museum's web site at http://www.lee.army.mil/quartermaster/museum/index.html or call (804) 734-4203.

Mortuary Affairs Assistance For Training and Deployment

Under the Mortuary Affairs (MA) Operating Concept, all MA assets – with the exception of advisors – were taken out of the divisions and consolidated at the 54th Quartermaster Company (Mortuary Affairs), Fort Lee, VA. Such centralization will maximize the flexibility of this small military occupational specialty's capabilities.

To remain proficient in MA services on the battlefield, units must request augmentation by MA teams during training exercises, include MA teams in the plans and orders process, and integrate and employ these MA assets in the combat team. For a coordinated plan to evacuate the dead, the theater-level command or the highest command involved in operations must request MA support as a comprehensive package. Mission-dependent, the 54th Quartermaster Company can provide assets ranging from a MA representative for a command post exercise to several fully staffed collection teams and a temporary Theater Mortuary Evacuation Point (TMEP) for joint theater operations. Also, a visit by representatives from the 54th Quartermaster provides an opportunity to train unit teams on search and recovery as well as to train staff on MA operations.

To request the services of the 54th Quartermaster Company or more information on MA operations, visit the Mortuary Affairs Center's web site at www.lee.army.mil/quartermaster/mortuary.

Annual Culinary Arts Competition

For the second time in a row, Installation of the Year honors went to Fort Bragg, NC, at the US Army Culinary Arts Competition hosted by the Army Center of Excellence, Subsistence, USAQMC&S, February 26 to March 10, at Fort Lee, VA. Fort Drum, NY, and the Military District of Washington tied for second place, and USAREUR took third place in the 23d annual worldwide competition.

A total of 17 gold medals, 57 silver and 105 bronze medals were awarded to individual soldiers and Marines. They were among the 227 individual competitors and the 23 teams from Army and Marine installations. Fort Lee is the home of all Army and Marine training for installation dining facilities and for field environments.

The 1998 Army Chef of the Year is a staff sergeant from Fort Drum, NY, and the Junior Chef of the Year is a specialist from USAREUR. Fort Campbell, KY, took first place in field competition, with Korea in second place and Fort Huachuca, AZ, in third. The goal of the US Army Culinary Arts Competitions is to continually raise the standards of cooking excellence and professionalism in the US Armed Forces.

The 344 entries for the static competition made this exhibition one of the largest in the United States. This Army competition is in its sixth year of sanctioning by the American Culinary Federation. Judges for the static competition were eminent civilian national and international chefs.

NCO Academy's Web Site Updated

The Quartermaster NCO Academy's World Wide Web site has been updated and also has a new address:

http://www.lee.army.mil/quartermaster/nco/index.html

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

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Quartermaster Home Page

Quartermasters have their own Home Page on the World Wide Web computer Internet. You can access the Home Page by typing: http://www.army.mil/quartermaster.

10th Medical Battalion soldiers utilize 10th Quartermaster Company mules to transport wounded to the rear, Italy, 1945.

210th Support Battalion

Constituted 27 August 1942 in the Army of the United States as the 10th Medical Battalion

Activated 9 September 1942 at Camp Carson, Colorado

Reorganized and redesignated 15 July 1943 as the 10th Medical Battalion, Light, and Assigned to the 10th Light Division (later redesignated as the 10th Mountain Division)

Reorganized and redesignated 6 November 1944 as the 10th Mountain Medical Battalion

Inactivated 26 November 1945 at Camp Carson, Colorado

Redesignated 18 June 1948 as the 10th Medical Battalion

Allotted 25 June 1948 to the Regular Army

Activated 1 July 1948 at Fort Riley, Kansas

Inactivated 14 June 1958 at Fort Benning, Georgia

Activated 1 July 1985 at Fort Drum, New York

Converted and redesignated 17 April 1992 as the 210th Support Battalion and remained assigned to the 10th Mountain Division

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