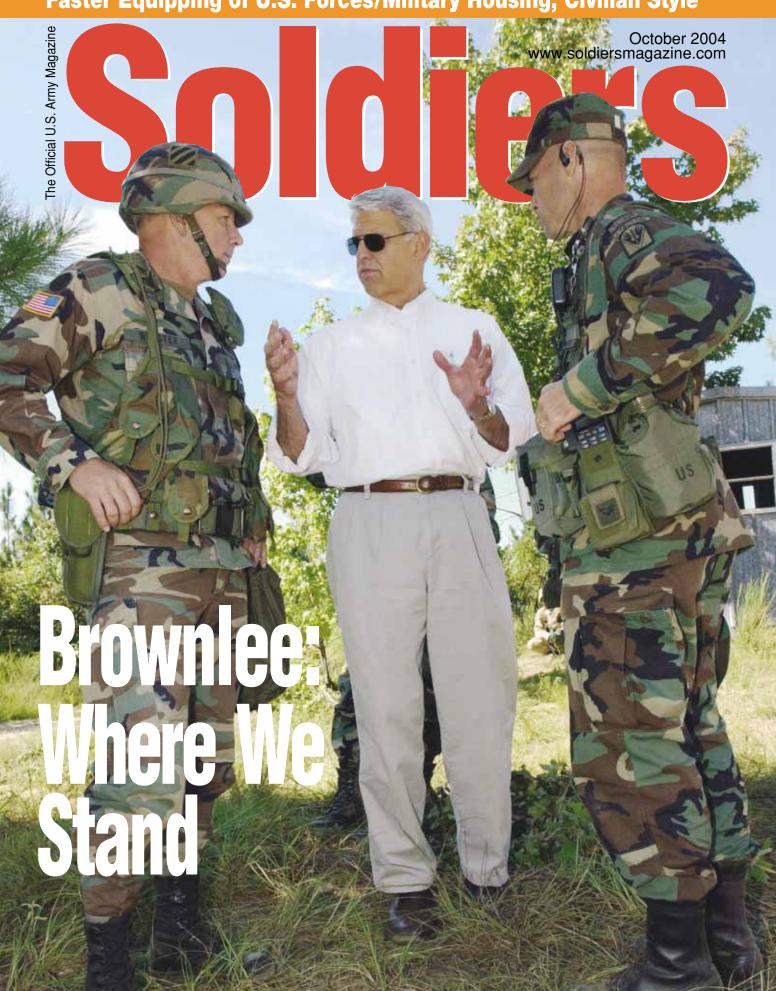
Faster Equipping of U.S. Forces/Military Housing, Civilian Style





Cover Story — Page 4

Acting Secretary of the Army R.L. Brownlee talks with senior officers during a visit to Fort Polk, La.
— SGT Carmen L.
Burgess



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cting Secretary of the Army Les Brownlee has visited with literally tens of thousands of Soldiers the world over during his tenure, and this month Beth Reece was able to catch up with him for a rare one-on-one interview that covers what we can expect now and in the future throughout the Army.

"Great Soldiers deserve great equipment." That axiom is more true now than it has ever been as our Army is actively fighting the global war on terrorism. In a series of articles by Heike Hasenauer and Tesia Williams, we show how extensive thought, research and testing is allowing the Army to more rapidly get the latest and best gear to field units.

Don't miss Beth Reece's look at just how far Army family housing has come in her piece on the RCI program. Several



years ago Soldiers showed you artists' renditions of the new housing, and now we can show you finished neighborhoods of new homes, ready for Soldiers and their families.

Our Soldiers are providing us with a never-ending source of inspiration and pride. Pride in what they

can accomplish and in their resolve. To see how the warrior ethos is being demonstrated every day, see MSG Lisa Gregory's story "Miracle on a Mountainside" on page 46.

> Rob Ali **Editor in Chief**



Soldie

The Official **U.S. Army Magazine**

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Soldiers (ISSN 0093-8440) is published monthly by the Army Chief of Public Affairs to provide the Total Army with information on people, policies, operations, technical developments, trends and ideas of and about the Department of the Army. The views and opinions expressed are

not necessarily those of the Department of the Army.

Send submissions and correspondence to Editor, Soldiers, 9325 Gunston Road, Suite S108, Fort Belvoir, VA 22060-5581. Phone: DSN 656-4486 or commercial 703-806-4486, or send e-mail to soldiers@ belvoir.army.mil.

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Military distribution: From the U.S. Army Distribution Operations Facility, 1655 Woodson Road, St. Louis, MO 63114-6181, in accordance with Initial Distribution Number (IDN) 050007 subscription requirements submitted by commanders

The Secretary of the Army has determined that the publication of this periodical is necessary in the transaction of the public business as required by law of the department. Funds for printing this publication were approved by the Secretary of the Army in accordance with the provisions of Army Regulation 25-30. Library of Congress call number: U1.A827.

Periodicals postage paid at Fort Belvoir, VA, and additional mailing offices

■ Individual subscriptions: Subscriptions can be purchased through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

POSTMASTER: Send address changes to the

Fort Belvoir address above.

Soldiers

Recipient of Awards of Magazine Excellence











Great Gate

I FOUND Steve Harding's March story "Guarding the Golden Gate" to be a very good one. It really emphasized the important association of the California National Guard and the Golden Gate Bridge over the years.

1SG Frank Bruni (Ret.) via e-mail

Big Coverage for the Big Red One

WE here at the 280th Base Support Battalion Public Affairs Office in Schweinfurt, Germany, just saw your July story "Deploying the Big Red One." We wanted to say a big "thank you" for focusing on the great work being done by our 1st Infantry Division Soldiers.

The story looks great overall — thank you again.

Margot Cornelius Via e-mail

Humvees in Bosnia

I RECENTLY read SSG D.C. Dempster's August letter, in which he said he was "shocked" to see a picture of an up-armored Humvee being used in Bosnia.

We all know that Bosnia isn't currently as dangerous a place as Iraq or Afghanistan. But Soldiers serving in Bosnia — site of the bloodiest military conflict since World War II — are always at risk from the thousands of land

mines that still litter the Balkans.

I am a two-time Bosnia veteran, having served there in 1996 and again in 1997. My unit had CUCVs — they were junk but we made do. And I'm sure the units in Iraq are also making do with the equipment they have. So my advice to SSG Dempster is to suck it up and drive on.

SGT Shawn Pierce Via e-mail

Reunion Info

I AM the battalion chaplain for the 29th Signal Battalion, based at Fort Lewis, Wash., and currently deployed to Iraq. As part of our preparation for redeployment I have been pulling together various resources for training, and one of my company commanders passed me Volume 5, Number 3, of your Hot Topics insert. It's titled "Reunion: Putting the Pieces Back Together," and it captures all the key issues in a few pages.

I would like to find a way to reproduce this issue and hand it out to my Soldiers. What kind of procedure would I have to go through to reproduce the materials in this issue? I am considering just turning the whole thing into a PowerPoint presentation, so that I can expose all my Soldiers to this helpful material at one time.

Please advise me on this. I did not want to go forward without checking

in. The issue is so informative and concise, and I do not wish to reinvent the wheel.

Chaplain (CPT) Sean Levine Via e-mail

Thank you for your e-mail.

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Can We Get It?

I AM a ROTC instructor in Somerset, Ky. Are we authorized to receive Soldiers magazine? The cadets love it, but I can only get it when I make trips to Fort Knox, our supporting brigade (and it's more than two hours away).

> SFC Jeannie Cottle (Ret.) via e-mail

TO receive Soldiers magazine each month you need to contact your publications officer. He (she) is the pointof-contact with the Army Publications Agency, which distributes Soldiers.



For links to the Army News Service and Soldiers Radio Live, visit www.army.mil



Get DOD News at www.defenselink.mil





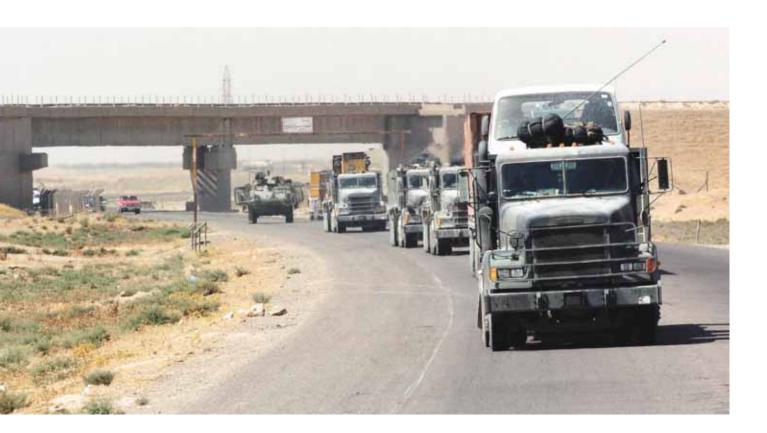
The Price of Freedom Tribute...

The National Museum of American History's new exhibit, "The Price of Freedom," explores the connections between America's military forces and American society and culture.





On **Point**





SSG Patrick Boyer of Company C, 9th Psychological Operations Battalion, delivers newspapers to Iraqi women during a patrol in Mosul. The battalion is working to help combat false propaganda published by insurgent forces.

- Photo by SGT Jeremiah Johnson



◄ Germany

Members of the 173rd Airborne Brigade from Vicenza, Italy, jump from a C-130 of the 37th Airlift Sqdn. over Grafenwöhr during a mass tactical exercise. The 37th dropped more than 430 personnel and 70,000 pounds of cargo over a two-day period during the exercise.

— Photo by Tech. Sgt.. Justin D. Pyle, USAF

✓ Iraq

A Stryker from 1st Squadron, 14th Cavalry Regiment, escorts a convoy of military vehicles loaded with Korean equipment to Irbil.

—Photo by PFC Abel Trevino

➤ Afghanistan

CPT Jennifer Marrast-Host of the 452nd Combat Support Hospital reviews patients' charts during a visit to the Kapisa Provincial Hospital.

- Photo by SSG Vernell Hall

▼ Iraq

Soldiers take cover behind a wall in a cemetery outside of An Najaf while looking for weapon caches and insurgents hiding there.

- Photo by SPC Lester Colley

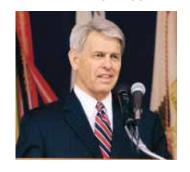




Brownlee: Where We Stand

Interview by Beth Reece

Acting Secretary of the Army R.L. Brownlee



RETIRED Army colonel, acting Secretary of the Army R.L.
Brownlee knows what it's like to be a Soldier. Since assuming his Pentagon position last June, he has visited Soldiers in Iraq, Kuwait, Afghanistan, Korea, Bosnia and other locations around the world. The American Soldier, he's known to say, is the single most important factor in winning America's war on terror. Here, he addresses issues currently affecting Soldiers and how the Army is coping with, and will continue to cope with, the demands of war.

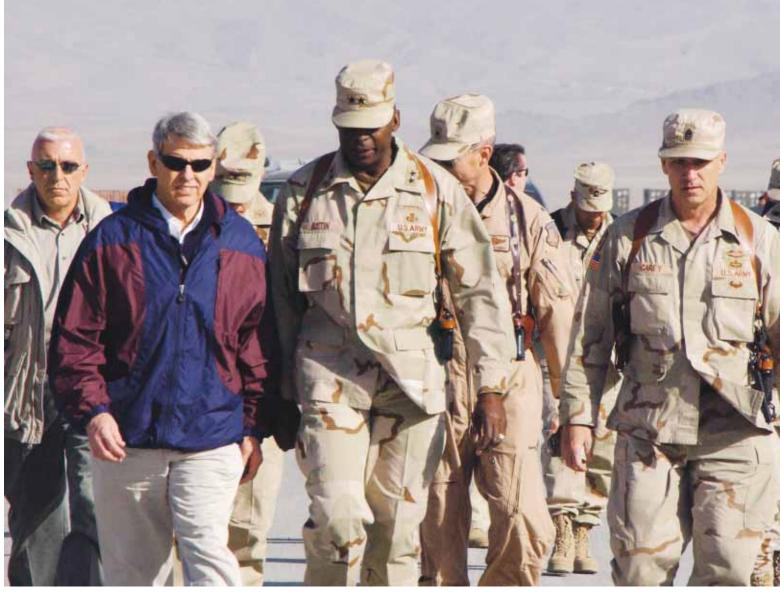
"I've always worked around Soldiers. They're wonderful folks to be with. They're good, honest, hardworking people trying to do the right thing." What would you say is the Army's biggest challenge right now?

Brownlee: Our main mission right now is to win the war on terror, and we're doing that. But we also want to ensure that we're taking care of Soldiers and their families. The Soldiers we have today volunteered to wear the uniform of their country. That many of them volunteered during a war is an incredible circumstance, so I feel a huge obligation to be sure we're taking care of them. When I go out and talk to Soldiers the one thing most of them ask me to do is ensure their families are being well cared for.

How is the Army responding to the current operations tempo? How will we meet our present and future commitments without stretching ourselves too thin?

Brownlee: Right now we have a very high level of commitment. We have a much larger number of brigades deployed than we thought we would at this time. We're asking a lot of our Soldiers in terms of deployments, how frequently they're deployed and the amount of time they have before going back.

But at the same time, we're laying the groundwork to relieve the stress on them. One of the things that we're doing is increasing the size of the active force. Our plan is to "grow" the



During a March visit to Afghanistan, Brownlee is escorted by CJTF-180 commander MG Lloyd Austin.

Army by 30,000 over the next three years, using supplemental dollars and building the right kinds of units in the right components and in the right numbers with the capabilities we need. Ultimately, it means more cohesive and combat-ready formations, more stability, and a more predictable lifestyle for our Soldiers and their families.

We're also working very hard to restructure the Guard and Reserve so they're used more effectively and efficiently. For example, we've converted a lot of artillery batteries into military police units because they're in high demand right now. We're going to do more and more of that, but it's not going to be easy or happen overnight. The chief of staff of the Army has likened it to repairing an engine while it's still running.

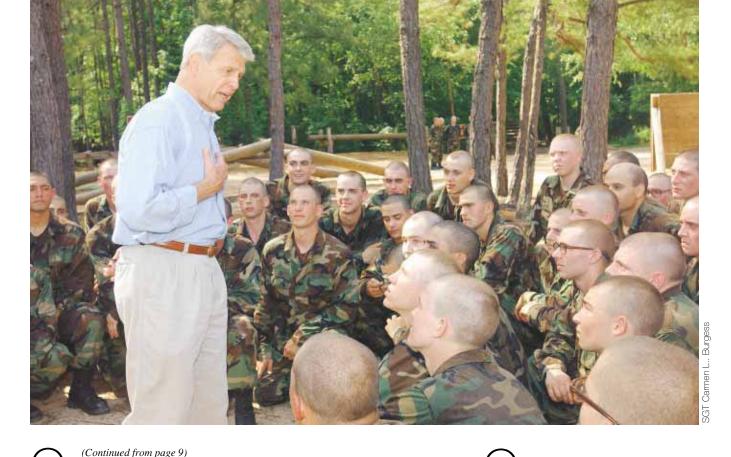
Will Reserve and Guard mobilizations continue as they are, or will there be changes?

Brownlee: Right now there are some units and job specialties that are in higher demand than others. Because we have to rely on those Soldiers so much, they get deployed more. We're currently restructuring the Guard to increase the number of units in such specialties as military police and civil affairs. To do that, we're converting units we don't need as much anymore — like air defense and artillery. Again, it's like repairing an engine while the motor is running. It's hard to do. If you're converting an artillery unit to military police, for example, you don't just dub them military police. You've

got to send them to school, organize them as a unit and train them as a unit. Our long-term goal is to increase the size of the active component so that Soldiers only have to deploy once for every three times they don't have to deploy. If they go for six months, they would only have to deploy every couple of years. Right now some of them are going one for one.

In the reserve components, we hope to get them to one deployment for six. But for at least the next three years we're going to be under some stress. We will also be able to bring down the commitment level as the Iraqis become more capable of helping themselves.

(Continued on page 10)



Is the Army meeting its retention goals? What are the challenges and how are we responding to them?

Brownlee: We're meeting our retention goals in the active Army, the Guard and the Reserve. We're also meeting our recruiting goals, except the Guard is a little bit down right now. Part of that, of course, is because more of our Soldiers are staying in the active force, which is one of the pools from which the Guard recruits prior-service members.

Why do you think Soldiers are staying in?

Brownlee: It's amazing, and a lot of people don't understand it. Our Soldiers are brave and patriotic Americans who love their country, who understand how this country is threatened. They haven't forgotten 9/ 11. And believe me, these people who attacked us on 9/11 — and there

are still plenty of them out there —if they could kill 10 times the people they killed on 9/11, they would.

I believe the strategy we have for fighting them is a good one. Not only have our Soldiers provided an opportunity for freedom and democracy for all the people in Afghanistan and Iraq, they are simultaneously protecting the American people. I believe Soldiers understand the gravity of that, maybe more than many other Americans do.

It's so inspiring to talk to some of these young kids who really get it, who understand the meaning of service to country. For example, I read a story this morning about three Soldiers in the Texas National Guard who wanted to go to Iraq. Because the Texas National Guard wasn't scheduled to go, they joined the Arkansas National Guard.

I have found that when Soldiers are wounded and in the hospital, they want to get back to their units as soon as possible. I think the American people are fortunate that we have young Americans who are willing to do that.

What do you think the Army's force-stabilization program means to individual Soldiers?

Brownlee: We believe that in time not in the near future, but in time we're going to stabilize the Army. We're going to stop moving people so often, we're going to stabilize posts so instead of Soldiers staying put one to three years, they stay five to seven years. This will enable Soldiers to become part of their communities, spouses to get jobs, children to stay in schools longer. Soldiers will be happier and so will their families. As a result, our units will be stronger. I'm so delighted, because the chief of staff and I agree on that completely, and have from day one.

How can Soldiers themselves help affect the future of the Army?

Brownlee: It's a political season. Soldiers have a duty to fight. They also have a right to vote. I want to urge all of them to exercise that right. Our voting campaign theme this year is most relevant: "It's your future, vote for it!"

- Brownlee talks to Basic Combat Training Soldiers who've just completed the Sandhill Confidence Course at Fort Benning, Ga.
- During All-American Week at Fort Bragg, N.C., Brownlee presents an outstanding 82nd Airborne Division Soldier with a commemorative statue.





During a July 18 ceremony at Camp Mabry, Texas, Brownlee addresses Soldiers of the newly formed 36th Infantry Div.

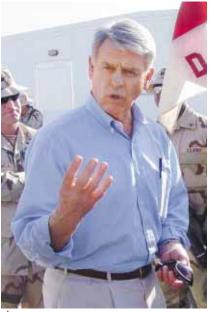
You've made many visits to **Walter Reed Army Medical Center** to talk with wounded Soldiers returning from Iraq and Afghanistan. That must have an impact on how you see your own responsibilities to Soldiers.

Brownlee: I love seeing and talking to Soldiers. I want to tell them how much the Army appreciates their service and their sacrifice, and that the Army is committed to taking care of them and their families. I want to tell their spouses, mothers, fathers and children how important the Soldiers are and how important their duty is.

I want to ensure that our Soldiers are receiving the best medical care available, and I commend our medical professionals in the field and at our hospitals for the outstanding care they provide to our Soldiers each and every day.

Why have you chosen to stay with the Army all these years?

Brownlee: I've always worked around Soldiers. They're wonderful folks to be with. They're good, honest,



Brownlee talks with Soldiers of the 2nd Brigade, 1st Cavalry Div., during a visit to Iraq.

hard-working people trying to do the right thing. They have a quality of dedication and service that I admire. And for as long as I've been around the military, I do think I understand things in a way that I can help them and be an effective advocate for issues that have a positive impact on Soldiers and their families.

What is your impression of the Soldiers serving today?

Brownlee: People who are senior NCOs and officers have spent years learning, gaining experience, becoming proficient at what they do so that when an emergency came they'd be ready. And boy, did they demonstrate how ready they were. The American people should be so proud of these people in uniform who make up our military services, because they perform so well. At one point they might be engaged in a firefight with enemies doing all they can to kill them, and that afternoon those same Soldiers will be doing humanitarian tasks to care for noncombatants.

Those who fought World War II have been dubbed "America's greatest generation." They laid down a tough standard for dedication and devotion to country. But these young folks today are going to be called "America's next greatest generation." They already are.



With sustainability and survivability in mind, AMC's engineers and scientists focus on quickly getting the right technologies into the hands of Soldiers when they need it.

Story by Tesia Williams



Photos courtesy AMC

HE war on terrorism has changed the way Soldiers fight and how the Army protects them.

Recent advances in science and technology have helped save Soldiers' lives by providing them with improved means of detecting and destroying enemy weapons. At the same time, these new technologies have decreased the number of Soldiers needed to perform certain missions, freeing up more Soldiers to fight the battles in Iraq and Afghanistan.

The Research, Development and Engineering Command, a major subordinate command of the U.S.

Tesia Williams works in the Public Communications Office at Headquarters, U.S. Army Materiel Command, Fort Belvoir, Va.

Army Materiel Command at Fort Belvoir, Va., is responsible for many of these battlefield improvements.

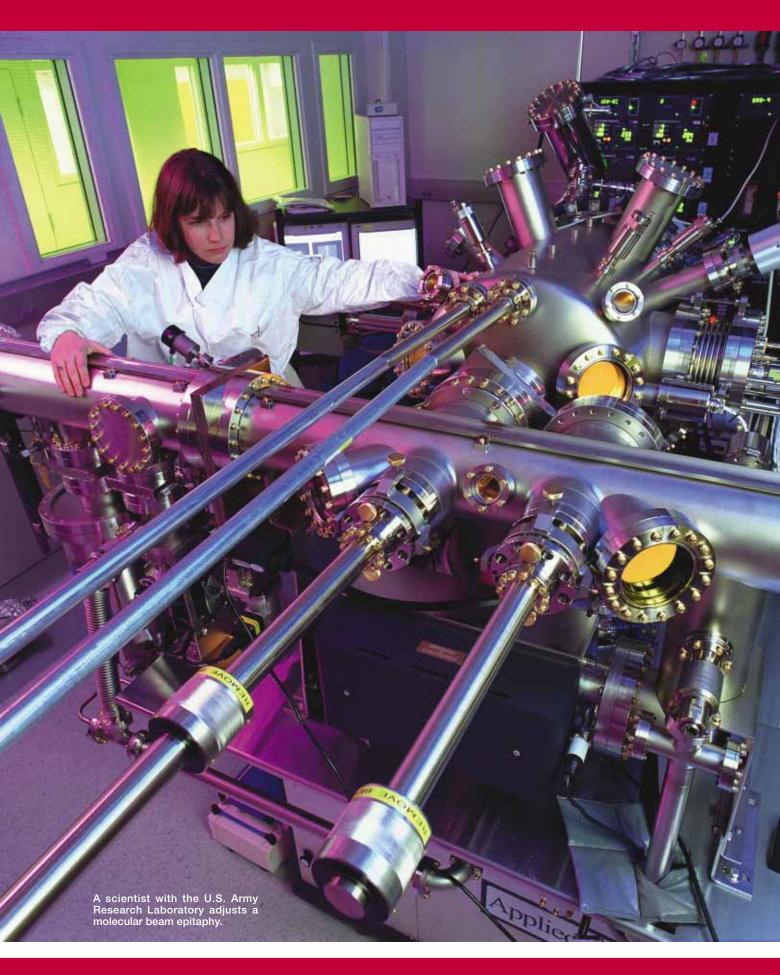
With sustainability and survivability in mind, AMC's engineers and scientists focus on quickly getting the right technologies into the hands of Soldiers.

"We used to have a five- to 10year outlook," said Jack Byers, chief of the Technology, Review and Communications Division in RDECOM's System-of-Systems Integration Office. "World events and the global war on terrorism brought our focus much closer - to get technology into the hands of Soldiers when they need it."

There was an increased urgency to arm and protect Soldiers when casualties began mounting due to

(Continued on page 14)







A Soldier inspects the squad automatic weapon pintle mount just installed on his vehicle.

Although simple in design, the SAW Pintle mount has been very useful for mounting machine guns to fend off at-

small-arms fire and the Iraqis' burgeoning use of improvised explosive devices, Byers said.

Army facilities responded to the urgency in 60 days, with the production of an Armor Survivability Kit. Soldiers can quickly install the kit which consists of ballistic glass, armored doors, windows and under plating — on their Humvees.

The requirement for 235 add-on armor kits was received in May 2003. A year later, the requirement increased to nearly 4,500. And by the end of June 2004, more than 6,600 armor door kits had been produced and shipped to Southwest Asia.

The kit weighs about 1,000 pounds and is helping to protect Soldiers on convoy operations in Afghanistan and Iraq from small-arms fire and fragmentation, Byers said.

Additionally, equipping Humvees with a device known as the Squad Automatic Weapon Pintle Mount

Assembly allows Soldiers to be more secure on patrols than they were without the devices, officials said.

Soldiers can now mount machine guns on their vehicles to fend off attacks, said Todd Richman, project manager at the Tank and Automotive Research, Development and Engineering Center's National Automotive Center.

Within five hours, the Mobile Parts Hospital team designed and manufactured two pintle assemblies that were mounted between the front and rear doors of the Humvee. Safety stops were also incorporated into the design to prevent "friendly fire" accidents, Richman said.

The squad automatic weapon kit consists of six parts, including the pintle, a tubular rectangular shaft and a swivel mechanism that allows a 180-degree turning radius. Soldiers can install the kit by simply drilling holes on both sides of the vehicle,

Richman said.

About 20 requests for the mount assembly reach AMC officials monthly. And since the original request came in during the fall of 2003, the MPH program has made additional modifications to mount SAWs on a wider variety of military vehicles, including 5-ton and dump trucks.

he growing insurgency in Southwest Asia also sped up the development of the Interceptor Multiple Threat Body Armor. Interceptor's predecessor, the Personnel Armor System for Ground Troops, commonly called the flak vest, has been widely used by troops since the 1970s. However, the new seven-pound armor is 40 percent lighter and provides more protection, due to the engineered ballistic system.





It includes an outer tactical vest and small-arms protective inserts, or SAPIs, which protect vital organs from small-arms fire. SAPI plates can be worn on the front and back of the vest for maximum protection without decreasing mobility. Further, the new armor increases protection while decreasing heat stress or causing fatigue.

The vest also includes webbing hangers that allow Soldiers to carry ammunition, water, and first-aid kits in pouches attached to the vest, eliminating the need for additional web gear, said Bob Kinney, director of the Individual Protection Directorate

- Soldiers make final modifications after installing an armored door on the driver's side of a Humvee.
- Protected by the Interceptor Body Armor and the Advanced Combat Helmet, a Soldier stands guard in the streets of Iraq.

at the U.S. Army Natick Soldier Center in Natick, Mass.

"Based on feedback we've received from the field, the armor has saved many lives," Kinney said.

"Natick is continuing to work on improvements to the body armor, such as multiple-hit capability and reduction of weight" said Kinney.

(Continued on page 16)







- A Soldier models the Interceptor Body Armor, which contains an Outer Tactical Vest system and Small Arms Protective Insert plates. The armor is 40 percent lighter and provides more protection than the flak vest.
- Two Soldiers can transport the front and rear backpacks of the Anti-Personnel Breaching System while carrying their weapons, which is an advantage over the system's predecessor, the Bangalore torpedo.
- The front and rear backpacks of the breaching system.

Since the war on terrorism began, more than 100,000 vests have been sent to Soldiers and government civilians throughout the Southwest-Asia theater, he said.

Soldiers are also receiving headgear for protection against "worst-case handgun incidents," said Fred Chan, program manager for Special Operation Forces Warrior Protection.

The Modular Integrated Communications Helmet was under development for four years before it was fielded to the Special Operations Command in January 2001. A year later, the Army adopted the Advanced Combat Helmet, which is the MICH without the communications compo-

It's a superior helmet with improved ballistic protection, comfort and fit, said Chan. It offers Soldiers better protection, without compromising their ability to see and hear what's going on around them.

ACH is one-half pound lighter than the old helmet, has a suspension system foam pad, similar to that in football helmets, and a four-point "chin strap" that helps keep the helmet securely in place.

The headgear was designed to stop 9mm bullets; however, field testing has proven that it provides protection



against AK-47 rifle fire as well, Chan said.

Roughly 50 percent of Soldiers in Southwest Asia have received the ACH under the Army's Rapid Fielding Initiative program.

ther new systems include the Anti-Personnel Obstacle Breaching System fielded in late 2002, after eight years in development. The self-contained system has been in increased demand by specialforces units because it can breach minefields or wire obstacles within a relatively short period of time.

"It allows Soldiers to conduct



deliberate or hasty breaches through enemy antipersonnel minefields and multi-strand wire obstacles," said Ranen Chatterjee, development project officer at the Armament, Research, Development and Engineering Center, or ARDEC.

The APOBS is made up of a front and rear backpack subsystem containing grenade-filled, line-charge segments; a detonation cord to ignite the grenades; a drogue parachute that provides stability during flight; and two quick connectors. Additionally, a rocket-motor assembly provides Soldiers the option to initiate the APOBS in delay or command modes.

APOBS' predecessor, the Bangalore torpedo, is 325 pounds heavier, takes significantly longer to set up, and cannot be deployed from a standoff position, Chatterjee said.

In addition, two Soldiers can set up the new system, as opposed to eight for the old system. And the team can transport the breaching system and carry their weapons at the same time.

"At the breach location, the Soldiers can open the backpacks, connect the line charges, emplace the rockets on the launch rod, aim and fire the APOBS system," Chatterjee said. "Now, they don't have to go through a minefield or encounter enemy fire."

Soldiers in Iraq have received nearly 800 breaching systems. They have also received about 600 shoulderfired munitions for use in combat operations in urban terrain environments.

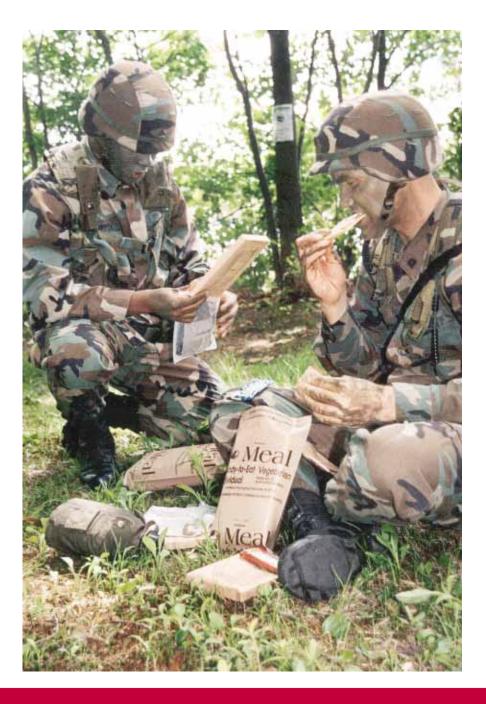
Touted as the new weapon system that provides a military operations in urban terrain capability with improved safety and survivability, the Anti-Tank for Confined Space, or AT4CS, has been widely accepted by Soldiers who appreciate that it's easy to use and accurate, said a program manager for shoulder fired weapons at ARDEC.

Research and development of the

(Continued on page 18)



- Front and back views of the Advanced Combat Helmet. which has a four-point reten-tion "chin strap" system and a suspension system foam pad similar to football helmets.
- AMC is continually working on ways to improve meals and other items used by Soldiers in the field.





AT4CS began in Sweden in the late 1980s to meet the Army's operational needs to engage targets in urban settings.

AT4CS was fielded quickly in response to the global war on terrorism, the ARDEC official said.

The single-use AT4CS weighs 17 pounds and is just over three feet long. It can be used against targets up to 900 feet away from the Soldier's position inside a building, providing him protection from direct and indirect fire.

Protection against the threat of chemical weapons prompted researchers at the U.S. Army Research Office to accelerate research and development on the Agentase Nerve Agent Sensor.

The sensor is a self-contained, hand-held device that consists of two specially formulated polymers within an applicator device. The device, which senses nerve agents, can be pressed against a surface to initiate a series of chemical reactions, said Dr. Stephen Lee, basic-research manager at ARO.

"The color-developing polymer layer contains a sensitive indicator that changes color from yellow to red/ orange within two minutes in the presence of nerve agents," Lee said.

Fielded in February 2003, the nerve-agent sensor can detect many chemicals that conventional sensors cannot, Lee said.

The components of the Agentase Nerve Agent Sensor include a self-contained, hand-held device that comprises two specially formulated polymers within an applicator.

The sensors can detect less than one microgram of nerve agent, even if a moderate amount of antifreeze, ethanol, diesel fuel, gasoline, cleaning products or seawater is present on the testing surface, he said.

Also, the extreme temperatures of Southwest Asia have not hampered the system's operating ability.

The Army has purchased more than 1,500 nerve-agent sensors, which are deployed overseas.









oldiers downrange are also benefiting from the new lightweight, long-life BA-8180 zincair battery, which reduces the weight they carry and extends the amount of time they can operate surveillance and communications equipment.

"Historically, primary zinc-air battery technology, in a form suitable for battlefield missions, was not available," said Dr. Terrill Atwater, leader of the material science team in the Integrated Battle Command Directorate at the Communications-Electronics Research, Development and Engineering Center. "Development efforts at CERDEC were focused on establishing a zinc-air battery capable of powering dismounted missions."

Originally intended for use in space shuttles, the BA-8180 provides five times the strength, with half the weight, of five commonly used BA-5590s, ultimately saving the Army money and reducing the weight

Dr. Jiang Liu, a scientist at AMC's Army Research Laboratory in Adelphi, Md., tests an optical link that will be able to carry the data rate of transmission up to the THz range, thus enabling the Soldier to acquire battlefield information faster, with lighter equipment and less power consumption.

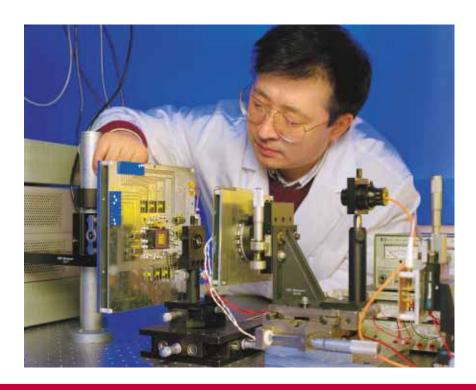
burden on Soldiers.

The zinc-air battery is one-third the size, half the weight, and half the cost of its predecessor, Atwater said. However, as with any other technology, the battery has disadvantages as well.

"It's an 'air-breather,' meaning it requires air to operate and won't work in air-tight areas. It doesn't work well in extreme cold either," he said. Nonetheless, the ultimate reward comes when Soldiers who are going

into dangerous areas don't have to replace inoperable batteries, because the BA-8180 lasts up to one week.

Scientists and engineers put these systems in the field so Soldiers today can reach their objectives more quickly and safely, and with greater agility. And so that they can attack an enemy with great ferocity and win the battle quickly, Byers said.









- Soldiers in Iraq prepare to deploy a small robot to check out a suspect object along a road.
- The REF has helped keep Soldiers out of harm's way by providing them with such devices as the Advanced Robotic Controller.

Faster Equipping U.S. Forces Story by Heike Hasenauer

HILE Soldiers in Afghanistan were shimmying down well shafts using ropes and grappling hooks, and crawling through caves looking for weapons caches and holed-up Taliban fighters, three people at a then-experimental Fort Belvoir, Va., office set about finding a better way for the deployed Soldiers to do business.

What began as an experiment in August 2002 today puts critical new technologies into the hands of Soldiers in Iraq and Afghanistan in record time, said Frank Phillips, a spokesman for the Rapid Equipping Force.

Today the REF consists of Soldiers, civilian employees and contractors. Some of them make up operations teams that are frequently deployed with U.S. forces in harm's





Since Operation Enduring Freedom began, the REF has fulfilled at least 50 requirements for items needed by units in Iraq and Afghanistan.

The WellCam, one of the REF devices now in the field, allows wells and caves to be examined remotely, thereby reducing the risk to individual Soldiers.

way — to learn first-hand what commanders and their troops downrange need and want.

"We now have teams with every Army division in Iraq," said REF deputy director Paul Stoskus.

Acquisition teams back at Fort Belvoir then hasten to get new technologies to the troops within 90 days, as opposed to several years, Phillips said.

Getting an entirely new weapon system into the field typically takes seven years, said COL Bruce Jette, REF's director, and one of four REF members who have been awarded the Bronze Star for their service in a combat zone.

Because REF items incorporate technologies already available off the shelf, REF can get new equipment into the field in a fraction of the time.

Equipping Soldiers Downrange

Since Operation Enduring Freedom began, the REF has fulfilled at least 50 requirements for items needed by units in Iraq and Afghanistan, Stoskus said.

Those items include everything from JLENS — an aerostat-borne, 360-degree surveillance device that REF facilitated through the JLENS program manager — and the Packbot, a robot that checks out potential



Packbots were developed as a way to uncover weapons caches and assist with explosive-ordnance disposal and search and rescue.

explosive devices and relays information back to a controller.

In Afghanistan, during four combat patrols, Packbots helped clear 34 caves, buildings and compounds, said Jette.

The Program's Beginning

In June 2002, when U.S. Soldiers in Afghanistan were searching wells and remote mountain caves using the old-fashioned method of rope and grappling hook, then Army Vice Chief of Staff GEN John M. Keane visualized a safer and more efficient way of doing the job.

He contacted Jette, then an adviser to the Army staff on technology and

acquisition.

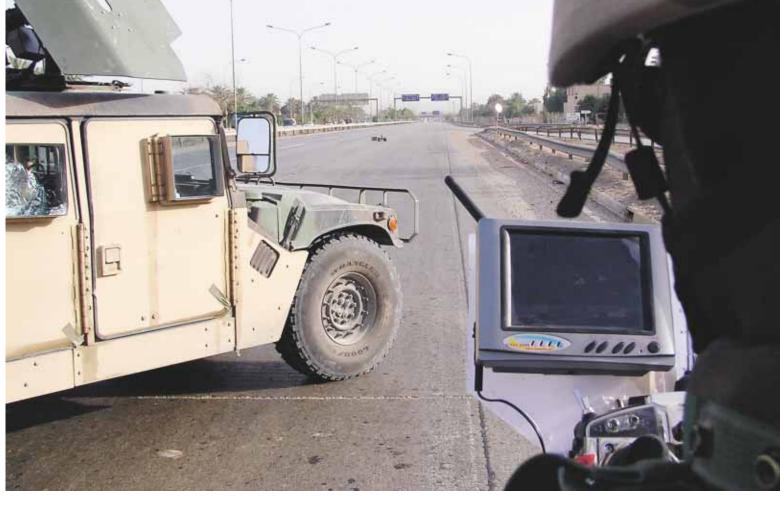
Keane was able to procure \$2 million in summer 2002 to support the new equipping venture and the three contractors who rounded out a program then called Rapid Integration of Robot Systems.

Jette procured an iRobot that had been developed by the Defense Advanced Research Projects Agency for potential use in explosive-ordnance disposal and search-and-rescue operations. The briefcase-sized device was easy to use and already in the Army inventory.

He then traveled to Afghanistan to demonstrate to Soldiers how the device, with integrated cameras, could be used to uncover weapons caches, Stoskus said. Within 45 days, Soldiers were taking the newly dubbed "Packbots" — so called because they're man-portable — into caves to look for weapons.

Getting away from the concept of fielding is key, said Jette.

"A program manager must field things," Jette told National Defense magazine in February 2004. "Fielding is a laborious process that yields a technology suitable for any unit and is capable of working in any environment. The process yields some pretty rock-solid equipment, but it is not a very rapid process."



Other

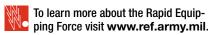
REF items now in the hands of Soldiers

- The FN303 Non-Lethal Weapon, which shoots paint pellets at potential aggressors and marks them with ink to help with future identification or apprehension;
- WellCam, a remote video system that precludes Soldiers from having to climb into wells and caves in search of weapons caches;
- electronic translators that emit voice commands in Pashtu and Arabic;
- lock shims that allow Soldiers to open padlocks, as is necessary during intelligence-driven home searches, without destroying locks and doors;
- a hand-held thermal viewer for close-up images of forward sites;
- electronic countermeasures, installed on Humvees, to jam frequencies the enemy is most likely to monitor;
- "Jaws of Life" emergency extraction/ rescue equipment sets used to free victims of aircraft and vehicle crashes; and
- · cables and power-supply adapters used by engineers in Afghanistan to feed power to computers and other electrical devices from the SINCGARS radio battery, after the battery no longer has sufficient power to run the SINCGARS.

A robot sends images of a suspected IED on an Iraqi street back to Soldiers waiting a safe distance away.



A Soldier in Iraq uses a thin, lightweight robot known as an ODIS to conduct an under-vehicle inspection.







Military Housing:



The community centers in RCI developments give families a place to gather.





(Above and left) New housing communities under the RCI program — such as the homes at Fort Meade, Md. — offer a hometown atmosphere with such amenities as community centers and property-management teams.

Story by Beth Reece
Photos by MSG Lisa Gregory

OST Soldiers have learned not to be picky about on-post housing, but some have recently discovered that the choices open to them are increasing. Favor one floor plan over another? Want to choose your neighbors or reside close to jogging trails? Go right ahead.

"We want Soldiers and their families to be happy about their living arrangements. Their wants matter to us," said Don Spigelmyer, director of the Residential Communities Initiative program.

The Military Housing Privatization Initiative Act lets the Army build partnerships with private-sector developers that have the money and mastery to manage and improve family housing. The result: better living conditions for Soldiers and their families.

"This is the best thing that's happened to family housing in the history of the military," Spigelmyer said. "No longer do we have to depend on unpredictable funding to repair and replace housing units."

The RCI program currently includes 84 percent of Army housing, or almost 71,000 housing units, at 34 installations all slated for privatization by 2007. Soldiers and families are already settling into new homes built on such posts as Fort Hood, Texas; Fort Carson, Colo.; Fort Lewis, Wash., and Fort Meade, Md.

Features of new housing include expanded living and storage areas, rooms that accommodate modern furniture, and neighborhoods with on-site maintenance teams and recreational facilities.



"I'm really impressed with our new house and the community it's in," said SGT Derwin Kitt, who moved into new housing at Fort Meade with his wife and three children last summer. "It's definitely a step above anything I've lived in before."

The Army takes a back seat in the RCI partnership, although it stays involved in major decisions. Developers maintain daily operations for their 50-year property leases.

Spigelmyer said the arrangement is working well so far. Soldiers and families get housing at private-sector standards, the Army gets world-class work, and developers get involved with the nation's military.

Changing for the Better

At the time Congress passed the housing-privatization legislation, 70 percent of the Army's inventory was inadequate, Spigelmyer said.

"We had a \$7 billion backlog in maintenance and repair, and that's a conservative estimate. There was no way we were ever going to get that amount of money through appropriated funding," he said.

Developers' main source of



revenue for building and construction is Soldiers' rent, which comes from the Basic Allowance for Housing. When construction is complete, developers place a portion of the Soldiers' BAH in interest-bearing accounts for future repairs and maintenance.

"Houses we renovate now will probably need to be replaced in 10 or 15 years, and the houses being built now will need renovations by then. The goal is to place housing on a sustainable basis," Spigelmyer said.

As Soldiers become accustomed to paying rent, developers will be pushed to satisfy customers. After all, Soldiers who aren't happy with on-post housing are free to take their BAH to off-post neighborhoods.

Most new construction so far has been on town homes for juniorenlisted Soldiers. And renovations on previously existing homes have been equally as popular as the new units,





(Both pages) Spacious living areas, modern designs and updated appliances are among the features of RCI housing de-

said Ivan Bolden, RCI's program manager for policy.

"Renovated quarters at Fort Hood, for example, are more popular than the new versions. They're gorgeous, and have a lot of character," he said.

While Soldiers are eager for changes, they won't happen overnight, Spigelmyer said. "There are going to be 'haves' and 'have nots' while we're going through the process. It usually takes five to 10 years to complete the initial-development period."

Community Atmosphere

More than just home improvement, RCI is an introduction of residential

communities and hometown atmospheres to military installations.

"New urbanism is big in the private sector right now. Our developers are keeping that in mind and bringing what's popular onto installations to replace the old military feel," said Rhonda Hayes, deputy director of RCI.

Each housing development will have a community center as a focal point for property management and maintenance teams, and give families a place to gather.

"This is definitely one of the biggest pluses," Kitt said of the center in his new neighborhood. "Everyone in the main office is there to help, and the clubhouse — which is just a short walk away — gives families a new place to go and get away from stress."

The ideas of such installation agencies as the Morale, Welfare and Recreation Division, and Army and Air Force Exchange Service are being integrated into the communitydevelopment process. And families also get a say in what they want. The result: tot lots, jogging trails, dog parks, and even swimming pools are planned into the neighborhood instead of being constructed as an afterthought or located elsewhere on post.

Residents to Pay Utility Costs

N an effort to encourage energy conservation by the residents of privatized housing, the Army will soon implement a utility plan that calls for RCI installations that have built new homes, or have totally renovated and metered homes, to inform Soldiers of their utility consumption.

The plan will begin by early next year with a one-year mock-billing period. The mock billing serves two purposes: It provides the project with an accurate baseline utility usage figure for the homes, and it informs the Soldiers whether they are above or below the "typical" utility consumption for that type of home.

Residents of privatized housing will begin paying utility costs for electricity, gas and heating oil by the end of 2005.

"Residents will have the chance to see how much energy they're using and make improvements if necessary before we actually start charging them," said Don Spigelmyer, director of the Residential Communities Initiative. "Soldiers need to start thinking about energy conservation just as if they lived off post."

After the mock billing ends, Soldiers will start receiving bills that compare their actual utility usage with the baseline. Those who have conserved utilities will get a rebate, while those Soldiers who have consumed more than the average will be expected to pay the difference. — RCI Office

"These things aren't that novel in the civilian sector, but they're new to military installations," said Spigelmyer.

RCI supports the Army's goal of making installations serve as flagships, one of the Army's 16 focus areas. The program gives commanders the freedom to focus on their units' missions, rather than post facilities.

"This is just as important as developing new equipment," Spigelmyer said. "Taking care of families and making sure they have good housing helps support that goal."

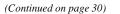




Training Troops for Deposition of the Photos by Heike Hasenauer

CONVOY of Soldiers cautiously approaches a village in Iraq. They've been briefed that the local people are hostile, and to be prepared for attacks.

There's only one way in and out of town — along route Yamaha. Their mission is critical; they must clear the route to the local hospital and police station, to allow followon troops to bring in supplies.





A 75th Division trainer looks on as reserve-component Soldiers move in to clear a building at Fort Hood's St. Elijah MOUT site.

Pitfalls in the Village

In the distance, trash burns in rusted barrels by the roadside and spills from the burned-out hulk of an old bus. Even before the lead vehicle in the convoy reaches the perimeter of dilapidated



concrete buildings, an improvised explosive device, or IED, detonates. And the Soldiers are distracted by the smoke, the trash and the loud blare of mournful Arabic chants that pour from loudspeakers and permeate the thick afternoon air.

The eeriness is bone chilling.

Within moments, the first vehicle rounds the

street corner, and a mob of angry men and women threatens to harm its passengers. The would-be attackers shake signs, warning: "You will die here," and "Go home. We don't want you here."

The Soldiers keep watchful eyes on the crowd, but they must focus on the road ahead, because IEDs could be set up virtually anywhere.

Nerves are further tested as dozens of villagers gather behind the open windows of the two- and three-story buildings, craning their necks to keep the Soldiers in sight. Every shadow is a potential killer toting a rocket-propelled grenade or AK-47 automatic weapon.

The events are not unlike those faced daily by Soldiers in Southwest Asia. The difference is that in Iraq and Afghanistan, Soldiers have little time to sort through options. They must react instinctively, based on skills the Army has taught them.

Training Support Divisions

Training Soldiers to stay alive in hostile environments is the mission of the Army's training support divisions, among them the 75th Division, part of Fifth U.S. Army at Fort Sam Houston, Texas.

Before reserve-component Soldiers can be considered ready to deploy to Iraq and Afghanistan, they must undergo four months of mission-specific training geared toward real-world threats, said MAJ Wayne Marotto, the division's public affairs officer.

For the division's trainers, that's meant training some 40,000 reserve-component Soldiers since January 2003, on everything from Abrams tank and Bradley fighting vehicle gunnery to motorized route reconnaissance and convoy operations.

Each day at the St. Elijah MOUT (military operations in urban terrain) site at Fort Hood, Texas, the division's Soldier-trainers stage scenarios like those described above.

"We put them through every weapontraining event you can think of," Marotto said. Numerous training scenarios present potential operational problems, such as hostile forces,

IEDs and irate civilians.

The role of the division's opposing forces is to wreak havoc on the troops, said SSG Martin Lawrence, a member of the OPFOR who also acts as an observercontroller.

Some 300 Texas residents from the Killeen area, outside Fort Hood, have been hired by the Army to play the angry locals.



Lessons Learned

"We incorporate training events based on lessons learned and real-time reports coming in from Iraq and Afghanistan," Marotto said. "The Iragis recently put an IED in an animal carcass. So now we simulate that in our training."

Another lesson learned in Iraq is that "Iraqis saw our combat service support guys as 'soft' targets in unprotected Humvees," said LTC John Siggelow, deputy commander of the division's 2nd Brigade. "For a long time, these CSS Soldiers weren't taught aggressive tactics. We've learned that if they're aggressive when they're approached by hostile Iraqis, the Iraqis will back off."

LTC Steve Williamson, a battalion commander in the division's 2nd Bde... said: "Training lanes are constantly changing, based on the most up-to-date information we receive. Today we might teach one way. Three weeks from now, we'll teach another way.

"Today, the enemy is using dummy IEDs," he said. "They'll watch us react and then hit us with sniper fire. So, in training, the Soldiers are taught to look up."

When the Iraqis started using cell phones and ignition systems to ignite IEDs, the British and Australians used localized jammers to jam the radio or telephone transmissions that the Iraqis were using to ignite the IEDs, Williamson said.

"The Iraqis have figured that out," Williamson said. "That's the difficulty we're facing; they're always changing their methods."

"After the first Gulf war, Congressional legislation created Training Support XXI, to ensure reserve-component Soldiers would be ready to deploy to combat if needed," said BG Walter Zink, 75th Div. assistant division commander.

"Today, we have a more robust training plan for reserve-component Soldiers than we did during the first Gulf war," Zink said. "Even before National Guard and Reserve Soldiers are called to active duty, their proficiency is higher than it was then."

Before reserve-component Soldiers can be considered ready to deploy to Iraq and Afghanistan, they must undergo four months of mission-specific training geared toward real-world threats.

The TSDs' Responsibilities

Once the TSD is called up, it provides specialized training to units within its jurisdiction, based on the unit's mission, Zink said.

Two training support divisions within Fifth U.S. Army the 75th Div., from Texas, and the 91st Div., located

near Sacramento, Calif. — are responsible for training reservecomponent units located west of the Mississippi River. First U.S. Army's

78th TSD is responsible for training Reserve and National Guard units east of the Mississippi River.

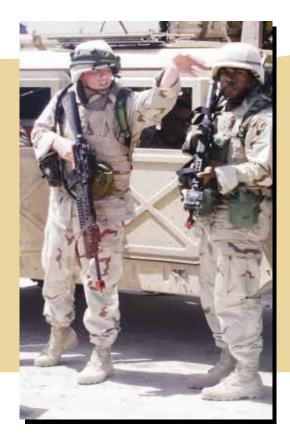
The 75th Div., composed of some 4,000 active and reservecomponent Soldiers, was activated in January 2003 to train Soldiers for combat, said Zink.



Training Focuses

Ever since Soldiers of the 507th Maintenance Battalion were ambushed in Iraq, training has focused on preparing every Soldier to be a rifleman first, whatever his or her MOS might be, Zink said. "We've also enhanced training in the law of war and the Geneva Conventions for all Soldiers."

Additionally, the 75th Div. trains Soldiers scheduled to deploy to the Balkans, Sinai and other locations.



Ensuring the Best Training

Each of the four brigades within the 75th Div. is responsible for a specific portion of the training. And each Soldier in each brigade is considered a subject-matter expert in his field, Marotto said.

In fact, the observer-controllers, who follow practically every action and every response Soldiers make in training, must undergo proficiency tests and be validated as O/Cs by a board within the 75th Div. Ultimately, every trainer, in every training lane, is O/ C-qualified in either combat or CSS missions, Marotto added.

To further ensure Soldiers get the best training, the division's active-duty Soldiers typically provide the training for combat-arms Soldiers, and its reservists train CSS Soldiers in preparation for deployment.

LaARNG Training Challenges

Recently, Soldiers from the Louisiana Army National Guard's 256th Brigade Combat Team, which will deploy to Iraq this fall, underwent the rigorous training program at Fort Hood.

Typically a heavy mechanized brigade with Abrams tanks and Bradleys, the 256th will function as a

> motorized brigade in Iraq, "so they had to learn a whole new set of skills and be validated on those," said Siggelow.

"The unit not only had to switch from tanks and Bradleys to Humvees, but they had to undergo a massive reorganization," he said. "The weapons training alone was substantial, because they'll be using crew-served weapons mounted on their Humvees in Iraq." They have never used those before.

"And, the unit had to become 'digitized' so it could interface with the 1st Cavalry and 3rd Infantry divisions," Siggelow said. That requires entirely new thought processes.

While digitization isn't new to the Army, it is new to some reserve-component units that have not had the advantage of using the latest equipment, said COL Al Dochnal, commander of the 75th Div.'s 2nd Bde.



Trainers Also Far From Home

"We plan, schedule and conduct the training," said Siggelow, "and ensure all the training resources are available when units get here."

The trainers have themselves been on active duty — away from home, loved ones and regular full-time jobs — for as long as 18 months, Siggelow said.

Besides training Soldiers in the United States, 75th Div. trainers are in Afghanistan, training soldiers for the Afghan National Army, and in Iraq, training Iraq National Army troops, Marotto said. "That's normally a special-forces mission."



"I signed up to serve my country, and I'm ready to help rebuild Iraq so the people there can feel a little bit of the freedom we enjoy."

Providing Training and Equipment

At the end of each training event O/Cs conduct an after-action review to inform the Soldiers about what they did well and what they can do better before they go overseas, said Williamson. "It's not sugar-coated. If they messed up, we say so."

While at Fort Hood, Soldiers of the 256th, and other National Guard Soldiers, were issued some of the Army's newest equipment, including improved hot-weather desert boots, improved Kevlar helmets and ballistic goggles through the Army's Rapid Fielding Initiative program [see related story].

SPC Shelley Landry, a civil-affairs Soldier with the Louisiana Army National Guard, and

> SPC Tracy Tesch, a communications specialist in the Minnesota National Guard, were among a group of Soldiers who modeled some of the new equipment.

It included the CamelBak hydration system, a personal "air-conditioning" system; improved body armor; boots and Kevlar.

"We've received a lot of really excellent training," Landry said. "Most important of all, because of the threat in Iraq, has been

training on IEDs.

"I'm excited to be going to Iraq, where I can do some good," she said. "I signed up to serve my country, and I'm ready to help rebuild Iraq so the people there can feel a little bit of the freedom we enjoy."

When the Louisiana Guard Soldiers complete training, the Texas Guard's 56th Brigade Combat Team of the 36th Inf. Div. will take its place. And the Soldier-trainers of the 75th Div. will continue their mission training thousands of new Soldiers for the uncertainties of a hostile world.



Soldier as a Sys

Story by Heike Hasenauer

EW technologies have resulted in the most significant transformation of Soldiers in half a century, said Debi Dawson, a spokeswoman for Program Executive Office Soldier, at Fort Belvoir, Va.

PEO Soldier was created in November 2001 as the single acquisition office responsible for providing Soldiers what they need in war and peace, today and in the future, Dawson said.

PEO Soldier tackles that mission by considering the Soldier as a system — much as major weapon systems, including tanks and aircraft, work as systems and are integrated with other systems to achieve the utmost benefits.

By treating the Soldier as a system, the Army — through PEO Soldier — can increase Soldiers' effectiveness, decrease their loads and allow them to adapt to requirements of varying missions, Dawson said.

PEO Soldier encompasses 350 programs and their project offices, allowing it to provide countless items to Soldiers. These run the gamut from night-vision devices, lasers, sensors and miniature displays to crew-served weapons, man-portable range finders and the Army's new combat uniform, which will be fielded to deploying units starting in April 2005.

tem

An example of the many individual entities under PEO Soldier is PM Soldier Warrior.

That project management office alone heads Air Warrior, Land Warrior and Future Warrior programs, and is working to develop the Mounted Warrior Soldier System designed to improve the combat effectiveness of armored vehicle crews.

Air Warrior focuses on enhanced comfort and safety for air crews. Land Warrior — the first system that includes everything an infantry Soldier wears or carries — works to integrate Soldiers into the digital battlefield and improve their awareness of battlefield events.

And Future Warrior focuses on systems for the Soldier in the future, such as Soldier-worn power sources, networked communications and head-totoe individual protection.

PEO Soldier's Rapid Fielding Initiative

The Rapid Fielding Initiative stood up in 2002, in response to lessons learned from the first Gulf war, said RFI director LTC

Thomas Bryant. The initiative consists of 49 items that provide the most up-todate equipment to Soldiers.

To date, more than 80,000 Soldiers have benefited from the equipment, said Bryant, and another 52,000 are scheduled to receive the new equipment by the end of this fiscal year.

"Our Soldiers are being outfitted with the best gear in the world right now," said COL Al Dochnal, commander of the 2nd Brigade, 75th

> Division, one of the brigades that trains Soldiers in preparation for their deployments to Iraq and Afghanistan.

Some things about the Soldiers' deployment are certain, said Bryant. They'll

have had the best possible training before they go and state-of-the-art equipment designed not only to provide them more comfort but protect them from

harm at the same time.



Among the 49new items are:

- Lightweight Shotgun System;
- Advanced Combat Optical Gun Sight;
- M-24 Mini Binoculars:
- Advanced Combat Helmet and cover;
- Improved Hot Weather Desert Boot;
- Hydration system;
- Silk-weight underwear;
- Modular Lightweight Load-Carrying Equipment accessories;
- Fiber-optic viewer;
- Assault ladder with backpack; and
- Knee and elbow pads.

Sharp **Shooters**

In September 2003 the Minnesota
Army National Guard's 2nd Battalion,
136th Infantry Regiment, joined the
Multi-National Brigade North as part
of Stabilization Force 14 in BosniaHerzegovina. Here, SFC Clinton
Wood of the Minnesota Guard's
135th Mobile Public Affairs
Detachment shares some of his
images of the battalion's SFOR
activities.

Mail photo submissions for Sharp Shooters to:
Photo Editor
Soldiers, 9325 Gunston Road, Ste. S108
Fort Belvoir, VA 22060-5581.
Digital images should be directed to:
lisa.m.gregory@us.army.mil.
All submissions must include an introductory paragraph and captions.



Sabahudin Majicic gets a ride on the shoulders of SGT Chet Gilbert at the Selo Mira "peace village" near Tuzla.



▲ 1SG Gary Metcalf and other 2nd Bn. Soldiers listen to preflight instructions before flying from Bosnia to Kosovo in March.

▶ UH-60 Black Hawks run up their engines at Eagle Base, Bosnia, before an early morning troop-lift mission.





▲ Soldiers of 2nd Bn. move toward the C-130s that will carry them from Bosnia to Kosovo.



ArmyHistory in October

eyond its role in defense of the nation, the Army and its Soldiers have contributed to medi- $\mathcal I$ cine, technology, exploration, engineering and science. The milestones listed in this monthly chronology offer only a small glimpse of that proud story of selfless service. It is also your story.

1759 — Rogers' Rangers attack the Indian village of St. Francis, Quebec, then begin the long march back to New England. The return takes nearly a month, and nearly half of Rogers' men die on the way, many from starvation.

1777 — Battle of Bemis Heights, N.Y., Oct. 7. Although ordered out of the fighting by MG Horatio Gates, BG Benedict Arnold assumes command of the American left flank and captures two British positions. Gates proposes court-martial charges.



1779

Army General Orders of Oct. 2 establish blue as the basic color of the Continental Army uniform and specifies trim colors for specialized units.

1802 — Joseph G. Swift and Simon M. Levy, the first graduates of the new U.S. Military Academy at West Point, N.Y., are commissioned on Oct. 12 as lieutenants in the Corps of Engineers.

1803 — The Corps of Discovery for territories of the Louisiana Purchase begins to take shape as CPT Meriwether Lewis swears in the first nine enlisted members.

1861 — The Battle of Ball's Bluff. On Oct. 21, Union forces cross the Potomac River near Leesburg, Va., but are driven back.

1867 — At Sitka, elements of the 9th Infantry and 2nd Artillery regiments accept possession of Alaska from Russia on Oct. 8.



1898

On Oct. 7 the Army changes from its traditional two-tone blue woolen campaign uniform to a khaki field uniform.

1900 — On the Philippine island of Luzon, rebels ambush members of the 28th U.S. Volunteer Inf. on Oct. 21.

1909 — The first solo flights by the Army's original pilots, LT Frank P. Lahm and LT Fredric E. Humphreys, occur on Oct. 26, from a field in College Park, Md. Each flight lasts approximately three minutes.

1918 — On Oct. 2 elements of the 308th and 307th Inf. regiments are cut off in the Argonne Forest, but refuse to surrender. The "Lost Battalion" holds for five days before relief arrives.

1939 — On Oct. 1 Fort Humphreys in Washington, D.C., becomes the Army War College. After World War II the post's name is changed to Fort Leslie J. McNair.

1942 — The 164th Inf. Div. arrives on Guadalcanal Island on Oct. 13 to reinforce the Marines in battle against the Japanese. The Soldiers quickly go into action near Henderson Field.

An officer of the Army History Foundation and co-author of "The Soldier's Guide" and "The Army."



1943 — On Oct. 27 the War Department establishes the Combat Infantryman and Expert Infantryman badges.

1944 — On Oct. 5 the 9th Inf. Div. launches two regiments into Germany's Hürtgen Forest, approaching key objectives commanding the Röhr River dams.

1950 — On Oct. 9 the U.S. Eighth Army's I Corps, led by the 1st Cavalry Div., crosses the 38th Parallel near Kaesong and advances north towards Pyongyang, the North Korean capital.

1951 — The Battle of Heartbreak Ridge. On Oct. 15 the 2nd Inf. Div., supported by South Korean units and a French battalion, seizes the ridge but suffers nearly 3,700 casualties in the process.

1956 — In response to the Hungarian Uprising, the 6th Armored Cav. Regt. is placed on alert on Oct. 23, and deploys along the East German border.

1962 — On Oct. 12 President John F. Kennedy authorizes specialforces Soldiers to wear the green beret.

1965 — The 1st Inf. Div. arrives outside Saigon, South Vietnam, on Oct. 2.

1967 — On the Imjim River, Oct. 7, a patrol boat from the 2nd Inf. Div. is attacked by North Korean raiders.

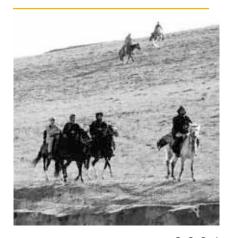
1970 — In Thua Thien Province, the 101st Airborne Div. completes the last major U.S. ground operation of the Vietnam War.

1993 — On Oct. 3 MSG Gary Gordon and SFC Randall Shugart are killed in their attempt to rescue Soldiers shot down in a fire fight in Mogadishu, Somalia. Each man is later awarded the Medal of Honor.

2000 — The black beret becomes the standard Army headwear. Rangers adopt a tan beret as their distinctive headwear, specialforces Soldiers continue to wear green and airborne Soldiers continue to wear maroon.

2001 — Operation Enduring Freedom begins on Oct. 7. The mission is to seek out and destroy terrorist camps and infrastructure within Afghanistan, capture al Qaeda leaders and remove the Taliban regime.

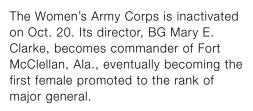
2002 — On Oct. 2 the U.S. Total Army Personnel Command and the Reserve Personnel Command merge into the U.S. Army Human Resources Command. Three days later the U.S. Army Civilian Human Resources Agency is established.





For more about Army history, go to www.ArmyHistoryFnd.org and www.Army.mil/cmh.

1978





Lifestyles



FREE TO NATIONAL GUARD AND **RESERVE SOLDIERS**

THE National Association of Child Care Resource and Referral Agencies has launched Operation Child Care. The program offers free care for the children of National Guard and **Reserve Soldiers returning for** two weeks of rest-and-recuperation leave from Iraq and Afghanistan.

Child-care providers who meet state and local child-care regulations will provide four or more hours of free child care. so that Soldiers can attend to family business or take their spouses out on dates. Operation Child Care was designed

for Guard and Reserve Soldiers because they don't typically have access to the military family support programs available to active-duty personnel.

Guard and Reserve Soldiers with leave orders can access **Operation Child Care services by** calling NACCRRA's national Child Care Aware hotline at (800) 424-2246, or by visiting its Web site. Soldiers will be connected to their local child care resource and referral agency. then linked to participating child-care providers.



Visit the Web site at www.ChildCareAware.org.

THE LURE OF HYBRID CARS

IS the cost of gas keeping you off the roads? Consider a hybrid electric car.

Running on a combination of rechargeable batteries and a conventional fuel engine, hybrids deliver excellent mileage that can add up to considerable savings if most of your driving is done in stop-and-go traffic. Hybrid batteries are designed to last the lifetime of the vehicle, and are covered by eight- to ten-year warranties by their manufacturers.

Hybrid-car owners may qualify for tax deductions of up to \$1.500 for vehicles purchased in 2004, and \$1.000 for those purchased in 2005. Some states also offer tax credits.

Hybrids are currently sold by Honda and Toyota, with Ford just entering the market, and General Motors and Lexus soon to follow.



Get more info on hybrids from the Department of Energy at www.ott.doe/gov/hev/hev.html.



All drivers can boost mileage by following these tips:

- Drive slower;
- Maintain a constant speed;
- Avoid abrupt starts and stops;
- Keep tires properly inflated;
- Keep your car tuned and change the oil regularly; and
- If you drive a conventional vehicle, avoid stop-and-go traffic.

ARMY CHIEF OF STAFF'S READING LIST

FEED your mind with knowledge from Army Chief of Staff GEN Peter Schoomaker's professional reading list. The books are divided into four groups, based on Soldiers' ranks and responsibilities. They highlight Army heritage, military history and world affairs.

"I challenge all leaders to make a focused, personal commitment to read, reflect and learn about our profession and our world. Through the exercise of our minds, our Army will grow stronger," said Schoomaker.

All books on the list are currently in print and available through commercial sources. Many are carried by the Army and Air Force Exchange Service and can be found in post libraries.



Professional reading list is available at www.army.mil/cmh.



IT'S YOUR FUTURE, VOTE FOR IT

HAVE your say in America's future: VOTE. You can get the latest information on both presidential candidates before hitting the polls, Tuesday, Nov. 2.



Candidates www.georgewbush.com and www.JohnKerry.com.

COMMISSARY NEWSLETTER

STAY informed about your shopping benefits through "Commissary Connection," an e-mail newsletter featuring news and information on worldwide promotions from the Defense Commissary Agency.

The Web site also offers links to local commissary events and sales, recipes, foodsafety information, customer-comment forms and sales-floor layouts to help customers plan their shopping trips. The site also includes a link for commissary gift certificates.



Stay Connected

Customers can subscribe at www.commissaries.com.

THE Soldier's Guide, Field Manual 7-21.13, has received its most recent updates and is now available. The guide is good for Soldiers of all ranks and job specialties, and condenses key information from other field manuals, training publications, Army regulations and other sources.

Covering both general subjects and combat tasks, the contents range from history of the Army and understanding how the government works to professional development and service benefits.



Get your copy of The Soldier's Guide at http:// globalsecurity.org/military/library/policy/ army/fm/7-21-13.

THE SOLDIER'S GUIDE

Legal|Forum



USTOMERS who make purchases over the Internet often complain of receiving defective or low-quality merchandise that is something other than what was advertised. This article alerts readers to some of the pitfalls related to Internet buying, especially on auction sites, where buyers' emotions may lead them to making costly mistakes.

Security First

Those who've read the Legal Forum article "Safeguarding Your Legal Documents" or the Hot Topics brochure "Identity Theft" in the May 2003 Soldiers are aware of the dangers and recommended safeguards related to identity theft — a criminal practice that is very much alive in the large and anonymous world of Internet transactions.

For this reason, be very careful to protect yourself when making payments for online purchases. The safest payment method is by money order or cashier's

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check, rather than credit cards or authorizing the electronic transfer of funds from your bank.

Buyer Beware

Impulse buying often causes consumers to purchase items they don't need, or to pay too much for items available from other sources. Nowhere is the practice of shop-

> ping around more important than on the Internet, because the selection is so great and there are so many sellers looking for your business.

> Buying on impulse can also lead to getting caught in a bidding war at an auction site or a failure to consider other factors of a sale, such as the value of add-on purchases or cost of shipping.

> Bidding frenzy can also lead some buyers into unwise purchases as they react to higher and higher bids by going beyond their own limit just to "win" an item they could easily do without. It's important, once

you've done your homework, to set what you think is a fair value on the item you want to purchase, and don't bid beyond that amount.

Uninformed buying may cause a customer to buy products that are inappropriate for his needs or below his expectations. For expensive items such as electronic devices it's often wise to study consumer publications before making a purchase and determine when to buy an item as new products come on the market and prices begin to drop.

When shopping for bargains at an online auction site, it is just as important to know the products you're bidding on. For example, a collector of model trucks wouldn't make a purchase based on a picture alone. An informed buyer would also want to know the manufacturer, scale, whether the model is plastic or die cast, and possibly the model's series number and production year.

Seller Practices

"Puffing" by the seller is a practice that often leads a customer to make a bad purchase. Words like "unique," "rare," "vin-

> ** tage" or "limited edition" are often calculated attention getters used to make a sale, and they are so open to interpretation that the buyer would be unsure what he was purchasing.

Seller inaccuracies are a more deliberate de-

ception used to entice buyers. But clever sellers are likely to couch their inaccuracies in language that offers them some protection. For example, the seller may say, "I'm no musician and don't know anything about this saxophone, but it appears to be in mint condition." Unfortunately, this and similar phrasing is all too common at sites where customers must bid against each other, often pushing the price far above the article's value.

Shipping and handling costs should also be figured into the cost of each purchase, since these added expenses can push

an item's price above its value. Some of the expenses to consider are the cost of money orders required by some sellers, insurance, sales taxes and "handling" fees. Buyers should negotiate shipping modes, since they pay for the more costly "priority mail"

and "tracking" used by many sellers. Purchases made outside the continental United States normally involve foreign-exchange rates, with added shipping and international money order costs tacked onto the price.

Buyer/Seller Transactions

Seller

Remember, however, that these observations are not made to discourage people from visiting Internet auction sites and bidding on merchandise either to save a few dollars or for the pleasure of acquiring a wanted "treasure." Just as customers may not Treasure know the value of an item if they

haven't done their homework, sellers often are unfamiliar with the items they sell and may offer them below their true market value.

The best way for buyer and seller to be equally satisfied with their transaction is through communication. Simple questions and answers between the two parties can eliminate most inaccuracies and permit reputable sellers to revise their incomplete or incorrect listings.

But to keep from being burned by your next Internet purchase, be sure you know the return policy of the seller you're dealing with, and by all means return any item that doesn't meet your satisfaction. Most reputable sellers value their customer ratings and will try to avoid negative comments that may affect their future business.

The Final Word

Look before you leap. Judicial remedy is rarely available in most Internet sales, because buyer and seller usually reside in different states where there are differing laws governing commerce. But Web-based purchases are safe if buyers educate themselves about products, take the time to comparative shop and clarify any doubts by communicating with the seller before buying.





Charm of the Cinque Terre Story and Photos by Heike Hasenauer

It's an area ideal for hiking, swimming, boating and meeting the people who live in a seemingly bygone era, where there are no highways, high-rise hotels or sprawling shopping malls, and few cars and tacky tourist shops.

ARLY autumn is the best time to visit an area in northern Italy known as the Cinque Terre, or "Five Lands." By then the throng of tourists has died down, as has summer's heat.

Located about 130 kilometers south of Genoa, the Cinque Terre's five small villages — each with its own old-European charm — are nestled on the sides of mountains whose sheer cliffs rise from the depths of the Ligurian Sea. Centuries-old footpaths connect the villages and wind through vineyards, olive groves and orchards.

It's an area ideal for hiking, swimming, boating and meeting the people who live in a seemingly bygone era, where there are no highways, high-rise hotels or sprawling shopping malls, and few cars and tacky tourist shops.

(This page and opposite) The Cinque Terre's five small villages offer sandy beaches, rugged vistas and Old World charm.



Because the five villages — Monterosso al Mare, Vernazza, Corniglia, Manarola and Riomaggiore — aren't easily accessible by car, tourists are encouraged to arrive by train or boat, preferably to the easternmost or westernmost village.

From there hikers can wander from village to village along the rocky, 18-kilometer-long coastline, take the train or hop on a ferry a portion of the way.

The largest and reputedly one of the most popular of the five villages is Monterosso, which boasts a crescent-shaped beach, a castle and a 17th-century monastery.

Vernazza is known for its medieval fortifications, including a tower, a small harbor and a stone jetty at the water's edge, which is ideal for sunbathing and catching the ocean's spray.

In Corniglia, famous for its olive groves and vineyards, a secluded beach is accessible by walking through an old railroad tunnel. And Manarola, founded in the 12th century, draws visitors to its baroque San Lorenzo church, only one of the village's attractions.

Riomaggiore is said to be the best village for meeting the local residents, who continue to live their lives little changed by the modern world. Clusters of small, colorful homes that hug each other on the hillsides characterize it. Riomaggiore also contains the most famous path in the Cinque Terre, Via dell'Amore, with breathtaking views of the ocean below.

The Cinque Terre isn't a place of magnificent cathedrals, museums or upscale shopping, it's a place for exploring one picturesque village after another and discovering the many pleasures each has to offer — from its local cuisine and renowned regional wines to the postcard-perfect vistas of the land, the sea and the people.

To learn more about the area and how to get there check out Cinque Terre on the Internet or visit your installation's leisure travel office.

For online information about the Cinque Terre go to www.5terre.com and click on the British flag for the English-language version.





OME were injured in accidents, others in combat operations, but all of the veterans visiting Snowmass Village, Colo., were there for one purpose — to challenge themselves and cheer for each other during the National Disabled Veterans Winter Sports Clinic.

What began as one man's therapy technique for a disabled veteran has grown into a clinic bringing together more than 350 severely disabled veterans for a twist on rehabilitation.

Jim Hall

The clinic, sponsored by the Department of Veterans Affairs and Disabled American Veterans, focuses on using winter sports to help veterans gain confidence and courage by doing what they think is impossible. This year, Soldiers injured in operations Enduring Freedom and Iraqi Freedom were given the opportunity to participate, thanks to donations made by the people of Aspen and Snowmass Village, Colo.

"I've been an instructor with the



Competitive athlete and former airman Lisa Bard, who is also confined to a wheelchair, takes on the rock climbing wall during her first visit to the winter-sports clinic.

clinic for 13 years," said Neil Cames, with the Snowmass Resort Association. "I was talking with Sandy Trombetta, who began this clinic, and we agreed to find a way to involve the veterans of Afghanistan and Iraq. I know a lot of them couldn't afford a trip like this, so we relied on the generosity of the people of Aspen and Snowmass and were able to raise \$40,000 to pay for the veterans' expenses."

Veterans attending the clinic learn adaptive Alpine and Nordic skiing and have the opportunity to participate in such other events as rock climbing, horseback riding, sled hockey, shooting or scuba diving.

Everyone who attends has to attempt to ski.

"This program is just what OIF and OEF veterans need to

SGT Chuck Bartles, who lost an arm while serving in Iraq, gets instruction while learning to scuba dive.

be involved with," said Alan Bowers, national commander of the Disabled American Veterans. "Today's service members are typically very healthy right up to the point where they lose a limb or their eyesight, and then they have to learn to live with the disability. It's very easy to get down on yourself, but this program and the people who volunteer here don't let that happen."

Bowers added that just relearning to do simple tasks with a prosthesis can be difficult. But for Soldiers to make it through their recovery and then ski from the top of a mountain is truly a miracle.

"When I first came here 10 years ago I was nervous and apprehensive, but by the end of the first day I made it down that hill and it made a huge difference for me," said Bowers. "We want these young veterans to know that these programs are available to them, and we want to give them the opportunity to participate."

Since most veterans know about the program through the VA, it was important for the staff of Walter Reed Army Medical Center in Washington, D.C., to know the program was available for the returning OIF and OEF veterans as well.

"We visited Walter Reed to explain the program to the doctors so they can decide who would be physically capable of attending," Bowers said.

Even after getting their personal doctors' approval to attend the clinic, participants are cleared a second time during the registration process to ensure their medical status hasn't

changed.

For Erick Castro, who was recently medically retired from the Army after losing his leg in Iraq, the events weren't as easy as they looked from the sidelines.

"The sled hockey is really pretty tough. It's a workout," said Castro.
"But it's great to have something like this for disabled veterans. It's a chance to meet others going through the same things you are and know they're there to help. Being able to ski and play sled hockey, and see others do it, too, is a real morale booster for me."

Each day of the clinic brought about visible changes in the participants' spirits. "It's all about pride," said PFC Phil Bauer, currently stationed at Fort Carson, Colo., awaiting the outcome of his medical board proceedings.

For many, that pride and courage was rewarded during the clinic's closing ceremonies. After having displayed tremendous courage throughout the entire week, Castro was honored with the DAV Freedom Award for Outstanding Courage and Achievement. The award recognizes the veteran who makes the greatest strides in his or her rehabilitation.

"These veterans had such a great time. I hope they go back and tell others about what they were able to do here," said Cames. "And we're going to keep collecting donations to make sure other OIF and OEF veterans can come back next year."



Keeping History Alive

URING the Vietnam War Larry Kelley was busy making a dream come true for his parents by striving to be the first in his family to graduate from college. And he did. By then the war was over, but his ongoing love of aviation eventually drew him into restoring and flying vintage military aircraft — known as warbirds — as a way to keep military history alive.

"History is not made by the aircraft, but by the pilots and crew, and I've always tried to focus not on the plane but the people behind it," said Kelley, owner of a World War II-vintage B-25J Mitchell bomber nicknamed "Panchito."



"For most young people today that time period is just a date," Kelley said, "but if we can show them what it was about and keep that alive, then we've accomplished something."

It's easy to spot Kelley and his crew of volunteers at air shows across the country. Not only do they dress in vintage uniforms, but a large storyboard detailing the B-25's history is usually nearby.

During the earlier restoration of a WWII UC-78 cargo plane Kelley and his collaborators wanted to display the aircraft with as many period items as possible, he said. So they found such authentic items as charts and maps that would've been used during that time period and placed them in the UC-78. They've done much the same thing with the B-25.

Kelley and his latest warbird work with the Disabled American Veterans to promote benefits awareness for disabled veterans. This has brought the aircraft much attention from World War II veterans.

"A gentleman came by during one show and said he'd flown a B-25 during the war," Kelley said. "We thought it would be an honor to have him sit in the pilot's seat again. When he did, he became very pale and had a faraway look in his eyes that worried us. I asked if he was OK, and he explained that the last time he was in a B-25, in 1944, he'd lost his entire crew. He'd never even told that story to his own children.

"Hearing those sorts of stories from veteran pilots and crew members is gratifying for us, and is a big part of the reason we're out here trying to keep alive an important part of this nation's aviation history."

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