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Engineer team deploys to Philippine disaster

By Robin Fulkerson
Engineer Research & Development Center

When the U.S. Army Corps of Engineers geoscience team deployed to the South Leyte province of the Philippines, they met devastation caused by a landslide.

On Feb. 17, a landslide struck the village of Guinsaogon. The landslide ripped through an elementary school at the base of mountain and killed at least 1,100 people instantly. Guinsaogon had an estimated population of 1,800. Fifty-seven survivors were rescued from the mud.

Assistance poured in from across the globe with the U.S. contributing rescue and recovery support, disaster equipment, and assessments of hillside hazards for nearby townships and rescue workers.

DoD response

Within one day of the landslide, the U.S. deployed military support to the region and provided more than \$100,000 in disaster equipment to the Philippine National Red Cross.

The Philippines Disaster Coordinating Council requested U.S. Marines to assist with rescue and recovery, inventory the warehouse, provide a tent for the Operations Center, build temporary latrines at evacuation centers, and assist with building a temporary evacuation center.

Corps response

Feb. 18, the U.S. received a request for geotechnical engineering assistance, which was staffed to Pacific

Ocean Division's Emergency Operations Center in Hawaii.

The Corps assembled a group of geoscience engineers as the Forward Engineer Support Team (FEST) to the disaster zone. The FEST mission was to assess the hillside hazards for nearby local townships and determine hillside instability to ensure the safety of rescue workers. It was complicated by cloud cover and rain over Leyte Province.

FEST moves in

The Monday following the disaster, the FEST began assessing the hazards at 11 surrounding communities. This assessment proved difficult because the cloud cover over the mountains was so thick that helicopters could not safely fly through it. But the group did determine the nearby communities were relatively safe from subsequent landslides. The team also determined the landslide was caused by multiple factors, but still had many questions surrounding the event.

"The landslide only occurred at one location instead of throughout the hillside, so something has to be unique there," said Dr. Rick Olsen, ground failure expert and the Engineering Research & Development Center (ERDC) team leader.

For two days, the team interviewed locals who supposedly witnessed the slide and soon discovered many of them had *not* seen the event as it occurred.

"People had already been talking with each other and mixing opinions," Olsen said. "We had to ask

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Last Blue Roof installed

By Dona Fair
Army & Air Force Hometown News Service

Another chapter came to a close in what has become one of the worst natural disasters in U.S. history as the U.S. Army Corps of Engineers and the Federal Emergency Management Agency (FEMA) closed its Operation Blue Roof program for victims of the devastation caused by Hurricanes Katrina and Rita.

A team of more than 700 engineers and other volunteers from 41 Corps districts worldwide wrapped up a seven-month mission to provide temporary repairs to both residential and public building roofs damaged by Hurricanes Katrina and Rita, according to Kim Thomas, head of Operation Blue Roof based in Baton Rouge.

Temporary roofing is a priority Emergency Support Function 3 mission for the Corps under the National Response Plan. It helps storm victims in disaster areas by installing rolled plastic sheeting over damaged roofs, helping to protect property and allowing residents to remain in their homes until permanent repairs can be made.

The popular name is "Operation Blue Roof" for the color of the heavy-duty plastic sheeting, and the patchwork blue pattern seen from the air as work progresses.

To get a "blue roof," residents must go to a servicing center and complete a Right of Entry (RoE) form that allows a Corps roofing team to enter the property, do a damage and eligibility assessment, and give the roofing contractor a tasking order.

Work is done on a first-come, first-served basis, but property owners can expect work within 14 days of their request.

More than 81,000 roofs in Louisiana and more than 152,000 buildings in an 82,000-square-mile area stretching from Texas to Alabama received temporary roofing following the two hurricanes that pounded more than 500 miles of the Gulf Coast region.

"Hurricane Katrina hit the coast on Aug. 29, and by Sept. 5 we had assessment teams flying over the region to determine the extent of the damage," said Thomas. "On Sept. 6 we began to set up our Blue Roof operations."

Working under the FEMA umbrella, Thomas and her crews set up disaster recovery centers at large discount stores and home improvement centers where they issued RoE

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Aerial view of the mudslide that struck Leyte Province in the Philippines. (Photo courtesy of ERDC)

Insights

Soldier embodies all seven Army Values

Col. Sherrill Munn
Chaplain, U.S. Army Corps of Engineers

(This is another in a series of articles about the Army Values.)

I have the honor and privilege of visiting our wounded and injured engineer Soldiers in Walter Reed Army Medical Center here in Washington, DC. Recently while at Walter Reed, I stepped into the barber shop to get a haircut.

While I was waiting, a young Soldier rolled into the barber shop in a wheelchair. The gentleman pushing him turned out to be his father. The Soldier had been injured in Iraq and was hooked up to IVs. He had metal pins coming out of his right leg, and a metal rack on his leg with loops holding the pins in place.

Those of us waiting let this Soldier go first, so his dad could get him back to his room.

Paratrooper's story. His dad came over and sat down by me, and we struck up a conversation. He told me his son could have waited in his room for a barber to come to him. But he was a paratrooper from a unit at Fort Bragg, N.C., and his hair had never been this long, so he wasn't willing to wait.

Actually, the Soldier's hair was quite short, well within regulations, but he wanted his "high and tight." Although severely wounded, he was a paratrooper and wanted to maintain that identity even there in the hospital. It was a tangible way to keep solidarity with his unit and fellow Soldiers in Iraq.

His dad went on to tell me what happened. His son was on a foot patrol with his squad near Rammadi, Iraq, supporting a special operations mission. He actually saw the improvised explosive device (IED) and started to yell a warning, but all he got out was "I...!" when it exploded.

When it went off it blew him into the air and about 20 feet from his location. He attempted to get up, but then saw his leg dangling and bleeding badly. Four in his squad were injured; he was the most severe. A buddy ran to him and applied a tourniquet that saved his life.

After the young paratrooper was evacuated, doctors discovered that he had several shrapnel wounds, and

his right leg was shattered from above the knee to the foot. It was not clear whether his leg would be saved. He had lost a significant amount of bone and muscle from the leg.

Since coming to Walter Reed, he has undergone several operations, including cutting-edge bone grafts and muscle grafts using muscle from his abdomen in an attempt to save his leg.

His prognosis is still unclear. Whatever recovery there may be will take two years and several more surgeries, according to the doctors. However, this Soldier is focused and disciplined in his physical therapy. He intends to heal, return to his unit, and he wants to return to Iraq.

By the way, his dad told me several Iraqis have been to see him and thanked him for his service and sacrifice for their freedom. We don't hear those stories very often in the press.

Loyalty. This Soldier certainly embodies all Army Values — Loyalty, Duty, Respect, Selfless Service, Honor, Integrity, and Personal Courage. I want to emphasize his loyalty, however. In his actions, from maintaining his "high and tight" haircut to his focused discipline in physical therapy, he shows complete loyalty to his fellow Soldiers, his unit, the Army and, ultimately, the nation. He is a Soldier who intends to return to duty, even though he has suffered so much that he could have said, "I've paid the price for my country. I'm going home."

If he had said that, no one would have thought less of him. But his sense of loyalty to the Army and the country overrides personal concern and comfort. He is also loyal to his mission. He not only intends to recover and return to his unit, but wants to return to Iraq and finish the fight.

What it means. Loyalty is the glue that holds relationships together and brings cohesiveness to organizations, whether military units or families. Loyalty means being faithful to one another, to the mission, to our organizations, our Army, and our country.

It means we faithfully fulfill our responsibilities and complete our tasks to the best of our ability. It means

people, whether superiors, subordinates or our peers, can count on us to pull our weight, to do what is right, and to look out for each other. Loyalty means to live up to our oaths.

Loyalty cannot be compelled. It must be prized and internalized and become part of our spirit. If loyalty does not come from within, as part of who we are, it will fail in the crucible of real life. Loyalty is a commitment taken as our oath says, "freely and without purpose of evasion." Loyalty is not just a word carried on a card in a pocket. It is part of the essence of being a Soldier.

Loyalty is also crucial in healthy and wholesome relationships. It is no accident that marriage vows almost always state in some form that love and loyalty are the foundation of a happy and enduring relationship. Loyalty is a component of love. While we may be able to be loyal apart from love, out of a sense of duty, we cannot truly love someone without being loyal to him or her.

I do not claim that the Army Values are Biblical or religious, but loyalty is certainly consistent with the Bible. In fact, loyalty is seen as an attribute of God in Psalm 86:15 that describes God as "abounding in steadfast love and faithfulness," i.e. loyalty.

Foundation of all. The reason that loyalty is an Army value is because it is an essential component to all good, healthy relationships. Loyalty binds us together, engenders confidence in one another, and brings esprit de corps. Healthy relationships and highly effective organizations cannot exist without it.

I went to Walter Reed to minister to Soldiers and lift their spirits. In the process, I was ministered to and inspired to renew my commitment as a loyal Soldier, husband, and father. When we live lives of steadfast loyalty, we will forge unbreakable bonds in our units, organizations, and personal relationships.

(The opinions expressed in this article are those of the writer and do not reflect the official policy or position of the U.S. Army Corps of Engineers, the Department of the Army, the Department of Defense, or the U.S. government.)

Blue Roof

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forms for hurricane victims.

Thomas believes that recovery in this region will be slow, but she seems optimistic that the Corps' involvement has made an impact despite media reports of a slow and insufficient response from the federal government.

"When we see people coming up to us and thanking us for what we do, it makes this job really mean something," Thomas said. "We wear the Corps of Engineers shirts and can feel proud for the impact that we make on individual lives. We've gotten some bad press, but you can't see it from the faces and the responses we get from those we help. We're here to do a job, but not because we have to, but because we love to do it."



The last Blue Roof is installed in Mississippi. (Photo courtesy of the Mississippi Recovery Field Office)



Temporary structure mission completed

By Diana Fredlund
Task Force Hope

When Hurricane Katrina slammed into the Mississippi Gulf Coast, it devastated more than private and commercial property. The storm also destroyed local government offices and schools, as well as fire and police buildings and equipment. After immediate needs like ice, water and medical supplies were delivered, the Federal Emergency Management Agency (FEMA) tasked the U.S. Army Corps of Engineers with providing temporary structures for public services.

On Feb. 28, that mission ended in Long Beach, Miss., with the delivery of the last temporary structure.

While the Corps has offered recovery support for previous hurricanes, providing temporary structures was a new task. FEMA tasked the Corps with the temporary public structure mission on Sept. 9. In five months 726 classrooms or offices had been provided to Gulf Coast communities.

The initial priority was housing for emergency services, including police, fire, and rescue. The first temporary structure was turned over Sept. 28 to the Delisle Fire Department, 30 miles west of Biloxi, Miss. Within 60 days the Corps turned over 74 of the 233 temporary public structures to local governments.

Delisle also received the first temporary classrooms at Delisle Elementary School. George Mixon, the Harrison County Fire Service Coordinator, was vital in requesting public buildings, said Elizabeth Ivy, Temporary Public Structures mission manager. "Chief Mixon knew if the city could submit the paperwork for all departments needing temporary buildings at one time, it would speed the process, and everyone would receive their buildings more quickly, from classrooms to his fire department," Ivy said. As a result, the city's needs were among the first processed and forwarded to the Corps for execution.

"This mission grew quickly," said Michael Wilson, Temporary Public Structures mission specialist. "The



These temporary structures house the City Hall of Waveland, Miss. Waveland was directly in the path of Hurricane Katrina as the storm came ashore. (Photo courtesy of Task Force Hope)

Corps had to conduct site assessments, including an environmental assessment, before the units could be moved to the selected locations."

The site assessments included NEPA and EPA compliance to ensure an environmentally sound footprint for each building.

One of the best decisions was made early in the planning process, Wilson said. "Contracting was able to purchase a large quantity of standardized units early on, which were staged in Gulfport. This meant the units were ready to transport as soon as the site assessments were completed, which saved a lot of time."

Had this step not been taken, upwards of 45 days would have been lost in the manufacturing and delivery phases.

"Providing temporary structures for government offices meant city and county officials could resume serving their citizens," Ivy said. "But setting up the temporary classrooms was dear to the hearts of everyone working this mission, because it meant we could help provide some structure to the youngest survivors of Hurricane Katrina. That was satisfying."

On Feb. 28, under a cloudless blue sky, the final temporary structure was turned over to Fire Chief George Bass of Long Beach, Miss. Col. Anthony Vesay, Commander of Vicksburg District and Task Force Hope-Mississippi, presented a ceremonial key to Billy Skellie, Long Beach mayor and a commemorative photo to the Long Beach Fire Station No. 2.

"We're grateful to the Corps for helping us regain our operational effectiveness," Bass said. "With Station No. 2 open, we can now provide emergency services without worrying about being delayed by passing trains."

Long Beach is bisected by the CSX railroad tracks. Before the hurricane, Fire Station No. 2 served the south section of the city, nearest the Gulf of Mexico. When the city was hit by a 30-foot storm surge, nearly everything south of the railroad tracks was destroyed, including the fire station. For five months, the central fire station, which is north of the railroad tracks, was the primary responder for emergencies.

When rail service resumed several months after the storm, Bass knew his teams could be delayed for precious minutes waiting for a train to pass when they responded to an emergency south of the tracks. "The garage structure is perfect for our dive rescue and fire trucks," Bass said. "Katrina hit Long Beach pretty hard, but thanks to FEMA and the Corps of Engineers, we're again ready and able to respond promptly. It's a good feeling to safely serve our community."

The efforts of many Corps employees made the temporary structures mission work, Ivy said. "Since the program began in September, more than 75 Corps employees have been involved. Everyone's dedication to developing a quality program will mean the Corps has a blueprint if we are called on to provide temporary structures in the future.

"Our primary mission was to help the communities in Mississippi rebuild," Ivy added. "We're proud of how well the TPS mission is helping them do that. The Corps provided the temporary structure so Mississippians could begin their long-term recovery."

Philippines

Continued from page one

them to rewind their experience second-by-second that morning. We had to peel off what their neighbors had told them. Many had only seen a small part of the landslide sequence, so it was a slow process to figure out what actually happened."

Luckily, one villager was on the hillside and witnessed the landslide from start to finish. He was the only eyewitness providing data to the team, and he explained that one section of the slope gave way, then another. Additional witnesses corroborated other parts of his story. This information became a critical component in assessing the trigger mechanisms for the landslide.

Driving force

"With landslides you only have to find the unique factors that caused it," Olsen explained. "There's no need for computer simulation while working in the field because a landslide represents a unique condition of failure. After finding the trigger, our next job was assessing the safety of other areas nearby."

For example, the team discovered the landslide was triggered near the top of the mountain, not because of excavations into the base of it.

The landslide occurred in an area of the valley destroyed by a previous slide, probably hundreds of years ago. Guinsaun was built atop colluvium debris, which is old landslide material, and was probably built at this location because the higher elevation reduces the risk of flooding.

The mountain system has three to six feet of soil over rock caused by weathering of the rock. Over

time, this weathered soil from the upper part of the mountain experiences small isolated landslides. These landslides become debris slides that slide down to the lower portion of the mountain hillside. The colluvium debris creates a shallower slope near the bottom of the mountain hillside compared to the steep upper section.

Small, isolated landslides may cause a "bird bath," or small basin, at the top of the mountain. Bird baths are formed from minor landslides that suddenly stop short, creating a basin that fills during rainstorms. Bird baths are not the primary cause of landslides, but are a contributing factor.

In Guinsaun, the water in the bird bath seeped down into the mountain along a fault plane, but was trapped from leaving the hillside. The internal water pressures at mid-mountain may be many times higher than those for a simple hillside water table. If the water creates enough pressure, a section of the hillside is blown out, causing a major landslide.

"During this emergency we had limited information about the fault orientations and therefore could not fully determine how the faults contributed to this massive landslide," Olsen said.

Between the extremely high rain fall, the bird bath effect, unique fault orientation, and increased water pressure, the hillside blew out and became a deadly high-speed landslide.

"An upper section of the mountain slid into the lower colluvium deposit causing a 'bang,'" Olsen said. "The section crumbled into debris material before the release of a second section. The resulting debris slide of the two sections moved at about 50 to 60 miles per hour over the community and stopped at the river."

When the debris left the mountain, it was wet and composed of sand and rock. After the debris material had traveled two kilometers (1.24 miles), it became muddy and extremely soft. Eric Bjorken, senior geologist and Construction Safety Manager from Honolulu District, said the phenomenon was created by high-speed debris mixing with the water and soil of rice patty fields as it moved across the valley toward the river.

The high-speed, high-density, and extremely abrasive debris slide quickly destroyed the schoolhouse and other buildings in the community. These structures were not built to withstand blast-like forces and gave way instantly.

"By the time people heard the 'bang' and ran outside and looked up, they were being crushed by the debris slide," Olsen said.

Landslide potential

Olsen believes debris slides will continue to occur on the flanks of this landslide.

"The next steps will be to understand if any of the nearby communities have long-term failure issues," he said. "The river shape shows evidence of previous landslides and the whole valley has a colluvial zone indicating a long history of minor landslides."

The FEST recommended regional studies of the geology of the area, fault mapping, history of landslides, and slope of the hillsides, including identifying "bird bath" shapes along the mountaintops.

"Each failure is similar to the personality of a person," said Olsen. "You can't judge it quickly and the answers are only revealed after careful study."

Future base will train Jordan special ops

By Andrew Stamer
Transatlantic Programs Center

Jordan is emerging as a leader and an important partner in the fight against terrorism. Jordanian special operations forces (SOF) are known for their skill in counterterrorism throughout the Middle East, and Jordan wants to be known as the region's leader in training SOF, according to Col. Maher Halaseh, the project director for the King Abdullah II Design and Development Bureau.

To assist this endeavor, a prestigious new facility, the King Abdullah II Special Operations Training Center (KASOTC), is being designed. KASOTC will provide SOF training in counterterrorism and internal security missions. Transatlantic Programs Center (TAC), Special Operations Command Central (SOCCENT), King Abdullah II Design and Development Bureau (KADDB), and the Defense Security Cooperation Agency (DSCA) are on the team.

As the U.S. Central Command's executive agent for KASOTC, SOCCENT serves as the program manager for synchronizing, reporting, expediting, and validating the project from concept phase until the completed facility is handed over to the Jordanian government.

This government-to-government collaboration will provide the Jordanian Ministry of Defense a state-of-the-art center and valuable resource for training SOF, police, and other civil and paramilitary organizations. On a much larger scale, the center will meet cross-training standards for hosting joint and combined-training operations with allies, and can prepare units for United Nations peacekeeping operations.

"In other words, all specialty equipment, target systems, range equipment, automation and simulation technology will be to current U.S. standards," said a SOCCENT representative.

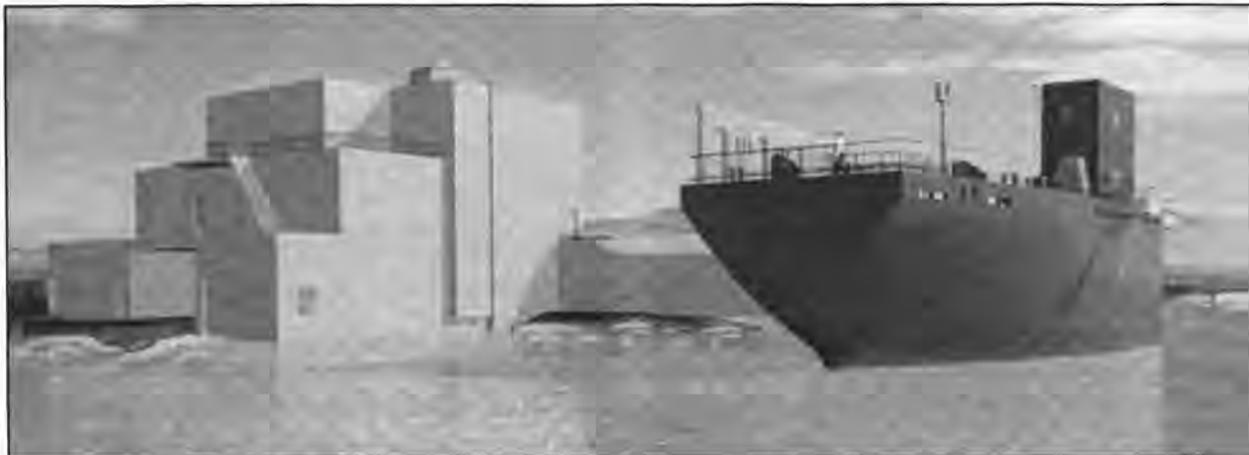
The project will enhance regional theater security interoperability and strengthen multi-national counterterrorism capability. KASOTC will be available to allied forces for exercises and training, providing a common venue to share combat experiences and evolving anti-terrorist tactics, techniques, and procedures. The center's training curriculum will also enhance counter-proliferation, consequence management, and civil defense capabilities.

Jordan's centralized location is significant to friendly nations' armies because they can train in the heart of the Middle East, said Halaseh. He also said that countries in the Middle East are becoming actively engaged in counterterrorism with their own SOF. The KASOTC locale will make it possible for Jordanian troops and allied forces to cross train in an environment that many countries lack within their own borders.

Strong ally

In the war against terrorism, Jordan has been a strong and silent ally of the U.S. Much of that changed last November when coordinated suicide attacks stunned the capital city of Amman and shocked the world. Besides being coalition members in Iraq and Afghanistan, Jordan's military is conducting U.N. missions elsewhere — Eritrea and the Ivory Coast, and Haiti.

In May 2005, Congress provided the Department of Defense \$99 million to establish a special operations center in Jordan. The project will be executed through Foreign Military Sales. FMS is the U.S. government's program for transferring defense articles, services, and training to other nations and international organizations, according to the Defense Security Cooperation Agency's Web site. Countries approved to participate in the program may fund the requirements with their own funds, or through U.S. government-sponsored assistance programs.



The King Abdullah II Special Operations Training Center will feature a facility for training in maritime scenarios. (Illustration courtesy of Transatlantic Programs Center)

In this case, the funding was authorized under the FY05 Emergency Supplemental Appropriations Act. In accordance with Congress' intent, the KASOTC is being built to train counterterrorism troops in support of the Global War on Terrorism, according to Thomas Jackson, TAC's project manager.

Maritime training

Aqaba on the Red sea holds strategic importance because it is the only seaport for Jordan, making it a natural area to hold SOF training for Jordanian naval personnel. In addition, the area is already a military compound.

The Aqaba Close Quarters Battle (CQB) facility is designed to train SOF in all facets of maritime counterterrorism skills in a realistic environment, including the ability to conduct air, diving, or sea-borne assaults. The design makes it possible for these assaults to be conducted individually or simultaneously.

The maritime training facility will have three key features — a mock-up ship, a CQB building, and a covered walkway linking the two. The Corps has been working closely with KADDB and SOCCENT to include design elements that would commonly be found in a port area. The CQB, walkway, and various deck levels will be fitted with ship's deck boxes, rigging, ventilators, and other miscellaneous items. These will train the troops in a realistic setting because the items can either provide cover or restrict movement. Obstacles can also be placed on the ship to train for special search operations.

"Using the latest technology, we will work with our customers to design these facilities with any obstacles that may be found during true maritime missions," said Jackson.

Urban training

Until recently, Yajooz bustled with the roar of mining equipment. That stopped when this site was chosen to become part of KASOTC. Soon, this remote area outside Amman will be busy with the sounds of construction on training areas.

Construction at Yajooz will take full advantage of the dramatic terrain, which is lined with steep cliffs and a rough, rocky landscape.

The facility is also designed to meet the important requirement of live fire in a realistic operational setting. Besides the ranges, there will also be CQB facilities built to resemble modern urban settings, and typical village and countryside scenarios. Here, troops can practice a multitude of essential training.

Design

Stanley Consultants is one of the Corps' Indefinite Delivery Indefinite Quantity (IDIQ) contractors, and was chosen to take the design from the master plan

phase through the design and development of the two sites, said Christopher Day, a Stanley Group project engineer.

Early January began an aggressive five-month race to reach full design, and Stanley Consultants has committed the people to get the job done, about 25 Stateside and another 20 in Jordan.

Besides being in contact with the Corps, Day said he works with KADDB and SOCCENT almost daily, and the whole team works well together.

"The guys on the ground in Jordan from SOCCENT have been a big help," said Day. "I can ask questions and the in-country liaisons are able to get answers quickly. This has helped move the design along."

While the design is moving along, the acquisition of the ship and aircraft mock-ups are going forward as well. "We're taking the customers' requirements and turning them into reality with SOCCENT's input and expertise," said Jackson.

The U.S. Army's Program Executive Office Simulation, Training, and Instrumentation (PEO STRI), headquartered in Orlando, Fla., has also been asked for its expertise. During the third week of January, the Jordanians, PEO STRI, Stanley Consultants, and the Corps' team met in Orlando to sort out equipment needs to determine what will be needed.

Having the latest in equipment is important to KASOTC's design because it will provide the most realistic training possible within this controlled environment, the SOCCENT representative said. And to meet this goal, the team needed to define the timeline, Jackson said, because some of the more specialized equipment can take from six to 18 months to deliver.

The strategy is to get construction started parallel to the date that will be set for ordering the specialty equipment.

"In early spring, construction on the preliminary phase to place a security fence, offices and guard stations should begin," said Jackson. "And construction on the infrastructure and remaining support facilities will begin when the contract is awarded, which we hope is done by this summer."

Running the construction and procurement of goods parallel greatly increases the chances of getting the project done on schedule.

"Our mandate is to ensure design aspects are complete in time to obligate construction contracts before the end of the fiscal year," the SOCCENT representative said. "It's the busiest and perhaps most critical phase of the project."

Once begun, construction is estimated to take about two years.

"Of course, if any modifications to the design come up, or if there are any delays with materials, then it may take a bit longer," Jackson said.

That is why a boots-on-the-ground approach helps.

Continued on next page

The Chief of Engineers Design and Environmental Awards Program entries were judged March 1-2 at the U.S. Army Corps of Engineers Headquarters in Washington, D.C.

Thirty-one projects and professional works were presented for this biannual competition, and 10 were selected for awards.

In addition to the Design and Environmental Awards, two Design Teams of the Year were recognized. Awards go to the Corps in-house design team that won the highest award in the Chief of Engineers Design and Environmental Awards Program. This year, both of the Special Recognition awards were designed by in-house teams.

The Design Team of the Year award for the Special Recognition in Environmental Protection award went to the U.S. Army Transferred & Transferring Range Inventory, a professional work. The Corps districts involved in this project were Baltimore, Omaha, Sacramento, Rock Island, and St. Louis, plus the Engineering & Support Center, Huntsville.

The Design Team of the Year Award for Special Recognition in Design for Historic Preservation went to Omaha District for the Protection & Restoration of the Chapel at Fort Randall Dam in Pickstown, S.D.

The awards program is organized into two categories of competition — Design, and Environmental Design. Projects in both categories were judged independently by a single interdisciplinary jury this year. Design

projects include primarily military construction projects and works, while the Environmental Design includes civil works and environmental restoration projects.

The Chief of Engineers Design and Environmental Awards juries may award four types of honors:

Chief of Engineers Award of Excellence – Only one Chief of Engineers Award of Excellence may be given for an entry in the Design category, and only one for an entry in the Environmental category. This award can only be given by unanimous decision of the jury for an entry that truly exhibits excellence in all design disciplines.

Chief of Engineers Special Recognition Awards – The jury may select a project and/or professional work for special recognition in environmental preservation. This was done to place special emphasis on the USACE Environmental Operating Principles.

Honor Awards – Honor Awards are given in both the Design and Environmental categories to entries that demonstrate or stimulate excellence in each design discipline. An Honor Award can only be given to an entry based on a majority decision of the jury, if no juror casts a dissenting vote.

Merit Award – Merit Awards are given to projects in both the Design and Environmental categories. Merit awards are either related to individual disciplines (e.g., a Merit Award in architecture, landscape architecture, interior design, engineering, environmental design, planning, energy conservation), or for excellence in mul-

iple disciplines. A Merit Award can be given to an entry based on the recommendation of a single juror, if no jurors offer dissenting votes.

The Chief of Engineers Design and Environmental Awards began in 1965 to recognize and promote excellence in design and environmental achievement by the U.S. Army Corps of Engineers and its professional contractors. The program has presented a total of 483 awards in the 30 times the program has been judged.

Jury Members

Markku Allison, AIA

Resource Architect at Headquarters, American Institute of Architects

Sue Bowers, ASID

Lead Interior Designer, Gruzen Samton, Architects Planners & Interior Designers LLP, Alexandria, Va.

Dennis Carmichael, FASLA

President, America Society of Landscape Architects

Terry Deglandon, R.A.

USACE Architect of the Year 2005, Norfolk District

Dr. Sharon deMonsabert, P.E.

Associate Professor, George Mason University

John Fisher

USACE Landscape Architect of the Year 2005, St. Paul District

Lawrence Olinger, P.E.

Executive Vice President, Federal Programs Operation, Dewberry & Davis, LLC

Jerry Taylor, IIDA

USACE Interior Designer of the Year 2005, Norfolk District

Design Winners

Chief of Engineers Design Award of Excellence: *Terry Lee Wilson Battle Command Training Center, Fort Wainwright, Alaska*

Design Agency: *Alaska District*

The Terry Lee Wilson Battle Command Training Center will train Soldiers at Fort Wainwright in using the Stryker armored combat vehicle. This training facility is the first of its kind. It links both live and virtual training support through battlefield visualizations using simulations. Key functional areas include:

- 30,000 square foot Tactical Operations Center trainer for up to 100 tents with electronic and communications support to simulate remote ground operations.

- 4,500 square foot Engagement Skills Trainer with a 12x56-foot screen to project computer animated battlefield imagery that forces engage using laser simulators.

- 13,300 square foot Digital Automation Suite to provide the "digital horsepower" and networking for the combined simulation and reach back mission.

- Twelve classrooms totaling 12,500 square feet.

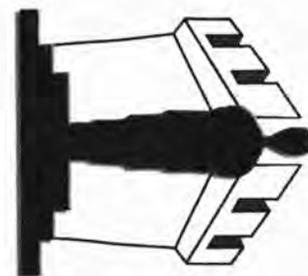
- 10,000 square foot column-free After Action Review room dividable into 10 equal classrooms for post-engagement instruction and evaluations, or a briefing room for 300.



The initial impression of the Terry Lee Wilson Battle Command Training Center at Fort Wainwright, Ala., commands respect and emphasizes the seriousness of battle command.

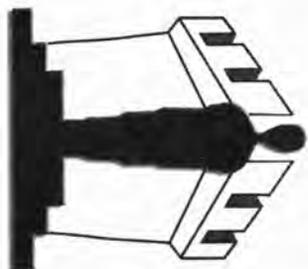


The training center is equipped with state-of-the-art simulators.



Design and Environmental Awards

2005 Chief of Engineers



II ENGINEER UPDATE *Special Insert*

• 1,600 square foot Fire Effects Trainer (Guardfist II).

Jury comments: *In every area of the judging criteria this is an outstanding project. The initial impression of the building emphasizes menace and the seriousness of battle command. It commands respect. This 155,000 square foot facility includes mission planning rehearsal and operations. It is designed to bring in units and have them operate as they would when deployed. The interiors are clean, elegant, and sculptural. They convey simplicity in the best sense of the word.*

Special Recognition in Design for Historic Preservation: *Protection & Restoration of Chapel, Fort Randall Dam, Pickstown, S.D.*

Design Agency: *Omaha District*

The Army established Fort Randall on the Missouri River in 1856. The post served many functions until it was abandoned in 1892, and today all that remains are several foundations, the Fort Randall Post Cemetery, and the walls of the Fort Randall Chapel. In 1973 the chapel was placed on the National Register of Historic Places.

The main goal was to preserve the chapel walls without damaging the existing structure or distracting from the historic significance or appearance. The solution was a protective roof that preserved the original walls while remaining physically separate.

The new roof pitches, configuration, and materials reflect the image of the original. The construction materials include concrete piers that match the existing chalk rock, cedar wood shingles, and Douglas fir heavy timber construction. Visitors can stop by the Fort Randall Historic Site, tour the old parade ground, building foundations, cemetery, chapel ruins, and see the original chapel bell.

Jury comments: *This project is clearly a gem. The design solution is clean, simple, elegant, and peaceful. It acknowledges the historic significance of the original while providing a clear demarcation between old and new construction. The new roof seems to float over the older structure.*

Honor Award for Design: *Military Entrance Processing Station, Fort Lee, Va.*

Design Agency: *Norfolk District*

The Military Entrance Processing Station at Fort Lee, Va., combines the state-of-the-art operability of a high-tempo activity with a professional, inviting environment that processes new recruits from 137 counties in Virginia.

The three-wing design is organized around a central applicant waiting area and control counter. The Counselor section is arranged around the waiting area with a separate entrance for those occupants working later hours. The Medical section is organized around its own waiting area and includes separate corridors for female and male applicants. The central wing contains the Operations, Testing, Command, and Support sections.

To operate effectively, the facility must process more than 50 applicants each day, facility flow and function must work for this rate to be achieved, and the building's character must be welcoming and professional, which has a direct influence on the attitude and retention of recruits.

Jury comments: *This is the first example of a new prototype standard design. The jury recognized its ability to take what has traditionally been a scary experience and make it approachable. It belongs to the context of Virginia architecture without being a caricature. The site plan demonstrates a marriage of site with external approaches and internal functions. Interiors demonstrate simplicity and clarity of function with an appropriate palate of materials.*

Merit Award for Design: *Fire Crash Rescue Station, Offutt Air Force Base, Neb.*

Design Agency: *Omaha District*

This is one of the Air Force's largest, most comprehensive, and state of the art facility of its type. The primary goal of this 36,060 square foot facility was to consolidate into one building the three mis-



A protective roof that mimics the look of the original preserves the ruins of the Fort Randall Chapel at Fort Randall Dam in Pickstown, S.D.

sion requirements – training & administration, living quarters, and vehicle storage. Meeting these goals greatly improves emergency response and personnel efficiency and effectiveness.

The facility also needed to provide a safe work environment for personnel, provide covered parking for all fire fighting vehicles and equipment to ensure their reliable use during winter, and provide updated living conditions to increase the overall health and safety of the staff living and working in the facility.

The floor plan is designed to provide easy access for personnel to equipment within the building without disturbing those who are sleeping.

The facility was designed to be self contained with emergency generators providing back-up power. To meet user and command desires to promote physical fitness of the staff, a full gym was provided.

Jury comments: *This new prototype design will become a prototype for Air Force Fire and Crash Rescue Operations, and the design will improve training and response time.*

The curved roof form expresses the mission of service to aviation, and the shaded patio, interior and exterior spaces make this a good place to work, train, and live.

Recycled concrete and steel are admirable gestures to sustainable design.

Merit Award for Design: *Fully Contained Small Arms Range, Wright-Patterson Air Force Base, Ohio*

Design Agency: *Louisville District*

Proficiency with firearms, a necessary skill for all members of the armed services, requires state-of-the-art training facilities. The new Fully Contained Small Arms Range at Wright-Patterson Air Force Base provides professional training resources for pistols, rifles, shotguns, and small-bore semi-automatic and automatic weapons.

The structure encloses firing lines, well-equipped instruction areas, a secure armory, computerized range management, and sophisticated safety and environmental amenities.

Safety is provided in several ways. The building is fully contained structurally. It is essentially a vault with no seams where the concrete walls meet the concrete slab ceiling.

Airborne lead from unjacketed projectiles is captured by a sophisticated negative pressure ventilating system that forces the particles through a filter system for collection and disposal.

The firing range side of the building is separated from support and instruction areas by cast-in-place concrete walls and grout-filled concrete masonry unit partitions. Steel doors connect the two areas are sound, impact, and pressure rated, and steel ceiling



Recruits are sworn into the armed forces at the new Military Entrance Processing Station at Fort Lee, Va.

baffles deflect misfired rounds away from the firing line.

Jury comments: *This project has exemplary performance to budget. The building is well detailed, when it could have been no more than a large white box. The Art Deco details recall other structures on the base, and the interiors are simple and refined.*

Merit Award for Design: *C-17 Flight Simulator, McGuire Air Force Base, Wrightstown, N.J.*

Design Agency: *New York District*

This flight simulator training facility supports the beddown of the C-17 squadron at McGuire Air Force Base, N.J. The facility had to be built on a restricted site between two existing buildings, and provide for future expansion.

The basic exterior palette is brick masonry veneer, insulated glass in dark bronze aluminum frames, and dark brown standing seam metal roofing, tying this building with adjacent existing and new C-17 beddown facilities. Landscaping also ties the three buildings into a cohesive campus-like setting.

The use of glass as a design element presents a creative departure from the typical solid exterior walls of most flight simulator buildings. This design element provides a view of the primary element of this training facility, the Weapon System Training Motion Bay. This element also maximizes the use of natural daylight.

Jury comments: *The building is tightly sited and brings focus to this complex. The flight motion simulator is showcased as a focal point of both the interior and exterior. The tower housing the flight motion simulator becomes the exciting focal element for the building and its surroundings. The dramatic use of glass and lighting defines this concept, and focus our attention on the mission upon entering and leaving the building.*

Environmental Design Winners

Chief of Engineers Environmental Award of Excellence: *Ed Pastor Keno Environmental Restoration Project, Tucson, Ariz.*

Design Agency: *Los Angeles District*

The Ed Pastor Keno Environmental Restoration Project meets the flood control needs of a growing city, and restores riparian habitat in a desert environment that is experiencing rapid growth and challenging water resource issues.

The project substantially improved the environmental quality of a mudflat basin, while maintaining the original function of detaining and storing flood waters from a 17.7 square mile watershed. It has two primary functions — flood control and ecosystem restoration. As a flood control facility, the project controls storm water discharge from the basin during storms. During non-storm events, water flow rates and water levels are controlled by a re-circulation system that includes a pumping station, distribution piping, solenoid valves, stream course weirs, and the deep pond inlet weir.

Substantial economic benefits have resulted from water-harvesting features that support not only restored habitat features, but also a park, ball fields, roadway medians, and other landscaped areas. Harvested storm water notably addresses the unique challenges of a desert community that already pays a high premium for water.

The project's natural and constructed aesthetic features, recreational benefits, and natural habitat have dramatically enhanced an economically depressed neighborhood. The project attracts wildlife, local nature enthusiasts, and many others seeking to escape the asphalt and concrete confines of urban life.

Jury Comments: *This project brings a natural area into an urban setting that was basically a mud flat. This is a multipurpose project that provides wildlife habitat, flood control, water supply, and recreation. It is self-sustaining even during the last season of drought, which is remarkable for a desert environment. It appears natural, not constructed, and besides the water feature, it also increases*



The Ed Pastor Keno Environmental Restoration Project in Tucson, Ariz., brings a natural area into an urban setting that was basically a mud flat.

mesquite and grass lands.

Special Recognition in Environmental Protection: *U.S. Transferred & Transferring Range Inventory*

Design Agency: *Baltimore District*

The \$7.5 million Army CTT Range Inventory program was implemented in response to the September 2001 Management Guidance for the Defense Environmental Restoration Program, and the FY02 Defense Authorization Act.

These directives established the Military Munitions Response Program (MMRP) as a new program for remediating unexploded ordnance, discarded

military munitions, and munitions parts, while also requiring the services to inventory all current and former defense sites within the U.S. and its territories. The defense sites identified in the inventory formed the basis for the MMRP and allowed DoD to begin planning and funding future response actions at these sites.

The Army, through the U.S. Army Environmental Center, USACE, and contractors successfully executed the inventory program, and met or exceeded all requirements directed by the FY02 Defense Authorization Act.

Jury Comments: *This unusual professional work provides an inventory for remediation of unexploded ordnance at about 3,000 sites around the world. This is far more than an information technology program or a data base — it provides a decision model based on data for a large range of conditions. It defines an organized, efficient process for decisions involving six USACE districts, 15 other organizations, and 600 facility points of contact. It standardized the site evaluation process for range sites.*

The results are dramatic. The inventory for the Army was completed four years ahead of the legislative deadline. It also reduces the cost of Preliminary Environmental Assessments from \$100-\$500 thousand per site to \$22 thousand. These savings give more funding available for remediation.

Honor Award, Environmental: *Roanoke Island Festival Park Aquatic Habitat Restoration & Protection Project*

Design Agency: *Wilmington District*

The Roanoke Island Festival Park Aquatic Habitat Restoration & Protection Project is located on Ice Plant Island in Dare County, N.C. About 1,500 feet of shoreline was eroding at about 10 feet per year, impacting important fish and wildlife habitat.

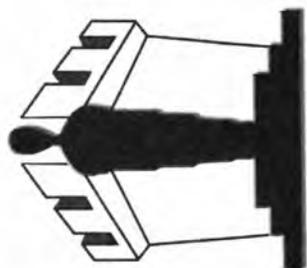
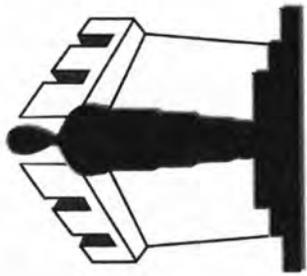
The project design expands on a living shoreline concept where restored natural marsh vegetation is the key, providing both estuarine habitat and shoreline stabilization. A typical living shoreline provides a low rock sill to improve shoreline sustainability. This design moved the sill seaward to provide quiet shallow water between the marsh and the sill, improving conditions for submerged aquatic vegetation and young fish, shrimp, and crabs.



A rock sill protects 1,500 feet of shoreline at Roanoke Island Festival Park, and provides quiet shallow water to improve conditions for aquatic grasses, and young fish, shrimp, and crabs.

2005 Chief of Engineers

Design and Environmental Awards



(Left and above) The habitat restoration at Ponca State Park in Nebraska restores habitats (backwater, wetland, emergent sandbar island, and tallgrass prairie) on the Missouri River main stem that had been degraded by alterations to the river system in the past several decades.

The design resulted in high ecological benefits at a reasonable construction cost of \$670,000. This project is naturally sustaining and is not expected to require significant maintenance. Three years of monitoring completed shows that despite several major storms, including two hurricanes, the shoreline is stable, and restored estuarine habitats are thriving.

Festival Park is a high-use public education center, and this restoration project includes interpretive signs to explain its features and their ecological benefits. An existing public pier provides access for public observation, and angling for fish and crabs.

Jury Comments: *The project restored five acres of maritime forest, marsh, sea grass, and oyster beds. Moving the rock sill offshore creates quiet habitat and protection for marsh grasses, oysters, and other aquatic life.*

Submerged grasses are developing. The shoreline has stabilized and the marsh is advancing at three feet per year. The project received a Coastal America Partnering Award in 2004 as the best restoration project in North Carolina.

Honor Award, Environmental: *Ponca Habitat Restoration on the Missouri River, Ponca State Park, Ponca, Neb.*

Design Agency: *Omaha District*
The primary goal of this project was to restore habitats (backwater, wet-

land, emergent sandbar island, and tallgrass prairie) in the main stem Missouri River that have been degraded by physical alterations made to the system in the past several decades.

Before construction, the project site was a series of degraded side channels, backwaters, and farmed wetlands. The restoration built 29 acres of backwater habitat, 17.5 acres of wetland, three emergent sandbar islands with a combined acreage of 37 acres, and planted 36 acres of tall grass prairie.

To maintain the aesthetic quality, there are few artificial structures. Vegetative plantings conceal the access trail when viewed from the backwaters. Efforts were made to build the backwaters and wetlands in the abandoned river channels and natural low spots that already existed to make the project appear as natural as possible.

Large woody debris was placed along the edges of the excavated areas to provide habitat for fish and other species. This debris was placed to resemble the snags that naturally occur along the Missouri River.

Jury Comments: *The project mitigates disturbances to ecosystem caused by the Gavin's Point Dam, urbanization, and agriculture. This is a highly effective habitat that allows people to see how the Missouri River looked before navigation and urbanization.*



The Nachshonim Storage Base is a \$125 million facility east of Tel Aviv. This panorama was pieced together from several photos.

Many projects underway in Israel

Article by Lou Fioto
North Atlantic Division
Photo by Brian Temple
Europe District

Sababa!

One of its meanings is akin to Swahili's "hakuna matada," made popular by Disney's *The Lion King*. However, this modern-day Hebrew slang, ranging in meaning from "excellent" to "no worries," was not borrowed from Swahili. It was borrowed from Arabic.

Language is a reflection of culture and an exchange among cultures can bring people together. It did just that for many of Europe District's employees in Israel.

"Best office I've ever worked in," said Bob Sommer, project engineer, who has 35 years in government service. "We're learning how to improve. The trick here is that the Israeli construction and business model is different, but the teamwork has been phenomenal."

Sommer and his colleagues managed 40 projects on 13 installations and placed \$37.5 million in construction in fiscal year 2005. From construction of a Blackhawk helicopter hangar to a high-tech flight squadron command facility, he said this tempo was sustained, in part, because of his Israeli colleagues.

Sommer said success lies in the ability of U.S.

Jordan

Continued from previous page

"Having a resident office in Jordan for this project is one way we can try to keep it on schedule because everything can then be dealt with on site," Jackson said. "The delivery schedule is important in any project, but we are also committed to delivering a quality product for the Jordanian government to use in their efforts to combat terrorism. Our team is proud to be helping them in their efforts."

"The role of the Corps of Engineers is essential in this facility because they design the facility and they will supervise the construction," said Halaseh. "The help we're getting from them is fabulous."

A resident office to oversee the construction and contract management will also make it possible for Corps' personnel responsible for the success to regularly tour the sites, meet with the customer and contractors, and conduct construction quality assurance. It is also important to coordinate this work with the Military Assistance Program Office at the U.S. Embassy in Amman.

"Having someone in Jordan gives us better oversight of the facilities progress," said Jackson. "It also makes it possible to ensure our customer will receive quality facilities they can use to train."

The end result will remain unchanged – the delivery of one of the most important facilities to combat terrorism in the heart of the Middle East.

Army Corps of Engineers' employees and their Israeli partners to see eye-to-eye on a common mission, despite different business cultures.

"We're a warm people, and we're open, but not in conducting business," said Ofer Davidi, project engineer, Southern Resident Office.

Davidi, who once worked for the Israeli Ministry of Defense, said it is stressful working on larger projects because one needs to ensure time and energy are not wasted. He said that with his countrymen, emotions sometime trump processes, and people challenge each other. However, the Corps lends business procedures that help keep projects in check.

Michael "Miki" Goldstein, electrical engineer, Israeli Ministry of Defense, has worked with the Corps for four years, and began his tenure on a two-year base project for Israeli paratroopers. "I enjoy every day of my life working with the Corps because their way of thinking and way of doing business is the way that I like to do business," he said.

Goldstein said his colleagues were initially hesitant to volunteer to work with the Corps, but he said he volunteered without reservation. Ironically, it is the Corps' structured approach toward business that appeals to Goldstein.

"Their standards are clear," he said. "There's a lot of bureaucracy, but I think it's the right way to do the job because without all the paperwork you will never do big projects right. No one can remember things that were agreed to two years ago on multimillion dollar projects. It's impossible."

Goldstein said he knows it's the open exchange that translates into reliable, relevant and responsive professionalism, ideals that most Corps customers value and appreciate.

Mutual respect is also appreciated, and Davidi said he certainly respects his Corps colleagues.

"Corps of Engineers people mingle with the locals and get involved with the local culture," he said. "For Europe District employees coming from the streets of Germany, this is a culture shock. They choose to live among the locals. They invite their neighbors over. We are one."

This camaraderie, mutual respect, and dedication to achieving the same goal brings people together, and the results are seen in the projects.

About two hours north of the Southern Program Office lies the Nachshonim Storage Base, a \$125-million base 40 minutes east of Tel Aviv. A small city in the desert, it consists of 210 buildings sitting on 400 acres of land connected by 23 kilometers (14 miles) of asphalt. It took four years to build and was turned over to the Israel Defense Forces (IDF) during a December ribbon cutting ceremony.

It is the largest project in the Corps' Wye River Program (an outgrowth of the 1998 Wye River Memorandum between the Palestinian Authority and Israel), and aids the IDF's relocation of troops out of the West Bank.

The base is designed to store military equipment for decades. With specialized storage units control-

ling humidity and dust levels, this base stores supplies, vehicles, and other equipment for artillery, infantry, and armored brigades in the Israeli reserves that will draw their equipment in the event of a rapid deployment.

Michael Roach, originally from Norfolk District, serves as resident engineer for Nachshonim. He said he and his family moved to Israel four years ago and feel a deep sense of community, although it took some adjustments. It was a difficult move for the Roach family, traveling 6,000 miles to a totally different culture.

"This was our first overseas assignment, so it was especially difficult for us," he said. "Then, adjusting to the new culture and all the things associated with that. That took a while."

Roach said the project delivery team was "varied" with many Corps employees coming from the East Coast, and from Germany, to work with the Israeli construction team.

"As far as teamwork, I think we've meshed together well," Roach said. "We've had our struggles like any family. We have our internal squabbles back and forth, but in the end I say we *did* come together."

People came together to make the facility a reality, overcoming language barriers, cultural differences, and engineering and construction challenges.

The Corps has a long history of service in the Middle East. It oversaw billions of dollars of work in Saudi Arabia in the 1960s and early 1970s, and has been working in Israel since the Camp David Peace Accords in 1979. That's nearly three decades of supporting our allies while working to secure international peace.

The Corps has done its job too, according to Miki Eari, an Israeli Army sergeant and manager of the Nachshonim dining facility. His new kitchen features state-of-the-art equipment that allows him to prepare a greater variety of food and meals quicker and easier.

Eari, who runs the dining facility to feed a small contingent of garrison soldiers operating the base, said cooking will be much more enjoyable for him now as preparing meals can be done in half the time.

"I now have time to prepare seven types of salads," he said. "I can now prepare more food, because I have more equipment and facilities. The customer gets a much better quality of food."

During the interview with Eari, an Israeli soldier came in the kitchen and spoke to him in Hebrew.

"There's your answer," Eari said. "That guy came in and shook my hand and said 'Thank you so much for the excellent food.' He wasn't invited to do so." It was a spontaneous example of customer satisfaction.

Roach summed up the feelings of just about everyone involved in the Corps' work in Israel.

"I'm awfully proud of what we've done here," he said. "I'm not a politician. I'm not sure how this base will fit into the greater picture, but the Corps has done a great job here. And I'm proud to be a part of this organization."

Troubled employees can get help

The U.S. Army Corps of Engineers is committed to caring for its most valuable resource - *people*. The Corps recognizes that problems of a personal nature can adversely affect an employee's job performance, conduct and health. The Corps also recognizes that most personal problems can be dealt with successfully when identified early and referred to appropriate care.

The Employee Assistance Program (EAP) is designed to deal with a broad range of problems, including emotional and behavioral disorders, family and marital discord, child care and elder care problems, family illness, financial and legal difficulties, and alcohol and drug abuse.

The EAP can be extremely important in the prevention of and intervention in workplace violence issues, critical incident stress management, employees returning from disaster relief missions and deployments to remote and dangerous locations, and the potential emotional and psychological impacts of workforce restructuring.

The objective of the EAP is to assist employees who either request assistance or who have been identified to potentially have personal problems that adversely affect work performance and/or conduct. To accomplish its objective, the EAP may refer the employee to his/her personal physician, treatment source, or established community resources, for treatment and rehabilitative care. The EAP does not provide treatment or continued counseling, nor does it replace the day-to-day counseling responsibility of managers and supervisors.

EAP provides comprehensive counseling and referral services to help employees achieve a balance between their work and family and other personal responsibilities. Job effectiveness can be adversely affected when employees are faced with mental or emotional problems, family responsibilities, financial or legal difficulties, or dependent care needs.

EAP is also available for employees who have alcohol and/or drug problems and are seeking rehabilitation and the opportunity to become fully produc-

tive members of the workforce. Managers and supervisors are urged to become familiar with the EAP and to make referrals and/or recommend to employees that they seek help through the EAP. Participation in the EAP is voluntary and, ultimately, it is the employee's decision to participate.

Matters that are discussed with the EAP counselor are kept confidential. Privacy is protected by strict confidentiality laws and regulations and by professional ethical standards for counselors. The details of discussions with the counselor may not be released to anyone without the employee's written consent.

Initiating contact with EAP can be done telephonically. EAP operating hours usually are flexible so employees can make appointments before, during, and after the workday. For specific information on hours of operation and procedures for making appointments, employees are encouraged to ask their supervisors or contact their local Civilian Personnel Advisory Centers.

Vietnam veterans

Continued from page eight

housing an Army with a lot of women, the day-to-day work in Iraq greatly differs from Phu Bai circa 1968.

Popular support

Joe Berindelli earned his second Silver Star providing security for engineer units with C Troop, 1st Squadron of the 4th Cavalry of the 1st Infantry Division in 1968, somewhere between Phu Loi and Di An. Yet he most recalls how "Many of us returned to the U.S. after Vietnam to have anti-war protesters spit on us.

"The demonstrations against the war were the lead story on the nightly news and got front page coverage in most newspapers," he said. "We believed we were serving our country, and came home to find a country that, at best, was divided. We had done our duty, and we were often treated as if we were the enemy."

Some Vietnam veterans came to Iraq to exorcise those lingering, ugly memories and "to help end a war correctly, as we should have been allowed to do there," said Master Sgt. Troy Porter.

Porter is another of the few still in uniform. In Vietnam, he was with C Company 2nd Battalion, of the 506th Airborne Infantry Regiment. A few years after leaving active duty he joined the Missouri National Guard. His unit is the Engineer Brigade of the 35th Infantry Division, which mobilized not long ago.

As a civilian, he works for the Directorate of Public Works at Fort Leonard Wood, Mo. In Iraq his duties are similar as he works in Gulf Region Central's Directorate of Public Works.

"Our commitment here needs to be until the job is done," said Porter. "Look how long our presence was necessary in Germany and Japan after World War II, and in Korea after the Korean War. How can people expect Iraq to instantly have a modern country and fully functional democracy?"

The news media

The difference in the popular support of the Iraq war verses Vietnam probably relates to differences in the way the news media is covering the war in Iraq.

During Vietnam, Dan Bliznik was a Navy medic with 2nd Battalion, 9th Marines in I Corps. Today as the senior accountant for PCO he keeps tabs on the \$12 billion dollars DoD has sent to help build Iraq.

"The embedded reporters during Operation Iraqi Freedom was a great idea," Bliznik said. "It allowed a lot of print and broadcast folks who had little or no



(Above) Lt. Col. James Zucarelli was a Marine lieutenant in Vietnam 1968-69. Today he is still on active duty with the 42nd Infantry Division in Iraq. (Right) In 1970 Henry Bunting was a staff sergeant in Vietnam with the 5th Infantry Division (Mechanized). Today he an acquisition analyst in the Joint Contracting Command. (Left photo courtesy of Lt. Col. James Zucarelli, right photo by Tom Clarkson)



experience with the military to see the war firsthand. What's that old, cliché, 'Walk a mile in my shoes'? I think anyone who writes about Soldiers, sailors, Marines, and airmen during this conflict need to live it. Attitudes about Vietnam would have been different if some of the 'Saigon Warriors' had left their hotels to go where the action took place. Too few came out where we were, and if they did it was briefly, with few ever staying overnight when it was often at its worst."

'Doing this one right'

In some ways, there are similarities between Iraq and Vietnam. In both countries, things are often not as they appear. The writer of this piece was a first lieutenant with the 1st Signal Corps in Vietnam 1967-68. Like in Vietnam, the longer I'm here, the more I realize how little I understand. The complexity of relationships, tribal loyalties, long-time hatreds, and vendettas under the surface cannot be ignored.

Yet there are big differences, too. Iraq has a history 7,500 years old. It is the land that invented paved roads, epic literature, law codes, banking, and even joint stock corporations. It is the culture that created cuneiform writing from which recordkeeping evolved.

Even under Saddam Hussein, it was a modern land of teachers and engineers and petroleum businessmen.

"This is not a backward country of slouches," said Henry Bunting, lead acquisition analyst in the Joint Contracting Command - Iraq/Afghanistan. Back in 1970 he was a staff sergeant in Vietnam with Company A, 75th Support Battalion, 1st Brigade, 5th Infantry Division (Mechanized). "The vast preponderance of the Iraqis with whom I deal are ready and eager to assume responsibility for their future. Many excellent Iraqi engineers and sub-contracting companies have successfully been part of the team completing hundreds of reconstruction efforts."

In fact, over two projects are completed every day. As an Army lieutenant in 1968-69, Mike Hatchett spent his tour in Southeast Asia at Kontum as a member of the Military Assistance Command - Special Operations Group. Today he is the supervisory auditor for the Defense Contracting Agency.

"The breadth and scope of work done with Iraqi help is mind-boggling," Hatchett said. "As of March 10, 2,779 GRD/PCO projects have begun of the projected 3,109, including 364 funded by Development Fund for Iraq (DFI). GRD/PCO has completed 2,183 projects. We're doing 'this one' right."

Around the Corps



Sgt. 1st Class Troy Westerman is the newest member of the Sgt. Audie Murphy Club, which recognizes outstanding NCOs who set the example. Sgt. Audie Murphy was the most decorated Soldier of World War II.

Sgt. Audie Murphy Club

Sgt. Audie Murphy was the most decorated Soldier in World War II, winning every medal for valor including the Medal of Honor. Twenty years ago, the Sgt. Audie Murphy Club was organized to recognize other outstanding non-commissioned officers NCOs who set the example for all to follow.

Sgt. 1st Class Troy Westerman is the newest member of this elite club. Westerman was among dozens of Soldiers competing for the honor in Gulf Region Division. He was screened in January at Gulf Region Central District by a board of five master sergeants and the command sergeant major. He answered questions for 40 minutes on topics including land navigation, NCO history, maintenance, Army programs, evaluation reports, weapons, leadership, drill and ceremony, first aid, and chain of command.

On Feb. 10 Westerman appeared before a board of GRD's sergeants major. Westerman said he's proud to be selected for the Sgt. Audie Murphy Club, "and it was especially meaningful to do so in a combat zone here in Iraq."

Westerman is a member of the Missouri National Guard's 35th Infantry Division's Engineer Brigade in Cape Girardeau, Mo. He is the NCO In Charge of GRC's Loyalty Office.

Engineering Career Day

"I really wanted to be here today because engineering is problem solving," said Leanne Thompson, a junior from Bishop Kenny High School. "It's all of us putting our talent and intelligence into one purpose. That's exciting to me."

And it was exciting to everyone else involved in Jacksonville District's Engineer Career Day on Feb. 24. Fifty students from five area high schools took part, along with an equal number of engineers representing numerous firms, colleges, and the armed forces.

The day-long competition took place on the second floor bridge of the Prudential Building. The students completed both a take-home project and a surprise project, which was completed on site. Both involved water management and control.

The team from Orange Park Christian Academy

won the competition, while the Bishop Kenny High School team took second place.

Correction

Stephen Martinez wrote the article "Battlefield teams prove worth in civil disaster" in the March on-line edition of *Engineer Update*.

Karbala Government Building

A ribbon cutting ceremony officially opened the Karbala Government Building in Afghanistan on March 5. The local administration building received a full interior make-over including new heating and air conditioning systems, electrical wiring, wall finishes, stage area, seating, and furniture. The exterior was also upgraded with a power transformer, courtyard, restroom, and a new coat of paint.

The Karbala Government Building has theater-style seating which will allow many uses as a convention or conference center for the province. This is the first of three government buildings renovated at this location; the other two projects are a garage and the Al Sadiq Building. Afghanistan Engineer District is managing the project.



Joe Woods signs copies of his new book in a bookstore.

New novel

Joe Woods, a retiree from Vicksburg District, has published his third novel.

Old Main Burning: A Tale of Love and Murder in Mississippi is based on a real event, when Old Main Dormitory at Mississippi State University burned on Jan. 22, 1959. In Woods' novel, investigators find a human skull in the smoldering rubble. The crushed skull is not a result of the fire, a fall, or a failed escape. Had the fire been deliberately set to cover up a murder? The investigation leads to the upscale social circles of the Deep South, influenced by big city visitors and money. Beneath the surface of slow-paced, innocent college life lays the true story of Old Main Burning.

Woods, who retired in 2003 as Chief of the Project Resources Management Branch of Operations Division, is enjoying the rewards of being a published author. In March he had two book signings, plus an interview for the "Midday Mississippi" TV show on WLBT in Jackson, Miss. Seven more book signings are scheduled in April. May brings another round of book signings in San Destin, Fla., and later this summer Woods will be signing at the grand opening of the Barnes & Noble bookstore at Mississippi State University.

"This part of the literary business is great fun," said Woods.

Woods began writing to pass the time while recuperating from a heart attack in 1992. "The doctor told me that if I had anything that I really wanted to do, I'd better do it, because I didn't have much time left," said Woods. "They say everyone has a novel in

them, so I wrote mine. And now here it is 14 years later, and I'm on my fifth novel."

Woods' novels are based on his memories of small town life in the Mississippi Delta. His first two novels are *Where the Ferry Crosses* and *The Trial*. By the end of this year, he hopes to publish his fourth novel, *Escape from New Orleans*, and release his fifth novel in 2007.



Wilmington District helped the National Park Service preserve the Cape Lookout Lighthouse.

Lighthouse

The National Park Service (NPS) owns the Cape Lookout Lighthouse keeper's quarters and summer kitchen since June 2003, but they have been threatened by erosion from storms and high tides, and a woodshed near the lighthouse was destroyed in 2003 by Hurricane Isabel.

This prompted NPS to seek protection for the lighthouse and remaining structures. NPS asked for and is receiving assistance from Wilmington District. According to project manager Mitch Hall, the Corps placed about 60,000 cubic yards of beach quality material along 2,600 linear feet of the estuarine shoreline of South Core Banks at the Cape Lookout National Seashore. This will act as a buffer that will slow erosion.

Dredging operations ended March 19 and the project was completed at the end of March. NPS is funding the project. The lighthouse and other structures are on the National Register of Historic Places. It was built by the Corps in 1859.

National Congress of American Indians

On Feb. 28, Lt. Gen. Carl Strock, Chief of Engineers, addressed the National Congress of American Indians (NCAI), the oldest, largest national organization devoted to informing the public and Congress about the rights of American Indians and Alaska Natives.

Strock is the first Chief of Engineers to appear on a NCAI agenda. He began by thanking NCAI President Joe Garcia for his leadership, and acknowledging the contribution Native Americans have made to their country in the armed forces. He acknowledged Native American Soldiers who have died in Iraq, calling them heroes.

Strock then departed from his prepared remarks to talk about the importance of tribal sovereignty, and the commitment the Corps has to working on water resources issues in partnership with tribes. He pledged the Corps' support to tribal nations and concluded by saying that his appearance at NCAI was an honor.

Still serving proudly

Vietnam veterans working hard in a new war, in a new century

By Tom Clarkson
Gulf Region Division

Guerrilla warfare then: In the deep undergrowth of a jungle path, it was a trip-wire attached to a grenade.

Guerrilla warfare now: In an Iraqi city, it's an improvised explosive device (IED) planted beside a busy highway and detonated by cell phone from a nearby roof.

Brutality then: In Kontum province in 1968, a village chieftain watched helplessly as his two young daughters were killed. Then he was beheaded.

Brutality now: Three construction workers enroute to work were stopped and pulled from their vehicle. Two were shot in the head, the third was beheaded.

Surprise attack then: In Saigon, a smoke-spewing motorbike wove through heavy traffic and the rider threw a grenade into an open jeep before darting away.

Surprise attack now: A new BMW with a trunk full of explosives rams a convoy of HMMWVs.

And some things never change: A midnight mortar or rocket attack sounded the same at a forward operating base in Phu Bai in 1967 as it does in North Babil in 2006. An AK-47 or rocket-propelled grenade does the same damage whether the gunner is Viet Cong or Iraqi.



(Left) Spec. 4 Wreco Reese with his DC-7E bulldozer "Karolyn" in Quan Tri Province in 1970. At right, Master Sgt. Wreco Reese, still on active duty, serving with GRD's Central District at Camp Blue Diamond in Ramadi. (Left photo courtesy of Wreco Reese, right photo by Tom Clarkson)

Vietnam vets in Iraq

There are a number of people who have seen both wars — men who served in Vietnam and now work in Iraq. In just a few weeks, I found more than 80 of these veterans working throughout Iraq. From 1964 to 1971 they served in the Army, Air Force, Marines, and Navy from the Gulf of Tonkin to the DMZ. Their present ages range from 51 to 70.

The once hard-bodied young servicemen are a little paunchier now, a little grayer, a little slower. But they are no less committed to serving their country. In fact, 13 are still in uniform — three colonels, six lieutenant colonels, three master sergeants, and one warrant officer five.

The others are federal employees or contractors. Their tours of duty in Iraq range from six months to more than 18. They are today, as they were in Vietnam, a diverse lot.

"With" rather than "For"

These veterans say that of all our mistakes in Vietnam, the worst was doing so much for the South Vietnamese, both militarily and in the civil sector. In doing so, we made two major errors. First, we took their pride and self-sufficiency and gave them the impression that we felt ourselves to be superior, generous entities that would solve all their problems.

Second, we failed to educate them for when they would have to take care of themselves. We failed to heed the old parable "Give a man a fish and he eats for one day. Teach him to fish and he eats for the rest of his life."

In 1967, Buddy Algood was a second lieutenant with E Company, 3rd Battalion, 7th Infantry of the 199th Infantry Brigade near Binh Chan. Following the loss of his lower right calf and foot and recuperation from his injuries, he was the first amputee to graduate from the Airborne School at Fort Benning, Ga. A month later he returned to Vietnam.

Thirty-eight years later, as a civilian, Algood came to Iraq with the Project and Contracting Office (PCO). He explained that, in Iraq, part of his early work was "identifying reconstruction projects in 10 strategic cities that would put Iraqis to work and make an immediate improvement in their quality of life."

In the first seven weeks, 358 projects were identified, developed, prioritized, contracts solicited and

awarded. Wherever possible, efforts were made to hire Iraqi contractors and workers. At one point, 21,000 Iraqis were employed on these projects.

Algood said that "We're finally doing that often-used phrase in Southeast Asia... 'winning the hearts and minds' of those we're supposed to help."

Then there's Steve Budnick. In 1967, he was an enlisted man in Vietnam with the 1st Cavalry, 101st Airborne Division, and with a Special Forces team. Today, he is in the PCO's Security and Justice Sector keeping track of more than 900 reconstruction projects. They include police stations, prisons, military bases, training academies, courthouses, border forts, ports of entry, and fire stations. These projects employ hundreds of Iraqis today, and will help make Iraq more secure in the future.

The enemy

These Vietnam veterans agree with Algood's assessment that "winning the hearts and minds" is as important today as it was in Vietnam, even though the enemy is different.

Lt. Col. James Zucarelli is a member of the 42nd Infantry Division serving as liaison officer with the PCO. He was a Marine lieutenant in Vietnam 1968-69, and will leave Iraq at the age of 59.

Zucarelli says of 'Nam, "There we were fighting a well-organized, structured, ideologically-driven force who shared a common objective. Today we are up against disparate, factionalized knots with an equally wide array of reasons for what they do."

The insurgents in Iraq include:

- A few Ba'athist Party members still loyal to Saddam Hussein.
- Islamic extremists using religion to sanctify black marketeering, kidnapping, extortion, and other criminal activities.
- Neighboring countries using the war as an excuse to settle lingering "debts" like the Iraq/Iran war, or generations-old tribal hatred and vendettas.
- International terrorists like Zarqawi.
- A multitude of ethnic, cultural, and racial groups who have moved their traditional hatreds into an international arena.
- The unemployed. There are former Iraqi soldiers who will accept \$25 dollars to take a potshot at a pass-

ing patrol, plant an IED by the road, or shoot a mortar from their backyard at night.

So this is clearly not our father's war.

The threat

The techniques of guerrilla warfare have evolved since Vietnam. Combatants are no longer the primary targets. For the most part it is Iraqi civilians who take the brunt of the assaults. For example, last August seven Iraqi contractors, working for Gulf Region Division and PCO, were killed and 11 injured.

The result has been a drain on funds. Significant money intended for new projects and rehabilitation projects are diverted for security. Rick Jervis of *USA Today* reported that "Security costs have chewed away at the \$18.4 billion appropriated by Congress for reconstruction in Iraq. Last year, \$5 billion of that was redirected to training and equipping Iraq's security forces, a move that resulted in the cancellation of some projects and scaling back others."

Our forces

As the threat has changed, so has our military.

"The make-up of fighting forces is markedly different than in Vietnam," Master Sgt. Wreco Reese noted. "There are many Guard and Reserve folks in Iraq."

He is an excellent example. In 1970 he was a young Specialist Four operating a DC-7E bulldozer with the 14th Engineer Battalion in Quan Tri Province.

Now, as a master sergeant, he serves with Gulf Region North in Ramadi. Before this, he was with the 416th Facility Engineers, an Army Reserve unit, in Kadahar, Afghanistan.

And those who do the day-to-day chores have changed as well. Today the majority of combat support and service work is done by government service professionals, civilian contractors, or local nationals. From meal preparation and KP to guard duty, convoy protection, and personal security details, all are now services contracted from the private sector.

This is a substantial change from Vietnam and has significantly altered the way the military does business. From logistical support to environmental impacts to

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