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In this issue:

Housing

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3 Letter from the Editor

Housing
4 Fort Hood improves barracks for single Soldiers
5 New barracks is centerpiece of $153 million construction bill *by J.C. Mathews*
5-6 Post tour reveals how dorm-style barracks evolved *by Sgt. Armando Monroig*
7 Housing Team receives recognition for efforts after Hurricane Katrina *by Becky Proaps*
8 Patch Barracks project revitalizes Old Craig Village *by Sgt. 1st Class Bill Sutherland*
9-10 Imploding vs. traditional demolition saves time and money for Fort Myer project *by Debra Valine*

Annual Installations Symposium
11-12 BRAC, Army Transformation among issues discussed at Installations Symposium *by Debra Valine*
12-14 Directorate of Public Works presents annual awards to six individuals, three organizations

Energy
15-16 Energy Surety for Mission Readiness *by David Menicucci, Roch Ducey and Paul Volkman*
16-17 Impact of the Energy Policy Act of 2005 on the Army mission, environment *by David N. Purcell*
18-19 Fort Benning opens first gas pump featuring Ethanol85 *by Melissa House*
19 Save energy by replacing obsolete incandescent bulbs with compact fluorescent bulbs *by William F. Eng*

Environmental
20 What Army installation managers should know about soil vapor intrusion at contaminated groundwater sites *by Mark J. Fisher*

Community Support
21-23 Stand-alone birthing center opens in Vicenza, Italy *by Lou Fioto*
23 Engineers complete sewer upgrade project in Iraq *by Claude D. McKinney*

Training Ranges
24-25 Line-of-sight technology speeds process of modernizing Army training ranges *by Debra Valine*

Master Planning
26 New Advanced Master Planning Class kicks off July in 2006
26 Technology Standards Group evaluating Army standards

Personnel
27 Deputy chief of staff for Installation Management retires with 35 years of service *by Suzanne Harrison*

This issue of the Public Works Digest focuses on housing. This issue also includes articles on the annual Association of the U.S. Army/Installation Management Agency Installations Support Symposium held April 4-6 in Kansas City, Mo.; changes to energy policies; and personnel changes.

Housing articles include one on how Fort Hood, Texas, is improving barracks for single Soldiers. An article written by J.C. Mathews discusses the two barracks complexes that are the centerpiece of construction at Fort Lewis, Wash.; Mathews' article is complemented by a companion article by Sgt. Armando Monroig that traces how dorm-style barracks evolved at Fort Lewis. Sgt. 1st Class Bill Sutherland shows how Patch Barracks housing at Stuttgart, Germany, was revitalized. Another article discusses a project at Fort Myer, Va., that is setting a new standard for facility removal by imploding a 12-story apartment building and recycling more than 80 percent of the material while saving money.

The articles on the annual Installations Symposium summarize what key leaders are saying and highlight six individuals and three organizations in the public works community with the annual Directorate of Public Works awards.

In the Energy section, David Menicucci, Roch Ducey and Paul Volkman explain how increased energy security and decreased dependence on fossil fuels are two major objectives of the new Army Energy Strategy for Installations; David N. Purcell talks about the impact the Energy Policy Act of 2005 has on the Army mission and the environment; and Melissa House writes about the opening of the first gas pump to feature Ethanol85 at Fort Benning, Ga.

The issue finishes with articles about soil vapor intrusion at contaminated groundwater sites; a stand-alone birthing center in Vicenza, Italy; and how new line-of-sight technology is helping speed up the process of modernizing the Army's training ranges.

This issue concludes my tenure as acting managing editor of the Public Works Digest. Mary Beth Thompson is on board and will take over with the May-June issue. It has been a rewarding and professionally satisfying experience working with all of you on the past few issues. Thanks for the opportunity to get to know you.

Debra Valine

Debra Valine, Acting Managing Editor, *Public Works Digest* PWD

Fort Hood improves barracks for single Soldiers

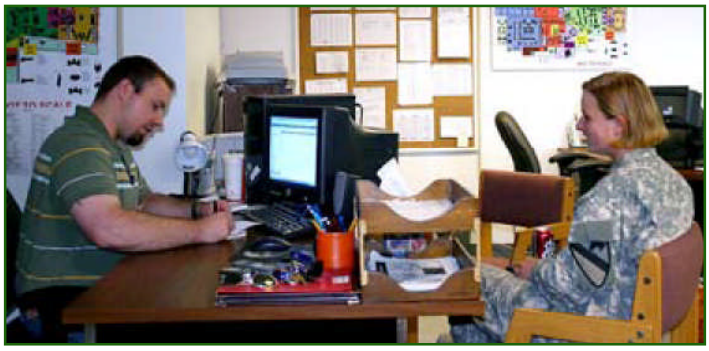
The 4th Infantry Division (4ID) Centralized Barracks Management (CBM) Team is playing a key role in improving the quality of life for our single Soldiers living in the barracks at Fort Hood, Texas.

Back in summer 2004, the Office of the Assistant Chief of Staff for Installation Management agreed to support program startup for the 4ID, wanting to test CBM at an Army Power Projection Platform in the throws of major deployments, re-deployments, mobilizations and demobilizations. This 13-person CBM team has changed the way barracks are managed.

Previously the barracks were managed by the military units, but under the CBM program the Directorate of Public Works became the barracks manager. The CBM teams assign each Soldier a room and track the occupancy, condition of rooms and furnishings until the Soldier is cleared to leave Fort Hood. During occupancy, the CBM teams provide access to the rooms for workers performing maintenance and report barracks utilization. When a Soldier is assigned to the 4ID, they are in-processed by a CBM team using a central database that not only aids in managing room occupancy, but also by processing work orders and furniture exchanges, thereby creating a history for each room.

Recently, the 4ID's CBM team was challenged with some first-time feats. From Nov. 27-Dec. 15, 2005, the CBM teams supported the deployment of the 4ID to Iraq. During this period, the CBM teams cleared more than 7,000 Soldiers. In addition to the deployment of the 4ID, the CBM teams assigned barracks rooms to 3,000 Army Reserve Soldiers of the 56th Brigade Combat Team returning from Iraq. The CBM teams worked their normal schedule and extended work hours to make the deployments and demobilizations work as a smoothly as possible, without causing delays. In many instances barracks rooms were assigned starting at 2 a.m. and were cleared as late as 10 p.m. to accommodate the military schedules. The CBM teams' work week also was extended to seven days per week to accomplish this great task. At the end of this three-week period, the CBM teams managed to assign and clear rooms to more than 10,000 Soldiers. The teams accomplished this because each military unit's chain of command was more than willing to work with and support the CBM staff.

Ashley Graham, right, helps answer Soldiers' questions. Photo by Michelle Dixon



Joseph Truelove, left, works with a Soldier. Photo by Michelle Dixon

In addition, barracks have been added to the central clearance process and Soldiers must coordinate with the CBM staff before departing the installation. Soldiers are now held accountable for non-fair wear and tear to their living quarters and in just three months CBM teams have collected an estimated $27,000 which has been deposited into a Fort Hood maintenance account and used to make needed repairs.

The CBM program is relatively new to Fort Hood, but in just a short time has proven to improve the quality of life for Soldiers. Improved living conditions and services is what our Soldiers expect and deserve, particularly at this time of war. By ensuring rooms are available when needed, well maintained, while at the same time holding Soldiers accountable for damages is the right thing to do, now more than ever. After reviewing the successes of the CBM program, Fort Hood leadership is considering the next steps of expanding the program beyond the 4ID to all 16,000 Soldiers residing in barracks on the installation.

Michelle Goldwire, left, shows a new resident the amenities offered in her new quarters. Photo by Michelle Dixon

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New barracks is centerpiece of $153 million construction bill

by J.C. Mathews

FORT LEWIS, Wash. – Two barracks complexes adding 500 new Soldier rooms to Fort Lewis are the centerpiece of nearly $152 million in construction projects funded by the fiscal 2006 budget.

Barracks construction funded in this year's budget will likely be completed during fiscal 2008, bringing Fort Lewis closer to its goal of housing all unaccompanied troops in rooms that conform to new standards for single Soldier housing, said Steve Glover, a master planner for the Directorate of Public Works.

"Every year we've done better in providing rooms and amenities to the Soldiers," Glover said. "Each (pair of rooms) will include these small kitchens, which will have a full oven and stove, microwave and sink — a fully functioning kitchen."

The budget contains about $152 million for the two barracks projects and three Special Operations Command projects. Other spending that would be funded in fiscal 2006 included $4.8 million for a new training facility for the 1st Special Forces Group, $18.5 million for an expansion of the 1st SFG's compound, and $30 million for renovations to hangar facilities near Gray Army Airfield.

Despite the addition of hundreds of unaccompanied Soldier rooms on post, the planned arrival of new units at Fort Lewis has actually postponed the day when all Fort Lewis troops live in the new "one plus one" barracks rooms. Glover said plans had originally called for virtually all Fort Lewis barracks residents to have the new rooms by the end of 2010. However, including the stand-up of the 2nd Cavalry Regiment at Fort Lewis this year, the post expects to grow by about 11,000 Soldiers over its 2004 population.

Still, the majority of post single troops should have the new rooms by the end of fiscal 2009, Glover said. He added that this year's funding will enable two of the installation's largest units to complete their move to all-new facilities in 2008.

"That will complete the new barracks complex for 1st Brigade (25th Infantry Division) on North Fort," Glover said. "The other will be our first barracks complex in the Jackson Avenue area, intended for the 62nd Medical Brigade."

The barracks projects will contain more than just troop housing. Glover said both projects include company and battalion headquarters buildings, and the Jackson Avenue complex for the 62nd Medical Brigade will contain a new brigade headquarters for the unit.

"The company headquarters will be configured differently from what's being built now at North Fort," he said. "We'll have four company headquarters in each building with more square footage per company than what we're now building. The battalions will be very similar to what's now being built at North Fort."

The relocation of 1st Brigade and the 62nd Medical Brigade are part of an installation plan to mostly empty the Banana Belt of permanently assigned troops, freeing that area to house participants in the annual Warrior Forge ROTC advanced camp. Currently, Warrior Forge troops live in World War II-era wooden facilities on North Fort. However, Glover said the addition of new units to Fort Lewis has also slowed the pace at which the Banana Belt can be emptied.

Funding requested for future projects includes close to $100 million each for 3rd Brigade, 2nd Infantry Division and 2nd Cavalry Regiment barracks complexes, almost $70 million for the 2nd Battalion, 75th Ranger Regiment area, and another $50 million for additional units in the Jackson Avenue area.

J.C. Mathews is a public affairs specialist in the Fort Lewis, Wash., Public Affairs Office. PWD

Post tour reveals how dorm-style barracks evolved

by Sgt. Armando Monroig

Through the years changes occur in just about every facet of life, and military barracks are no exception.

Military barracks have evolved from the wooden World War II-era buildings to the college-dorm-type dwellings of today. By taking a tour of Fort Lewis, Wash., one can observe this timeline of change which may feel like time travel.

The World War II-era barracks are still in use today, with 5,500 beds. They are used to house cadets and cadre participating in Warrior Forge ROTC Advanced Camp each summer.

Reserve and Guard units also use them.

There are Korean War-era barracks that were built from 1953 to 1956 with community showers, two-Soldier rooms, one-Soldier rooms and a few that look like apartments.

Six barracks were built in the late '70s during the Cold War-era. Two barracks buildings were constructed just prior to the first Gulf War.

Barracks have been built by different construction firms throughout the years, which explains the various designs.

Whichever barracks a Soldier lives in, the priority for Fort Lewis is improving quality of life for Soldiers, said Jim Benson, barracks program manager at the Fort Lewis Department of Public Works.

"It affects the Soldiers' quality of life and readiness," Benson said. "Everybody needs a sense of home, and Soldiers are no different."

Tackling this challenge required input, Benson said.

To gain this input, the post Inspector General's Office conducted a survey ➤

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and analysis in spring 2005. The majority of the 1,000 Soldiers interviewed focused on storage space, showers, laundry facilities, refrigerators, kitchens, space and privacy.

Responses are used to develop the standard for improving quality of life issues for Soldiers, Benson said.

And the results are appreciated.

"I think they're awesome," said Sgt. Ronald Waugh, 864th Engineer Battalion, a tenant at one of the new barracks on North Fort Lewis. "They're comfortable. It's great. It's like living in a college dorm."

Waugh can remember a time when he lived in barracks not much bigger than the one he is living in now, and had to share it with two other Soldiers.

"I've been in military service eight years and have seen the barracks come a long way," he said.

The barracks Waugh lives in has a recreation center, with a big-screen television, stereo, ping-pong table, pool tables and a laundry room with 20 washers and 30 dryers.

"I'm used to four washers and four dryers and two are broke," Waugh said.

But not everyone on Fort Lewis has the same accommodations.

"It's what you make of it," said, Pfc. Jessi Tseng, Regimental Headquarters and Headquarters Troop, 2nd Cavalry Regiment, who lives in one of the older, Korean War-era barracks on main Fort Lewis. "You just have to deal with it."

The barracks she lives in doesn't have a kitchen and five females share a bathroom. She said the bathrooms remind her of the basic training bathrooms and offer four sinks, toilets and community showers.

Feedback from Soldiers like Waugh and Tseng allows DPW to make positive changes for those who serve now or may serve in the future.

The DPW goal is for each Soldier to have 60 cubic feet of storage when closets are not available. There will be 90 square feet of floor space for each Soldier E1-E4; 135 square feet for each E5-E6. Also, no more than two Soldiers will live in a room except when the 90 square foot requirement is met. There will be at least one shower head for every five Soldiers, one washer for every eight Soldiers, one dryer for every six. There will be at least one community kitchen per battalion.

A budget item setting aside $135 million for construction on post will pay for more modern barracks complexes like this one on North Fort Lewis. Barracks construction funded in this year's budget will likely be completed during fiscal 2008. Photo by Sgt. Armando Monroig

"At the Army level it has been identified as a program that is important with terrific implications not only for Soldier readiness and quality of life, but also retention and recruitment," Benson said.

There are about 80 barracks buildings on Fort Lewis and North Fort Lewis in addition to the short-term, transient bachelor's quarters. Construction of newer barracks began in 1995 with the first few buildings being completed in 1998.

"Of the 80 existing barracks, around 50 of them were built during the Korean War in the early 50s," said Benson of the standard barracks located on the east side of Gray Army Airfield on main Fort Lewis that house about 8,000 Soldiers.

The renovations, upgrades and new construction combine simultaneous projects coming from the three different funding programs, he said.

Two of those programs are the Flagships Program and the Barracks Improvement Program.

"(The Flagships Program) is designed to repair barracks for deployed or redeploying Soldiers," Benson said. "Painting and re-carpeting are among the things done to spruce things up."

The Barracks Improvement Program is used to work on the barracks in the worst condition first. On Fort Lewis those are the H-shape barracks (that house about 1,900 Soldiers) in the 3rd Brigade area and hammerhead barracks (barracks designed in the shape of a hammer that house about 6,000).

In addition Benson said there is the regular DPW program focusing on sustaining, restoring and modernizing.

"Between those three programs we have the opportunity to do a lot of neat things," Benson said. He pointed out that a total of $35 million has been spent on renovations just within the last three years.

DPW estimates that by 2008 there will be enough new construction and renovations done that Soldiers can be spread out. This will mean fewer Soldiers living in the same barracks, alleviating overcrowding and wear and tear on the buildings.

"It's what we owe the Soldiers for asking them to do what they do," Benson said.

Sgt. Armando Monroig is a public affairs specialist assigned to the 5th Mobile Public Affairs Detachment. PWD

Housing Team receives recognition for efforts after Hurricane Katrina

by Becky Proaps

HUNTSVILLE, Ala. — The Professional Housing Management Association recognized Huntsville Center's Unaccompanied Military Personnel Housing Team at the annual professional development seminar Feb. 3 in San Diego, Calif. The team's program manager, Alicia Allen, received an appreciation plaque presented by PHMA President Michael Shelton.

The Unaccompanied Personnel Housing Team is shown with Deborah Reynolds (Office of the Assistant Secretary of Information Management Agency Family Housing Team Chief). The UPH team received the special service award in recognition of their efforts to procure furniture for families affected by Hurricane Katrina who were living in government leased housing at Fort Polk, La., and had no furnishings. Left to right are Katrena Pope, Jay Clark, Sue Werner, Katherine Atkins, Reynolds, Alicia Allen, Beatrice Hill, Heather Holder, Larry McIntosh and Debbie Bogema. Jane Davis and Marcus Searles, not pictured, also received the certificates and awards. Courtesy Photo

Team members are Katrena Pope, Jay Clark, Sue Werner, Katherine Atkins, Alicia Allen, Beatrice Hill, Heather Holder, Larry McIntosh, Debbie Bogema, Jane Davis and Marcus Searles.

The association recognized the team for exemplary efforts to procure furniture for families affected by Hurricane Katrina who were living in government leased housing at Fort Polk, La. The team's efforts made possible the procurement and delivery of entire houses of furniture in less than four weeks, ensuring families living in homes with nothing more than twin beds were provided furnishings for use while in the Fort Polk housing.

"One of the most important things the Corps of Engineers does is help those who have been affected by events such as floods, hurricanes and other natural disasters," said Katherine Atkins, a contract specialist in the Acquisition Support Division of the Directorate of Contracting.

Alicia Allen, center, Program Manager for the UPH team, is with PHMA President Michael Shelton, left, and Donald Prosch, Principal Deputy Assistant of the Army, Installations and Environment (PDASA IE). Courtesy Photo

"Although the UPH team is primarily responsible for furniture for unaccompanied personnel, the team happily and efficiently did what had to be done to ensure that these families had furniture," Atkins said.

"These Soldiers were redeploying from Iraq, not knowing what they would find when they reached Louisiana. Knowing that we were doing something that would help make their lives easier or better is one of those things that makes our jobs worthwhile," she said.

Team members also received coins from commanders at Fort Knox, Ky., Fort Jackson, S.C., and Fort Hood, Texas, during the UPH portion of the Army day meetings at PHMA.

PHMA contributes toward better quality housing for military members and their families by continuously raising the level of proficiency and professionalism within the military services' housing profession. This is done through improved communications and networking, education and training, certification, and professional recognition.

Becky Proaps is a public affairs specialist assigned to the Engineering and Support Center in Huntsville, Ala. PWD

Patch Barracks project revitalizes Old Craig Village

by Sgt. 1st Class Bill Sutherland

As the Army transforms the way Soldiers train and fight, it is also committing considerable effort, and resources, into enhancing the quality of life of the service members and families who live on installations.

One of the benefits of this effort was unveiled in July 2005 on Patch Barracks in Stuttgart, Germany, during a dedication ceremony and open house celebrating the completion of a neighborhood revitalization project in Old Craig Village.

The U.S. Army Corps of Engineers, Europe District, together with contractor HSG Technischer Service GmbH, provided 110 improved housing units for area families, said Carl Pritchard, director of the 6th Area Support Group Directorate of Public Works. Instead of upgrading individual buildings, the whole neighborhood revitalization project concept resulted in a dramatic improvement of an entire area.

"Our Stuttgart Whole Neighborhood Renovation Project Delivery Team was superb and we are all very proud of their success," said Col. Margaret Burcham, Europe District commander. "This project represents a classic example of a straightforward mission in which all the elements came together synergistically, without a hitch."

The improved neighborhood for military families received high marks from many.

Eric Kevitz, who supervised the project for HSG Technischer Service GmbH, said the results included not only "wonderful" apartments but also a stronger relationship between host-nation companies and U.S. military organizations.

The $17.5 million project included 60 three-bedroom apartments and 50 four-bedroom apartments. Courtesy photo

"This was a great project," he said. "Partnership works."

Teaming with various agencies, to include the 6th Area Support Group and members of the Norfolk District, to provide such quality of life improvements requires communication and strong teamwork. The project has been nominated by the Europe District as one of the Project Delivery Teams of the year.

In addition to a large living area, all apartments include laundry spaces with washers and dryers and two bathrooms. Courtesy photo

The neighborhood revitalization project was delivered through the process of using "virtual engineering" to incorporate the stateside talents of the Norfolk Design team. Europe and Norfolk Districts combined technology to transfer Computer Aided Drafting and Design files, quickened the design process. The cornerstone of the project was an initial two-week design charrette involving housing and public works officials which placed the project on the fast track. The project was delivered a month ahead of schedule and below cost.

The approximate price tag was about $17.5 million, and included various upgrades on several aspects of the construction, many of which progressed from the drawing board at the Europe District level to what was seen at the open house. The project included the renovation of 10 residential buildings, each containing apartments with various floor plans which included: 60 three-bedroom apartments of 1,646 square feet, 30 four-bedroom apartments of 1,898 square feet, and 20 four-bedroom apartments, constructed in former attic spaces, each with 2,013 square feet.

All apartments include laundry spaces and provide washers and dryers – no more need to haul laundry down to the basement. And, each renovated unit has two bathrooms.

Other highlights of the upgrades include new sprinklers, heating, sewer systems, fire alarms, lighting fixtures and intercoms – part of a comprehensive improvement of area infrastructure.

The outdoor enhancements included new roads, parking areas, patio/grill areas, and various shrubs and trees.

During the ceremony, two military leaders cited caring about community members and family support as the driving force behind the project.

"The Corps of Engineers greatly appreciates the opportunity to enhance the quality of life on our military installations. It's also an opportunity to provide service members and their families quality facilities that directly impact them in their day-to-day lives," Burcham said.

Col. Gwendolyn Boney-Harris, commander of the 6th Area Support Group, said the project was also about peace of mind.

"Our service members work so hard," she said, "and this lets them know that their families are living in a nice, secure place. Taking care of our families is simply the right thing to do."

Editor's Note: *Hugh C. McBride, from the Stuttgart Public Affairs Office, contributed to this story.*

PWD

Imploding vs. traditional demolition saves time and money for Fort Myer project

by Debra Valine

With a sound similar to that of a large thunderclap, Bldg. 501 at Fort Myer, Va., will be reduced to rubble. The implosion, scheduled for sunrise in early June, depending on how work progresses, will take approximately 15 seconds.

Imploding Bldg. 501, Tencza Terrace, is part of an effort to reduce the number of outdated buildings on Army installations. Imploding the building will save $100,000 and at least a month of time compared to traditional demolition methods.

The Installation Management Agency and Fort Myer turned to the U.S. Army Corps of Engineers, Engineering and Support Center, Huntsville, for guidance on the best way to accomplish the mission. As the Installation Support Center of Expertise for facilities demolition and reduction, Huntsville Center supports the planning, management and execution of the Army-wide facilities reduction program.

"The demolition of Tencza Terrace demonstrates the great partnership between the Installation Management Agency and the U.S. Army Corps of Engineers," said Col. Thomas A. Allmon, commander of the Fort Myer Military Community. "We in the Fort Myer Military Community lean heavily on the Corps' expertise for all our major projects. The partnership we've established between our installation staff and the Corps working our demolition is fabulous. An effort of this magnitude requires a synchronized effort by all involved for it to be a success and I know the team we've established is up to the task."

Bldg. 501 is a 150,449 gross square foot, 13-story family housing facility built in 1966 for junior noncommissioned officers. The cost to remove the building is estimated at $1.6 million and will be complete by June 2006.

"We worked with the Installation Management Agency to develop a contracting tool that did a couple of things – it got better prices for what was being done and met environmental goals of the Army," said Michael Norton, a project manager in the Facilities Reduction Program.

IMA had found that installation Directorates of Public Works were using historic data – how much it cost to demolish a building before – rather than looking at demolition experts and nationwide costs for demolishing buildings, Norton said.

Work continues in Phase 1, the soft demolition of Bldg. 501 at Fort Myer, Va., to remove all interior walls, fixtures, doors, windows, appliances, sheetrock and floor tiles for either recycling or disposal. Once Phase I is complete, Phase II will consist of imploding Bldg. 501, and the resulting brick and concrete will be crushed into aggregate and used as engineered fill material to build up a slope in front of the existing building. The Huntsville Center's Installation Support program is supporting Army Transformation through initiatives like the Facilities Reduction Program, which removes old buildings in an environmentally safe and efficient manner. Photo by Gary Williams

Everything had to be removed from the interior of the building to avoid contamination of the brick and concrete rubble that would eventually be ground into small pieces and used as landfill on the site. Photo by Gary Williams

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"We awarded an Indefinite Delivery, Indefinite Quantity contract initially for only the IMA Northeast Region Office (NERO) to Bhate Environmental Associates, Inc., of Birmingham, Ala. This firm demonstrated that it has the knowledge and means to demolish buildings using industry demolition best practices," Norton said. These industry best practices reduce the cost of demolition often as much as 50 percent from what installations have been paying.

"Bringing down the building should take about 15 seconds and sound like a large thunderclap," said Tom Peck, a professional engineer with Bhate Associates. "It will sound like the grand finale at an inexpensive fireworks display."

There will be a test blast the Friday before the implosion actually takes place, said Raymond Zukowski, a field operations manager with Controlled Demolition Inc. of Phoenix, Md. "We put the dynamite in place on Friday and do a test blast. On Saturday we go back in and install the caps and other items needed for Sunday. Once the sun comes up on Sunday, the building will come down."

Bldg. 501 is constructed of brick and concrete and is located on a sloped site. Once the building is imploded, the brick and concrete will be crushed on-site, rather than removed to a landfill and the resulting rubble used to level the slope. Most of the materials that normally would have gone to a landfill will be recycled or reused, Norton explained.

"The new Army waste diversion standard is 50 percent by weight," Norton said. "That is important because the diversion standard is by weight, not volume. We will exceed that goal. Huntsville Center awarded the contract for the Fort Myer work. Baltimore District is providing the contracting officer representative and quality assurance services for us. They have someone on the ground watching the contractor to ensure he is accomplishing his approved work plan."

Bhate Environmental Associates of Birmingham, Ala., in late February started preparing Bldg. 501, Tencza Terrace, at Fort Myer, Va., for implosion in early June. Photo by Gary Williams

Work will be accomplished in two phases. In Phase 1, utilities will be disconnected and rerouted; asbestos abatement will be conducted; and soft demolition performed.

"Utilities such as water, sewerage, gas, TV, electricity, just like in a house, will have to be turned off," Norton said. "When you tear a building down, you do not want a broken gas line, etc. The next part of it is that there is asbestos in the building – in the floor tile, in the adhesive, and on the hot water tank in the basement – that is considered hazardous. That asbestos has to go away, completely out of the building. It is critical that all asbestos containing material be removed so when the remaining rubble is crushed to use as fill material, it is not considered contaminated.

"Soft demolition is the stripping or gutting of the inside of the building," Norton continued. "We will remove sheetrock, doors, cabinets, windows, piping, fixtures, metal, etc. Most of these materials will be recycled or salvaged. Bhate has even found a company to recycle the sheetrock. The goal of Phase 1 is to reduce the building to a structural skeleton, so that when the building is imploded, the leftover rubble is suitable for crushing into material which is reusable.

In Phase 2, the contractor will implode the building and come in with a crusher to crush the brick and concrete rubble to a small diameter so that it can be used as fill and compacted. The metal rebar will be removed and recycled. The compacted debris will provide the right foundation to allow the Fort Myer DPW to use the site to build roads or small structures. The new slope shouldn't erode and shouldn't need a retaining wall, Norton said.

Debra Valine is the deputy chief of Public Affairs for the Engineering and Support Center, Huntsville, Ala.

*(**Editor's note:** An article about the implosion and the recycling efforts involved will appear in a future edition of the Public Works Digest.)* PWD

BRAC, Army Transformation among issues discussed at Installations Symposium

by Debra Valine

KANSAS CITY, Mo. – Leaders in the Installation community addressed key issues facing the Army at the second annual Installations Symposium April 4-6. The Association of the United States Army (AUSA) and the Installation Support Agency (IMA) sponsored the event.

Many of the issues revolved around Base Realignment and Closure (BRAC) and Army Transformation. Standardization of facility design, environmental analyses, streamlined construction and commercial acquisition practices appear to be the only way to meet the demanding facilities challenges being presented by BRAC, Integrated Global Presence and Basing Strategy (IGPBS) and Army Modular Force. To obtain the benefits of standardization, members of the installation community must change the way they do business.

Among the speakers at the opening day session were the Honorable Keith Eastin, assistant secretary of the Army for Installations and Environment; Lt. Gen. David Petraeus, commander, Combined Arms Center; Lt. Gen. Carl A. Strock, chief of Engineers, and Maj. Gen. Michael Rochelle, director of the Installation Management Agency.

Eastin discussed installation funding. He said the bottom line is that garrisons need to look at services and determine if they are truly necessary and are being optimally performed. He suggested that to save money, garrisons must be innovative in the provision of services.

"We need to re-look the services that installations provide," Eastin said. "Nothing should be considered sacred. You will get suggestions from above. You are going to be asked to take careful scalpels to the services you provide because we have to cut money. Be very realistic in what you think funding will be. In the out years, we will have to get very realistic. We need to be lean and include only services that are necessary."

Petraeus brought together the changes taking place in the Army to improve the way Soldiers fight, and the changes taking place on Army installations to support the fight by taking care of families and improving facilities for them to come back to.

"We are using lessons learned to improve doctrine and training techniques, which in turn impacts the way the installations approach upgrading facilities and programs," Petraeus said. "IMA is enabling all of this. It is our Installation Management technology focus with SIPRNet capabilities; it is the transformation of training ranges that has made possible the vastly improved training for our Soldiers. It is all of this that is conducted along the way that has made such a difference. Soldiers are coming home to attractive, clean, vibrant, first-class communities that include better housing, modern barracks, newer facilities, improved ranges and training areas, and comprehensive family programs."

Use the Corps to extend garrison staffs

Strock urged attending garrison commanders, command sergeants major and other garrison members to consider the Corps of Engineers as an extension of their staffs. He emphasized the Corps' Regional Business Centers and Centers of Expertise.

One mission for the Corps is to provide safe, environmentally correct infrastructure at Army installations.

"At the end of the day, I see this as an execution opportunity," Strock said. "We need to get the type of infrastructure in place that the Army can count on."

To provide the Army with needed infrastructure with available resources and ➤

Jim Duttweiler, Fort Campbell, Ky., Directorate of Public Works, asks questions following a presentation by Brig. Gen. Bo Temple, director of Military Programs, U.S. Army Corps of Engineers. Photo by Debra Valine

Maj. Gen. Michael D. Rochelle, director, Installation Management Agency, speaks to attendees at the Installations Support Symposium April 4-6 in Kansas City, Mo. Photo by Debra Valine

Directorate of Public Works announces its 2005 Annual Awards

KANSAS CITY, Mo. – Six individuals and three organizations received awards for their Public Works efforts at the second annual Installation Support Symposium April 5.

The Directorate of Public Works Award Program is an annual competition to recognize excellence in DPW management. The program was initiated to foster a spirit of peer recognition for the best in the DPW business worldwide.

Receiving individual awards were Gregory Bean, director of Public Works, Fort Bragg, N.C., who received the DPW William C. Gribble Jr., Executive of the Year Award; Larry Martin, chief, Operations and Maintenance Division, Fort Campbell, Ky., who received the DPW Operations and Maintenance Executive of the Year Award; John Burrow, chief engineer, Plans and Service Division, Fort Hood, Texas, who received the DPW Engineering, Plans, Services Executive of the Year Award; Charles William, chief, Housing Division, Fort Riley, Kan., who received the DPW Housing Executive of the Year Award; Nancy Niemann, chief, Environmental Division, Fort Hood, Texas, who received the DPW Support Executive of the Year Award; and Steve Smith, chief, Operations Division, Fort Bragg, N.C., who received the DPW Business Management Executive of the Year Award. Receiving organizational awards were: Southwest Region Public Works Team, Fort Sam Houston, Texas, which received the DPW Support Program of the Year Award; U.S. Army Engineer District, Savannah, Ga., which received the DPW Installation Support Program of the Year Award; and Meridian Management Corp., of Ponte Vedra Beach, Fla., which received the DPW Contractor of the Year Award. ➤

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timelines will require changing the way the Corps and the Army approach military construction. Strock suggested standardizing facilities across the Army, using commercial business practices as much as possible and designing and constructing facilities with sustainment in mind.

"We need to permit more innovative approaches to construction," Strock said. "We need to group projects smartly. We want to turn contractors loose to use their own initiative and incorporate commercial experience as well as military experience."

To help installations plan for required missions, Strock offered that the Corps of Engineers has Centers of Expertise in various areas.

"We have a lot of programs we are very proud of that we do on behalf of the Army," Strock said. "Use the Centers of Expertise to get your missions accomplished. Huntsville Center is truly a national asset. They are supporting master planning."

In addition to the Centers of Expertise, the Corps has developed Regional Business Centers. "We mobilize the work force to tap into the expertise and knowledge," Strock said. "We move the work force from where it is to where it's needed."

Keep the main thing, the main thing: Providing readiness for Soldiers

To meet the challenges the Army faces, the Installation community must stay focused on the main thing, Rochelle said. Keeping the main thing the main thing is a tenet presented by Lean Six Sigma, a system being used by the Army to streamline processes to cut costs and improve efficiency.

"Speakers today give us something to think about as we meet Army challenges," Rochelle said. "When we look at where we are today in providing support, we have to keep in mind that the main thing is providing readiness for our Soldiers. That is the challenge we wrestle with because occasionally we argue over what the main thing is. For example, is it opening a bowling alley or library, or is it providing for our Soldiers."

Rochelle suggested planners take an enterprise-wide look at how projects are being accomplished.

"We must come to the table with other than just the same old solution set," Rochelle said.

By 2011, the Army will have more forces permanently stationed in the United States than it has had since 1945, Rochelle said. To provide the type of installations and services needed by today's Soldiers, planners need to look at the communities outside the gate and see what services are being provided before attempting to duplicate some of those same services on the installation.

"Young Soldiers want computer hookups, rather than bowling alleys or movie theaters that show movies available on DVD," Rochelle said.

"We have the level of comfort in the installation business to look critically and objectively at ourselves," Rochelle said. "That is what we have to do to find the savings we need. We need to make sure we are keeping the main thing the main thing; that we have good metrics to undergird thinking and expectations; and that we understand alignment – that which you measure can be tied back to the main thing. That which you reward can be traced back to the main thing. Strategic communication is the challenge ahead of us."

Debra Valine is a public affairs specialist in the Engineering and Support Center, Huntsville. PWD

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Executive of the Year

Gregory Bean, director of Public Works, Fort Bragg, N.C.

This award recognizes Bean's leadership skills, professional engineer knowledge and managerial excellence at the highest levels of installation DPW management. Bean's selection from the many outstanding nominations received this year represents exceptional achievement in managing DPW activities. His resourceful, committed leadership has been a major factor in guiding Fort Bragg through a difficult period of concurrent challenges that included mobilization and demobilization of deploying units, Army Modular Force Transformation, Base Realignment and Closure studies, and post 9-11 force protection improvements. The ability to view challenges as opportunities and an on-site presentation to the Secretary and Chief of Staff of the Army played a vital role in gaining their support for the $250 million Barracks Improvement Program. Bean's outstanding efforts helped to ensure that Fort Bragg has the facilities needed to accomplish its power projection mission and improve the quality of life for all Soldiers and families.

Operations and Maintenance Executive of the Year

Larry Martin, chief, Operations and Maintenance Division, Fort Campbell, Ky.

This award recognizes Martin's managerial excellence in the DPW Operations and Maintenance function at the installation level, and recognizes the complex activities and responsibilities involved in planning, programming and executing the engineering operations, maintenance and repair missions of the DPW. Martin's leadership and personal contributions were instrumental in the implementation of improvements recommended in the A-76 Management Study including increased staffing of a Customer Service Office, establishing a work management review team and improving service order execution that measurably improved customer response time and reduced facility down time. Martin's unique contributions have improved customer service and the quality of life for all Soldiers and families on Fort Campbell.

Engineering, Plans and Services Executive of the Year

John Burrow, chief engineer, Plans and Service Division, Fort Hood, Texas

This award recognizes Burrow's managerial excellence within the engineering, plans and services function at the installation level and recognizes the complex activities and responsibilities involved in successfully integrating requirements, plans and programs into effective execution. Burrow's selection represents outstanding achievement in all facets of master planning, real property, engineering, construction and renovation of Fort Hood facilities. His strong technical wisdom and experience were apparent in the superior planning and execution of the facility requirements in support of the $120 million transformation of 4th Infantry Division facilities to support the stationing of 5,000 additional Soldiers on Fort Hood. Burrow's outstanding achievement in all facets of master planning, real property management, engineering and construction have proven to be a valuable asset to Fort Hood and an inspiration to DPW EP&S personnel Army wide.

Housing Executive of the Year

Charles William, chief, Housing Division, Fort Riley, Kan.

This award recognizes Williams' managerial excellence in the DPW housing function at the installation level, and recognizes the complex activities and responsibilities involved in planning, programming and providing adequate housing for Soldiers and their families. Particularly commendable was his leadership and commitment to expand the available family housing inventory by maintaining a 99 percent occupancy rate and increasing the off-post inventory through partnerships with local communities. Williams implemented a unique maintenance contract that will improve the condition of all housing assets reflecting his cutting edge leadership in Army housing management that has improved the quality of life for all Soldiers and families at Fort Riley.

Support Executive of the Year

Nancy Niemann, chief, Environmental Division, Fort Hood, Texas

This award recognizes Niemann's managerial excellence and productivity in a DPW support function at the installation level. This award also recognizes outstanding execution of the complex activities and responsibilities involved in supporting the engineering operations, maintenance, environment and natural resources mission of a large DPW organization. Niemann's strategic vision and firm commitment to developing and implementing an installation Sustainability Plan provides Fort Hood with short- and long-term ➤

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goals and a coherent environmental direction for the next 20 years. Niemann has fostered the spirit of environmental cooperation by developing partnerships and improving relations with the surrounding community, state and federal agencies, and private organizations. Niemann has helped raise environmental awareness and improved the quality of life for the entire population of Fort Hood and the surrounding area.

Business Management Executive of the Year

Steve Smith, Fort Bragg, Business Management Executive of the Year

This award recognizes Smith's managerial excellence within the DPW business management function at the installation level, and recognizes the complex activities and responsibilities involved in successfully integrating requirements, plans and programs into effective execution. Smith's selection represents outstanding achievements in all facets of DPW business operations including requirements identification, programming, budgeting, collection of reimbursements, automation and personnel management. Particularly noteworthy is the successful planning analysis to support Army Modular Force, BRAC and Integrated Global Presence and Basing Strategies (IGPBS) realignments; deployments of the XVIII Airborne Corps and the 82nd Airborne Division; creation of a small projects team to rapidly scope and execute repair projects; developing a Web-based work planning and management system and fielding of an improved utility tracking and billing system. Smith's accomplishments have enhanced readiness and helped improve the quality of life for all Soldiers and families at Fort Bragg.

Region Support Program of the Year

Gregg Chislett, Southwest Region Public Works Team, Fort Sam Houston, Texas

This award is usually presented to an individual, but this year recognizes a Southwest Region Public Works Team of six individuals for providing support to an installation Public Works mission. The SWRO team of engineers responded to a Fort Polk, La., request for assistance in the wake of the one-two punches of hurricanes Katrina and Rita. The SWRO team surveyed damaged buildings, developed cost estimates and outlined a work priority and contracting strategy to make repairs and quickly return all Fort Polk operations to full mission capability. Six outstanding engineers on the Southwest Region Public Works Team included Qaiser Toor, team leader; Gustavo De Jesus; Gregg Chislett; Tom Uncles; Ernesto Ortiz; and Frank Velazques.

Installation Support Program of the Year

Ted Kientz, Savannah District, U.S. Army Corps of Engineers

This award recognizes the Savannah District support to Fort Stewart, Ga., and Fort Bragg, N.C., DPWs for the outstanding assistance provided as a full partner in accomplishing the installation RPMA, OMA, Environmental, MCA, and Master Plan missions. The exceptional support to Fort Stewart included awarding 10 military construction projects totaling $150 million, design and contract support for more than $90 million maintenance and repair work and executing a critical $20 million energy plant project. At Fort Bragg, particularly noteworthy was the timely support for a new MP Barracks Complex, facilities for the 4th Basic Combat Team, construction of a Mobilization/Demobilization Complex, contract awards for the $35 million Barracks Improvement Program and Master Planning support during a period of rapid transformation. All Savannah District employees can be justly proud of their accomplishments and customer oriented "can-do" attitude that has enhanced readiness and greatly improved the quality of life for all Soldiers, families and civilians at Fort Stewart and Fort Bragg.

Support Contractor of the Year

This award recognizes excellence in contractual execution of an installation's Public Works base operations, real property maintenance and engineer support mission. The selection represents outstanding achievement in the areas of contract performance, customer relations and customer satisfaction. Management innovation using a Master Control Board, attention to details and responsive support to the DPW has substantially reduced the service order backlog, enhanced facility condition and improved the support to military missions and all customers on Fort Hamilton, N.Y. Your consistent commitment to quality work and customer service is proven true by customer feedback and laudatory comments received through a comprehensive quality control survey system. You and all your employees can be proud of your outstanding support to the Army mission and the Soldiers and families at Fort Hamilton. PWD

Elliot Horne, Meridian Management Corp.

Energy Surety for Mission Readiness

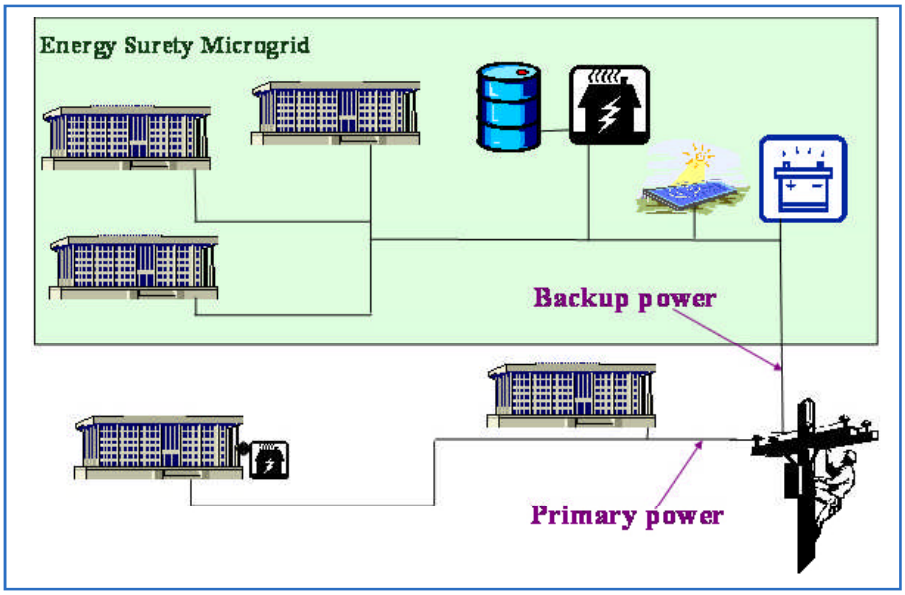
by David Menicucci, Roch Ducey and Paul Volkman

Increased energy security and decreased dependence on fossil fuels are two major objectives of the new Army Energy Strategy for Installations. Both goals suggest that the Army consider diversifying its current use of the local electric utility for primary power and engine-driven generators for emergency back-up power. They also call for including renewable energy systems such as wind, solar, geothermal and biomass, and other advanced distributed generation (DG) technologies such as fuel cells and microturbines. Increased energy reliability and security and, therefore, enhanced mission readiness, can be achieved by networking these power systems together in an "intelligent" microgrid. This concept is built on the philosophy that, "the whole is greater than the sum of its parts."

To assess the microgrid's potential for Army use, the U.S. Army Engineer Research and Development Center (ERDC) is working with the Office of the Assistant Chief of Staff for Installation Management (OACSIM); Headquarters, Installation Management Agency (IMA); and the Research and Development Engineering Command (RDECOM). ERDC is investigating how the energy surety microgrid concept can be implemented, not only at the installation and remote training facility level, but at forward base camps, tactical operation centers and Soldier power – in other words, "home station to foxhole." ERDC's Construction Engineering Research Laboratory (CERL) and its Army partners are joined in this effort by Department of Energy laboratories, Sandia National Labs in particular.

What Is Energy "Surety?"

Energy "surety" is a term that has been derived from defense applications and is being used here to characterize energy systems. It incorporates a variety of factors including security, reliability, safety, sustainability and cost effectiveness. An energy system is said to have high levels of "surety" if it delivers the energy product to the end user while meeting all the surety elements.



Energy Surety Microgrid Concept

Sandia and ERDC-CERL are focusing much of their efforts on energy reliability and security, with a secondary consideration on the other three elements. These two elements are of primary concern to military facility operators and security teams.

The traditional approach to protecting buildings from grid interruptions is based on backup generators and Uninterruptible Power Supplies. That approach addresses only a subset of the surety elements. For example: they typically cannot be run full time; they depend on a supply of fossil fuel, a diminishing and increasingly costly resource located in unstable regions of the world; and they are typically only about 80 percent reliable in coming on line when needed unless they are meticulously maintained. They are, however, generally proven technologies.

Within the framework of the energy surety model, a number of requisites have been identified for an energy system with high levels of surety:

- Reducing the number of single points of failure
- Generating the energy as close to the load as possible
- Running generators full time
- Using proven technologies
- Varying the generation mix with renewables and other advanced DG
- Securing the fuel supply
- Including sufficient and appropriate on-site fuel/energy storage

The Energy Surety Microgrid

A microgrid appears to meet these basic requirements. The microgrid concept refers to a subset of the grid, in which distributed generators supply power. The surety microgrid is designed to meet the essential factors noted above.

While the surety microgrid is interactive with the local utility grid and its generators share power delivery to the entire installation, it can isolate itself from the grid and provide power to mission critical facilities, on its own, should the grid fail for any reason. In effect, the on-site generators become the primary sources of power for the buildings within the surety zone and the grid becomes the backup energy source. In addition, depending on its design, it can meet the requisites for an energy system with high levels of surety. ➤

Impact of the Energy Policy Act of 2005 on the Army mission, environment

by David N. Purcell

The Energy Policy Act of 2005 (EPAct 05), Public Law 109-58, was signed by President George W. Bush Aug. 8, 2005. It contains provisions that require federal agencies to increase energy and water conservation efforts. Provisions also contain Congressional reporting requirements. Several provisions directly impact the Army mission and environment.

The act specifies a new energy management goal that requires the Army to reduce energy consumption per gross square footage by 2 percent per year from FY06 through FY15 when compared to the FY03 baseline energy consumption. The Army reduced consumption by almost 30 percent from FY 1985 through FY 2003. However, in FY04 and FY05 Operations Tempo in support of the Global War on Terrorism has increased consumption by 3 percent. The new EPAct 05 energy reduction goal will be a challenge. It will require greater senior leadership visibility and command emphasis.

Two EPAct provisions will assist the Army's achievement of this new energy reduction goal. First is reauthorization of the Energy Savings Performance Contract (ESPC) program through Sept. 30, 2016. The ESPC program evaluates, designs, finances, acquires, installs and maintains energy savings equipment using private sector capital and expertise. Current ESPC investments by the private sector for the Army exceed $670 million.

Second is the mandate that agencies retain the savings realized from energy and water conservation measures and that such savings "…may be used only for energy efficiency, water conservation or unconventional and renewable energy resources projects." Retention of savings can be a win-win situation for Army installations because executing energy conservation measures may provide additional funds (savings) for continued conservation efforts. A similar provision in the previous EPAct authorized retention of 50 percent of realized savings, but energy conscious installations never benefited because savings were always diverted to other programs. To be effective, the provision to retain realized savings must be formalized within the Army budget process.

Additional EPAct provisions require:

- All federal buildings to be metered for electrical consumption by Oct. 1, 2012, and where "practicable" advanced ➤

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Some of the most important tasks involved in developing the surety microgrid include:

1. Develop surety requirements (i.e., determine what facilities to protect, the level of protection and the type of generators)
2. Optimize the amount of fuel/energy storage
3. Properly control the surety microgrid
4. Model and measure the microgrid's effectiveness
5. Ensure proper interconnection to the grid

The military is interested in the surety microgrid concept because there is a growing awareness of the defense mission's dependence upon the energy infrastructure and the vulnerability of that infrastructure to natural and man-made disasters.

The Sandia/ERDC-CERL Effort

A technical team has been assembled to develop and apply the surety microgrid concept on a military base. Sandia is the lead lab and ERDC-CERL is a principal collaborator. The program is funded in FY06 and will address all of the technical challenges noted above. This is called the Phase 1 surety microgrid development activities.

After completing Phase 1, additional funding is expected for Phase 2, which will focus on studying how the surety microgrid concept could be implemented on an actual military base. The funding will not be sufficient to build such a microgrid, but the study will help the team to understand whether the basic concepts hold promise in meeting the specific surety needs of an actual military base. Phase 2 is expected to begin in October 2006 and be completed in spring 2007. Installation energy managers who might be interested in hosting the Phase 2 demonstration should contact Paul Volkman at HQ-IMA (POC information below).

A New Army/DoD Energy Surety Capability

At the conclusion of this effort, the team will be able to: quickly review a military base, with emphasis on its mission and associated energy requirements; determine through modeling the consequences of an energy disruption on the base mission; assess whether a surety microgrid can improve the situation; and, if appropriate, develop an optimally designed surety microgrid. This capability could significantly augment existing Installation Energy Security Plans. The Sandia/ERDC-CERL team welcomes comments and suggestions from the Army DPW community.

For more information, please contact Paul Volkman, 703-602-1540; e-mail: Paul.Volkman@hqda.army.mil.

David Menicucci is manager of the Energy Surety Program Office at Sandia National Laboratories, Albuquerque, N.M.

Roch Ducey is a senior researcher in the Energy Systems Branch at ERDC-CERL in Champaign, Ill.

Paul Volkman is with the Public Works Division with HQ, IMA in Washington, D.C. PWD

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meter technology be used to permit remote monitoring. For the Army, using guidance from the Office of Deputy Under Secretary of Defense for Installations and Environment (ODUSD-I&E), electrical metering installation will cost in excess of $60 million from 2007 through 2012, with approximate annual operations and maintenance costs between $4-5 million. (Note: Additional expense will be incurred due to ODUSD-I&E guidance to also meter natural gas, water and steam.)

- Federal agencies to purchase at least 7½ percent of electricity consumption from renewable sources by 2013. (Note: ODUSD-I&E goal is 25 percent by 2025 where cost effective.)
- Buildings to be designed to surpass the American Society of Heating, Refrigeration, and Air conditioning Engineer (ASHRAE) standard for energy efficiency by 30 percent.
- Application of sustainable design principles.
- Mandates procurement of energy-efficient products with Energy Star rating or equivalent.
- Listing of Energy Star and Federal Energy Management Program recommended products by GSA and the Defense Logistics Agency.
- Use of photovoltaic energy in public buildings.

Army started compliance before EPAct 05 was signed. On July 8, 2005, the Secretary of the Army and Army Chief of Staff approved the Army Energy Strategy for Installations (AESI). The strategy is a vision of the goals and initiatives required to posture the Army to meet future challenges of providing reliable, economic and environmentally sound energy and water service to installations. The five major initiatives of the strategy are:

- Eliminate waste and improve energy efficiency in existing facilities.
- Increase energy efficiency in renovation and new construction.
- Reduce dependence on fossil fuels.
- Conserve water resources.
- Improve energy security.

To execute the AESI, an Army Energy and Water Campaign Plan for Installations is nearing completion. It lays out comprehensive implementation plans for installations to achieve the long-term (25 years) goals of the AESI, setting milestones and developing an initial funding strategy.

In October 2004, the Secretary of the Army and the Army Chief of Staff approved the Army Strategy for the Environment (ASE). One of the six goals of this strategy drives the Army to minimize impacts and total ownership costs of Army systems, material, facilities and operations by integrating the principles and practices of sustainability.

The Offices of the Assistant Secretary of the Army (Installations & Environment) and the Office of the Assistant Chief of Staff for Installation Management (OACSIM) have been working closely with the Department of Energy, ODUSD-I&E, sister services and other federal agencies to develop energy scorecards that will objectively measure progress toward achieving EPAct 05 goals.

As the Implementation Plans for the AESI and ASE are developed, the Army is focused on ensuring energy efficient and sustainable practices are addressed.

Other ongoing actions/programs within OACSIM include:

- An Interim Army Energy Policy Guidance memorandum was signed Dec. 27, 2005, by the Deputy Assistant Secretary of the Army for Installations and Housing (DASA-I&H) which revises energy usage and conservation policies.
- Energy Awareness and Conservation Assessment visits to installations. Each visit consists of a weeklong, on-site assessment of facility energy usage and conduct of awareness training sessions for installation personnel. Visits result in recommendations for no-cost/low-cost savings opportunities. Since June 2005, seven EACA visits have identified almost $10 million in energy savings opportunities.
- Energy Conservation Investment Program (ECIP), which is funded by Military Construction appropriations from Office of the Secretary of Defense (OSD) to improve energy efficiency of Army facilities through the construction of high-efficiency energy systems and the improvement of existing Army systems. Direct funding for Army ECIP projects from FY96-05 totals $100 million.

The mandates within the Energy Policy Act of 2005 present many challenges for the Army over the next 10 years. The Army fully understands and supports reductions of our energy footprint in the face of increasing energy demand, dwindling reserves and rising costs.

The increased OPTEMPO caused by the Global War on Terrorism and recent natural disasters makes this responsibility an even greater challenge. In spite of these operational demands, the Army must execute its responsibility to be a better steward of our limited energy resources.

While our initial steps contribute to accomplishing the EPAct 05 goals, we have to make substantial changes to our habits, facilities and investment strategies to comply with the statute. Successful compliance will impose new resourcing requirements and senior leadership support is essential if the Army is to meet its responsibilities laid out in this law.

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Purcell is an Army Energy Program Manager in the Office of the Assistant Chief of Staff for Installation, Facilities and Housing Directorate, Facilities Policy Division, Utilities and Energy Team. PWD

Fort Benning opens first gas pump featuring Ethanol85

by Melissa House

Fort Benning notched a first with the opening of an Ethanol85 pump at the Dixie Road shoppette Jan. 13.

"Fort Benning has always been a leader in environmental efforts," said Andrea Hicks, the post's pollution prevention program manager. Several years ago, alternative fuel vehicles debuted on post, but the infrastructure didn't exist to support their use.

Through working with the Army and Air Force Exchange Service to make the fuel available, Hicks said, the installation is now able to comply fully with executive orders and continue its environmental stewardship.

Garrison Commander Col. Rick Riera pumped the ceremonial first gallons into one of the post's 327 E85-capable vehicles.

"This is a big deal for Fort Benning," he said. It's been six years in the making, and not only do we have the first AAFES alternative fuel pump in the Army, but in the Department of Defense.

Also attending the ceremony were representatives from the Middle Georgia Clean Cities Coalition, General Motors and Alternative Fuel Solutions — groups interested in the post's efforts.

Dr. Linda Smyth, president of the MGCCC, said her organization has found that the military always takes the lead on projects involving new technology and is willing to be the first to try things that others later adopt.

"That's commendable, and we applaud anything that reduces our use of fossil fuels," she said. "It's good for the environment, for our economy and for national security."

Smyth's group promotes the use of alternative fuels and reducing the use of petroleum "in any way, shape and form."

(above) From left: Lee Holloway, Ed White, John Brent, Andrea Hicks and Col. Rick Riera at the opening of the first Defense Department Ethanol85 gas station at Fort Benning, Ga., Jan. 13. Army photo

(above) Garrison Commander Col. Rick Riera pumps the ceremonial first gallons of Ethanol85. Army photo

(left) Col. Rick Riera, Lee Holloway and John Brent cut the ribbon opening the Ethanol85 pump at the Fort Benning, Ga., Shoppette. Army photo

And opening an ethanol pump on Fort Benning is good for Georgia, too, said Ed White, representing Alternative Fuel Solutions, LLC and Clean Fuel USA. The groups promote the use of ethanol fuel, specifically, and facilitate the use of ethanol fuel by developing infrastructure and assisting in creating programs for its use.

White said they encourage companies to create ethanol plants in Georgia and to take advantage of the state's agricultural capabilities. Ethanol alcohol is distilled mainly from corn plants, and E85 is available at fewer than 200 stations nationwide. ➤

Save energy by replacing obsolete incandescent bulbs with compact fluorescent bulbs

by William F. Eng

The incandescent light bulb's time has come and is soon to be gone. Contrary to popular belief, the light bulb wasn't invented but was perfected by Thomas Alva Edison in the late 19th Century, into something very practical that helped propel the world into the next century. The incandescent light bulb revolutionized how people live and work.

The traditional light bulbs come in many "sizes" like 40, 60, 75, 100 or 150 watt to name a few, as well as multiple-wattage bulbs, like 75/100/150 watts. Inside the modern incandescent bulb is a very thin tungsten filament that, when electricity is applied to it, heats up until it becomes "white-hot" and glows. The "white" emits light. The rest of the energy, about 90 percent, becomes heat. Incandescent bulbs are very inefficient, giving only 15 lumens (a standard unit for measuring the flux of light) per watt of input power. A compact fluorescent light (CFL) by comparison, produces four times as many lumens per watt of power. And as anyone who has tried to replace a burned out light bulb too soon after it goes out, learns quickly that light bulbs get very hot, about 350°F, while a CFL is a slightly warm, 90°F.

From an energy efficiency viewpoint, incandescent bulbs shouldn't be used in indoor lighting fixtures where a replacement compact fluorescent bulb can be substituted, or an even more energy-efficient LED (light-emitting diode) fixture can be installed instead. Compared to a standard incandescent bulb, which has an average life of 1,200 hours, a compact fluorescent bulb can last up to 10,000 hours and uses one-third the amount of electricity. With energy costs increasing every year, every Army Soldier and family member, and employee, civilian and contractor alike, needs to replace wasteful incandescent bulbs with more energy efficient compact fluorescent bulbs.

That heat from a light bulb in a confined space like a ceiling light fixture can cause serious fire safety problems. This is especially the case when higher wattage bulbs are used than what the fixture manufacturer recommends. Cases in point are three military families who moved into the recently completed Lewis Village on Fort Belvoir, Va., a Residential Communities Initiative (RCI) housing project. Ceiling fixtures in the bedrooms were overheating and electric wall outlets weren't working due to tripping circuit breakers. Inspections of all the completed houses by the RCI contractor found 100-watt bulbs in bedroom ceiling fixtures, instead of the 60-watt size recommended by the manufacturer. All the higher wattage bulbs were replaced with the proper size and checking for proper sized light bulbs is now part of the quality assurance inspection program. According to the installation newspaper, *Belvoir Eagle*, the only damage that occurred was confined to the light fixtures themselves but had the residents not noted the overheating, a fire that endangered life and property could have been the result.

DOD light bulb fires between 1984-2001 resulted in 110 fire responses totaling $2,273,469 ($1,731,296/bldg and $542,173/contents losses). Average fire loss was $21,000. About six fires per year and one injury every eight-nine years were caused by light bulbs. The moral of this story is to get rid of all incandescent light bulbs and replace them with energy efficient compact fluorescent bulbs. Determine the size of the compact fluorescent by dividing the incandescent wattage by three and then rounding down to the closest available wattage size for the compact fluorescent. They also come in a dimmable-type and for installing in "can" or "spotlight" fixtures. CFL's will definitely save energy and money. Most important of all, they could save a life.

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Eng is a professional engineer with Headquarters, Department of the Army, Office of the Assistant Chief of Staff for Installation Management. PWD

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"Ethanol means jobs," White said. "It's economically and environmentally beneficial. It's win-win for everybody."

Nationwide, there are more than 2 million General Motors vehicles capable of running on E85, said GM Fleet Account Executive Randy Queen.

"But right now the 'pretty boy' on the block is the hybrid (vehicle)," Queen said. "But the hybrid doesn't do nearly as much in reducing fuel consumption as E85 vehicles do."

Unfortunately, he said, there are few retail E85 facilities. The majority of the nation's pumps exist in the Midwest, where the bulk of the ethanol is produced.

The good news for the average consumer is that some may be driving a vehicle that is capable of using the E85 fuel — and buying it at the Dixie Road pump at approximately 20 cents per gallon less expensive than gas.

"A lot of people don't know their vehicle will handle ethanol," White said. "And as you decrease the demand for gas, you ease the price people are paying for that gas.

"E85 — it's 85 percent ethanol. For every gallon, you're only burning 15 percent of what a normal person is burning. That's huge."

Melissa House is assigned to the staff of the Fort Benning Bayonet. PWD

What Army installation managers should know about soil vapor intrusion at contaminated groundwater sites

by Mark J. Fisher

Q. What is vapor intrusion?

A. For the purposes of this article, vapor intrusion occurs when soil vapors carry volatile organic chemicals (VOCs) from contaminated groundwater into overlying buildings. The vapor intrusion exposure pathway has become especially prominent in the environmental cleanup community since the Environmental Protection Agency (EPA) Office of Solid Waste and Emergency Response (OSWER) published draft guidance entitled, "Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils" in November 2002.

Q. Why should Army installation managers be concerned about the vapor intrusion exposure pathway?

A. This exposure pathway may be complete at facilities where there are, or will be, inhabited buildings over VOC contaminated groundwater. Due to heightened awareness of this pathway, more groundwater sites are being looked at for vapor intrusion problems and it is becoming evident that, at the very least, VOCs can collect below floor slabs at levels great enough to potentially impact the health of facility staff and residents.

Q. How should Army installation managers assess and mitigate vapor intrusion problems?

A. While the hazards may be real, Army installation managers should be cautious in their response. The need to characterize and possibly mitigate this exposure pathway has generated questions in the environmental legal community about the authorities in the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to respond to this potential hazard. To assure that an appropriate amount of caution is applied, it is very important that a full staff of RCRA/CERCLA experienced environmental professionals be involved and work together to develop vapor intrusion investigation and mitigation recommendations. Recommended staff responsibilities include:

1. Legal staff with RCRA/CERCLA expertise should evaluate authority issues associated with the use of environmental funding to address indoor air quality problems. If public relations pressures or project politics make it necessary to address the potential for exposure via this pathway, legal staff should help pursue the necessary permission.
2. Program/project managers should be expected to address funding issues associated with characterizing and mitigating a new pathway on existing groundwater projects.
3. A technical team consisting of a risk assessor, geologist, chemist, industrial hygienist and process engineers is needed to consult on exposure limit, modeling, sampling and analysis, and mitigation system issues.

Q. Where can Army installation managers find guidance? All the services (Army, Navy and Air Force) are in the process of developing technical guidance advising on assessment and mitigation methods. The Interstate Technology and Regulatory Council (ITRC) is in the process of drafting guidance on the subject. Many states have their own vapor intrusion guidance or draft guidance under development. EPA has issued draft guidance "OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)" available at http://www.epa.gov/epaoswer/hazwaste/ca/eis/vapor.htm.

A. Army facility managers are going to find, with increasing frequency, that it will be necessary to assess facility personnel and resident exposure to VOCs via the vapor intrusion pathway. To be prepared for the inevitable questions from facility personnel and residents, it is recommended Army facility managers evaluate the location of VOC contaminated groundwater relative to the location of existing and future occupied buildings. After the potentially impacted buildings are located, seek support from qualified environmental professionals at the facility or other servicing environmental organization to gauge the real potential for unacceptable exposure and to make recommendations for pathway mitigation if necessary.

POC is Mark J. Fisher, Hazardous, Toxic and Radioactive Waste Center of Expertise (HTRW CX), phone: 402-697-2587; e-mail: mark.j.fisher@usace.army.mil PWD

IN OUR NEXT ISSUE

The May/June 2006 issue of the **Public Works Digest** will feature

The Environment

Stand-alone birthing center opens in Vicenza, Italy

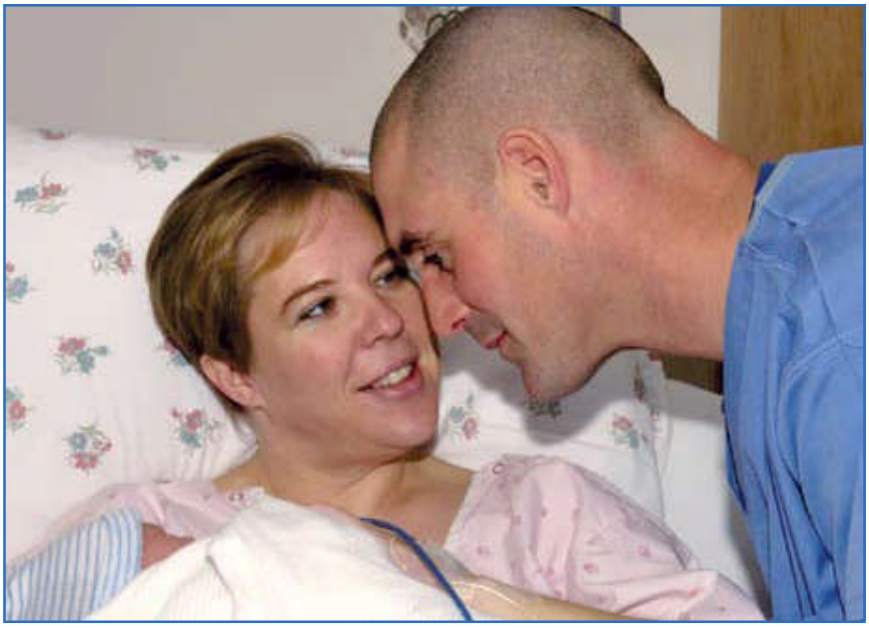
by Lou Fioto

The Corps of Engineers is putting the finishing touches on the Dr. Frank V. Benincaso Mother and Infant Pavilion at Caserma Ederle, Vicenza, Italy; the only stand-alone birthing center within the Department of Defense.

Thanks in part to the Corps' efforts, Army families now have something they were sorely lacking; continuity of U.S. standard quality health care before, during and after childbirth.

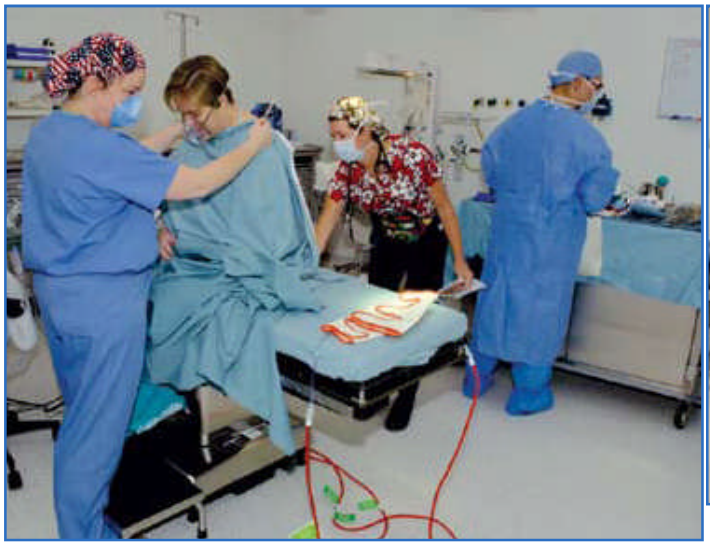
The Corps provided project management, design review and oversight, and construction management to the facility when it was originally built, and is tweaking a few last things to ensure maximum efficiency of the facility.

"I just can't say enough positive things about not only the quality and caliber, but the expertise that the Corps brought to the construction project," said Lt. Col. John Alvarez, deputy commander of the Vicenza Health Clinic. "The facility has benefited the community in a number of ways. The first is the overall quality of care of the delivery for the wives and spouses of the military community. What this does is provide United States standard inpatient health care … here in, Vicenza. It also provides continuity of care for the families."



Anna-Lisa and Sgt. 1st Class Christopher Whiten celebrate Noah's birth at the Dr. Frank V. Benincaso Mother and Infant Pavilion on Caserma Ederle, Vicenza, Italy. The only birthing pavilion in the Department of Defense; the facility provides a great quality of life improvement for Vicenza families. Photo by John Rice, NAU

Before the facility was built, expectant mothers would receive care here for the first seven to eight months and then have to go elsewhere for the actual delivery and follow-up care. ➤



Staff prepares Anna-Lisa Whiten for her delivery at the birthing pavilion on Caserma Ederle, Vicenza, Italy. Construction of the facility was managed by Europe District and was completed in approximately seven months. Photo by John Rice, NAU

Capt. Yvonne Heib, head nurse, operating room / central material service, prepares for another baby delivery at the Dr. Frank V. Benincaso Mother and Infant Pavillion on Caserme Ederle, Vicenza, Italy. The state-of-the-art birthing center was completed in seven months and is the only birthing center in the Department of Defense. Photo by John Rice, NAU

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"They would have to go back to the states," Alvarez said, "or up to Landstuhl Regional Medical Center in Germany. They'd have to go to Aviano, or they'd go to a host nation hospital." Now, a woman is treated by the same physician, obstetrician, gynecologist, etc., in the same location throughout her pregnancy, and after, because the new birthing facility is designed to handle it all, he said.

Alvarez said the facility is very important to the morale of the Army family. It's a little piece of the United States in a foreign country.

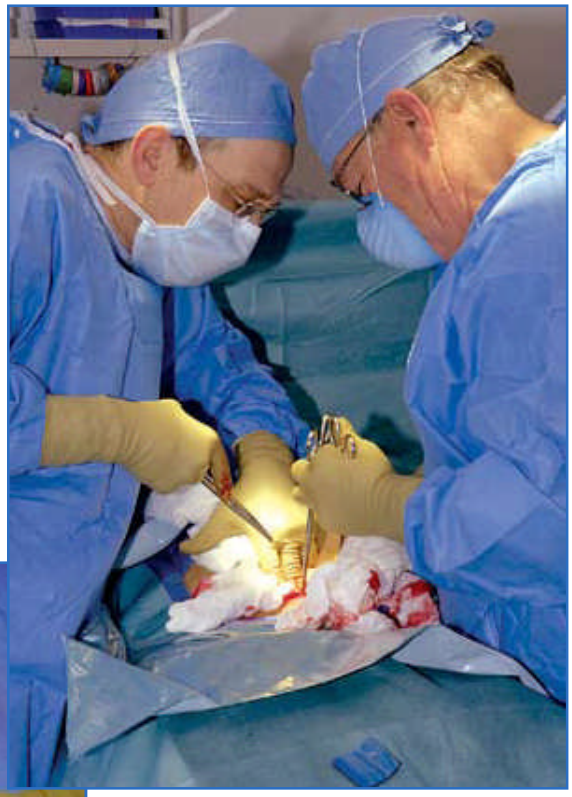
Ask a new mother and you'll hear the same. The facility provided the capabilities to perform the operation close to home with a highly trained and compassionate staff, said new mother Anna-Lisa Whiten; who gave birth to Noah, Jan. 26, during a Caesarean section. "It is a comfort to have the center because with a possible language barrier you don't have to worry about a miscommunication when you are receiving care," she said. "The most positive aspect about having access to the center is knowing that it is here for us, to monitor our pregnancy and to have a birth either way."

Alvarez said the clinic provides that familiar environment to the Army family. Family support groups are here and available to assist in those roles that the father would normally provide. "It's really the quality of care, the continuity of care and it's a morale and family support boost."

The facility means a great deal to the Soldiers of the twice deployed Southern European Task Force and 173rd Infantry Brigade, Alvarez said, and now "the Soldiers can do their mission, in part, because they know we are taking good care of their loved ones."

The trend in the medical community today is to design new facilities to meet the demands of the population to be served by the facility. "Our community," Alvarez said, "is a 19- to 34-year-old, primarily healthy, population. So we're configuring our facility to meet the specific needs of our population. That's in contrast to our very much 'cookie cutter' approach to hospitals in the past history of the Army's medical department and the Department of Defense as a whole."

Noah Whiten takes his first breath at 10:28 a.m., Jan. 26, 2006. Photo by John Rice, NAU



Doctors proceed with a Caesarean section at the Dr. Frank V. Benincaso Mother and Infant Pavillion in Vicenza, Italy. The pavillion provides full-spectrum services to mothers expecting normal deliveries and contains state-of-the-art equipment to ensure medical procedures run smoothly. Photo by John Rice, NAU

The birthing facility establishes a hybrid healthcare model for locations where service members serve on bases with similar populations and healthcare needs.

Construction was completed in May 2005 and the Benincaso Pavilion opened the following month. It is named for Dr. Frank V. Benincaso, a pediatrician who worked for 13 years in the installation's health clinic. Benincaso retired from the Army Medical Corps as a colonel after a 30-year Army career. The pavilion provides full services for mothers expecting normal deliveries and can manage the birth and care of up to four babies daily. High risk pregnancies are still referred to appropriate medical facilities.

Europe District is now conducting modifications, including upgrading the existing emergency generator system to meet NFPA codes. The district also will revise the Preventive Maintenance Plan and change the exterior Air Handling Units to meet local noise ordinances.

The Corps, working on a fast track with the European Regional Medical Command (ERMC), built the normally three- to five-year project in seven months. The Corps named Bill Delozier, who had previous medical facility construction experience at Fort Stewart, Ga., the project manager, and devoted engineering support from both Germany and Italy.

In October 2004 the Deputy Director of Public Works in Vicenza requested ➤

Engineers complete sewer upgrade project in Iraq

by Claude D. McKinney

MOSUL, Iraq – In a city with a population of more than 1.75 million, sewer upgrade projects seem to come in small steps and may not even be noticed by most residents, unless it is your street which has just received the sewer install.

That is the case in a subdivision neighborhood within the largest city of northern Iraq, Mosul. A new pipe has been buried that carries away the waste from 6,000 residents of the neighborhood. The only evidence of the activity is a stretch of new pavement down the middle of the road.

Little by little the open surface waste water system which has been in use for as long as the city has been in place, is being replaced by underground piping transporting the sewage to treatment plants. And in some cases, as with this one, a more modern system has been neglected and allowed to deteriorate to such a state that it is now broken and needs replacing.

"The benefit of these projects is far greater than just providing 6,000 here and 7,000 there, an upgraded sewer system. These projects address a broad health issue. As surface sewage and contaminated ground water is removed from neighborhoods, the spread of disease is lessened," said Lee Kenderdine, the resident engineer for the U.S. Army Corps of Engineers. "We are working 15 similar projects."

Road surface is replaced following the installation of new sewer pipes in Mosul. USACE file photo

At the current rate of progress, it may be years before the entire city has an upgraded sewer system. But as the old saying goes, "Rome was not built in a day." Mosul is an old city with a marvelous history, but it will not be rebuilt in a day either.

Claude McKinney is the Public Affairs Officer at the U.S. Army Corps of Engineers, Gulf Region North. Requests for more information should be directed to McKinney at 540-542-1437. E-mail requests can be sent to claude.d.mckinney@tac01.usace.army.mil. For more information on the U.S. Army Corps of Engineers in Iraq, visit www.grd.usace.army.mil. PWD

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Europe District to serve as the contractor officer representative (COR) and project manager for this project, said Delozier, Europe District's regional program manager supporting the U.S. Army Garrison, Vicenza. Delozier said the Vicenza Resident Office was asked to provide inspection and quality assurance support during the construction. This was a design-build contract with the ERMC reviewing and approving the design submittals, he said. The DPW and Naval ROICC provided technical review and approval for those areas involving the Italian codes. Europe District's Engineering Branch provided design review support in the areas of mechanical and electrical disciplines.

"Mr. Delozier understood the complexity of building a medical facility," Alvarez said. "His experience in Europe also helped him understand the complexity of having an Italian firm design a U.S. specification medical facility and all the challenges that that involved. The Corps of Engineers was critical in making that building."

Alvarez applauded Delozier's ability to understand and manage the variety of intricate challenges involved in building such a fast track project.

"I've got a lot of acquisition training," he said, "and it was almost one of those situations where they say at the school house 'this is what the ideal project would look like if we could make it happen in reality.' And, I actually saw the ideal happen out here in reality."

Lou Fioto is a public affairs specialist with the North Atlantic Division, U.S. Army Corps of Engineers. PWD

Line-of-sight technology speeds process of modernizing Army training ranges

by Debra Valine

As the Army incorporates new weapons systems into its inventory, training ranges must be updated to provide the best possible and most realistic training venues to support the Army's "train as we fight" philosophy.

On the larger more complex digital ranges, the footprint or "baseline to target box" can comprise up to 6,000 acres of land. More challenging, Soldiers are required to acquire, engage and hit stationary and moving targets at distances out to 2,400 meters in a time sequence/scored process.

"As engineers, we must ensure Soldiers can see or 'engage' specific targets at the required distances without visual obstructions (landforms and vegetation) in order to achieve the strict training standards within the allotted time," said Mark Fleming, program manager, Army Training Facilities Program Office at the U.S. Army Corps of Engineers, Engineering and Support Center in Huntsville, Ala. "This is known as line-of-sight, a critical element in the design and construction of these large expansive range facilities."

Target matrixes are developed by Army trainers during the early design process to determine minimum target engagements to meet Army Training Standards. In the past, it would take a long time to develop a line-of-sight analysis for the range simply because it took four to five days to run the computer modeling program. The answer would come back as a yes the engagement could be engaged, or no it could not be seen from that position. If the answer was no, it was back to the drawing board for the range designers to reorient the firing positions and target objectives. In some cases, this iterative process could take weeks of combined dedicated effort from the trainers and the engineers working closely together to obtain a satisfactory design solution.

Today, Huntsville Center's Range Center of Expertise is using a line-of-sight design analysis program developed by HNTB Corps of Kansas City, Mo., that runs much faster and incorporates the newest training requirements. Line of sight integrates planning, designing and building of larger, more complex ranges. Line-of-sight analysis is essentially a visual line of sight between firing points and the target positions, which is critical to allowing Soldiers to achieve standard training.

"Applying this tool saves time and reduces the cost of constructing military training ranges, reduces contact with unexploded ordnance, reduces environmental impact and optimizes training by making it more realistic," Fleming said.

"There are four proven case studies where the Huntsville Center went in and saved four ranges that were in trouble," Fleming said. "We used those ranges as a baseline to test the LOS design tool and the results have been outstanding. We were being called in when projects were in design or nearing construction and were in trouble. Now we want to get in at the start of the design process to optimize the benefits for the range."

The four case studies proved that value is added by using a line-of-sight analysis.

- The traditional six-year schedule for designing and building a range could be reduced to four years.
- Training capability was improved by optimizing training scenarios for multiple platforms (Abrams, Bradley, Scout and others) through balanced target utilization, increased utilization of targets from firing positions and increasing effectiveness of training on trails.
- An average of $2-4 million cost avoidance per range could be realized by reducing unnecessary earthwork, design optimization, reduction in unexploded ordnance/environmental mitigation and impacts, and maintenance.
- Environmental impact could be reduced by 10 to 30 percent.
- The ranges provided flexibility in training scenarios in order to minimize impacts to other adjacent facilities by increasing target availability by 10 to 25 percent.
- Unexploded ordnance impacts could be reduced 10-30 percent.

"We want to use this software to change the way the Army designs ranges and implement a new design approach," said Lary Quick, a technical manager in the Engineering Directorate at the U.S. Army Corps of Engineers, Engineering and Support Center in Huntsville, Ala. "Using this software we can go through as many iterations as necessary to optimize training for the Soldier, reduce cost, etc."

Huntsville Center is the Corps' Mandatory Center of Expertise for Ranges. The Center:

- Is the central engineering consultant to the Army for training facilities.
- Provides standard design drawings and manuals for Army automated ranges, prepares DD Forms 1391 for Army G3 funded projects, performs technical review, design review for target interface compliance, construction interface inspections and line-of-sight analysis.
- Provides the complete spectrum of range design services for the U.S. Army, U.S. Marine Corps, Army National Guard and the U.S. Army Reserve Components.
- Supports the Department of the Army in the development of a comprehensive Master Range Plan that correlates mission training needs with well-designed ranges and training areas.

In the past 16 years, Huntsville Center has helped with the construction of more than 600 ranges.

"In the mid-1980s, we had a line-of-sight program that we ran on a local computer that went to a larger computer in the building and then to a Cray super computer in Maryland," Quick said. "We got an answer back in about three-four days – the answer was either yes you can see the ➤

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target or no, you cannot see it.

"As the ranges became more complicated and larger in scale, that answer did not suffice," Quick said. "To meet training requirements, we needed to know more than just yes or no. So we went out to get a computer analysis program written that would meet our specific needs. In the late 1980s, Intergraph Corp. of Huntsville created a triangulation model – a 3-D computer model, and then they created a graphical user interface (GUI) between the computer screen and the 3-D model that allowed us to see the profile of the line of sight. From that, we generated reports that told us yes or no, something about the line of sight – distance between firing point and target, elevation, angle, etc.

Realistic training prepares Soldiers for future missions. U.S. Army photo

"Every time they came out with a new operating system for our computers, we had to have our software rewritten to keep up with it," Quick said. "It started out taking 24 hours to run a line-of-sight analysis somewhere in the neighborhood of 1/2 million profiles. We have upgraded several times and we are now using software that we are leasing from HNTB. This software – True/Viz™ On Target – can run the 1/2 million profiles in less than five minutes. This is the software we are using with the three test ranges we are working on." The test ranges – scheduled for construction in 2008 – one each at Fort Riley, Kan., Fort Stewart, Ga., and Yakima Training Center, Wash. Each range will take about 18 months to build and then six months for instrumentation.

HNTB had written the existing software and, based on a strong partnership with the Huntsville Center, adapted it to fit Huntsville Center's needs. Not only does it provide the profile between firing position and targets, it incorporates all the training tasks in the various Army Field Manuals. It provides the combinations that will need to be used to get the training task accomplished by helping lay out ranges that fit the requirements of the training tasks.

"We can run the analysis on existing ranges and tell them which ranges meet the training requirements," Quick said. "Because we can run the profiles so quickly, we can run the analysis over and over and change it a number of times to meet training requirements. It costs about $30 million to build a new range. This brings down the cost to build the range by avoiding massive quantities of earthwork for one example."

Using this program, the range can be designed much faster than it could be using traditional design with computer aided drafting (CAD).

"We can cut design time," Quick said. Ranges get looked at for rebuilding on a cycle of every 10-15 years. There are always new training range requirements based on stationing of units, which changes with initiatives such as Base Realignment and Closure (BRAC) and military transformation.

These ranges support training on tanks, Bradley Fighting Vehicles, Strykers, HUMVEES and Scout vehicles. The software has the capability to be used for small arms range development, but has not yet been used by Huntsville Center for that.

In the past six months, armor training requirements and standards have changed dramatically, Quick said. "We put in the new training requirements and standards. We now have the ability to go back to finished designs to ensure they meet current training requirements before the ranges are actually built."

"The objective of the prototype effort is to introduce a new engineering design process leveraging computer technology to provide our Soldiers with a higher quality, more flexible training venue," Fleming said. "The results will be apparent in approximately three years when these projects are turned over to conduct live-fire operations."

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Debra Valine is the deputy chief of Public Affairs at the Engineering and Support Center, Huntsville.

PWD

New Advanced Master Planning Class kicks off in July 2006

A new Advanced Master Planning class is scheduled for July 17-21 in Huntsville, Ala., at the U.S. Army Corps of Engineers Professional Development Support Center.

This course provides planners the collaborative planning skills needed to conduct/lead complex master planning efforts. It provides an overview of comprehensive planning techniques needed to integrate various planning considerations that must be comprehensively considered in the development of Army installations.

Through an intensive hands-on workshop, students will use a planning charrette technique to develop an Area Development Plan. Through the exercise, students will consider various planning considerations and will be required to holistically integrate these issues into a comprehensive solution that meets mission requirements, and provide for a quality urban design solution that is sustainable and compatible with the installation's long-range vision for real property development.

For more information. please contact Beverly Carr at 256-895-7432. PWD

Sixth Annual Installation Management Institute Jan. 8-12, 2007, Atlanta, Ga.

The Office of the Assistant Chief of Staff for Installation Management (OACSIM) is pleased to sponsor the Sixth Annual Installation Management Institute (IMI) in support of our installation management work force.

This exceptional training opportunity will be offered Jan. 8-12, 2007, in Atlanta, Ga., at the Hilton Atlanta Hotel and will be held concurrently with the Installation Status Report Centralized Training.

The purpose of the IMI is to offer centralized training that provides our Installation, Army National Guard (ARNG), and Installation Management Agency (IMA) Region work force with the latest information and instruction needed to accomplish their installation management missions.

The IMI training program will consist of a Plenary Session on Monday morning and nine (9) concurrently run training tracks throughout the week. Each training track is designed to address the knowledge and skills required to effectively accomplish missions within each functional area. The IMI concurrent training tracks include:

#1 Plans, Analysis, & Integration
#2 DPW Business Operations
#3 Master Planning
#4 Real Property Management & Real Estate Processes
#5 Geographic Information Systems
#6 Army Sustainability
#7 Competitive Sourcing
#8 Logistics Management
#9 Information Management.

The OACSIM will be providing specific information regarding training content and IMI registration at a later date. If you have any questions, please contact the IMI Coordinator at (706) 866-6717, e-mail: radonna.parrish@us.army.mil. PWD

Technology Standards Group evaluating Army standards

In March 2006 the Army Facility Standardization Committee (AFSC) approved facility standards for Light Emitting Diode Traffic Signals and Non-Water using Urinals. An article on these new standards will be published in a future edition of the Public Works Digest. A revision of the keyless entry facility standard was revised at a previous meeting of the AFSSC.

The TSG is evaluating several technologies for possible submission as Army facility standards.

1. Standardized Wood Truss Inspection Method – A draft method has been created. This method must be validated before release as a TSG recommendation.
2. Sustainment Management System (SMS) Master Plan – A draft master plan is available. A meeting of stakeholders involved in the SMS is scheduled for later in FY06 to approve the SMS master plan.
3. Energy Efficient Retrofit Measures for Government Buildings (EnERGo) – Final draft of the Energy Assessment protocol for industrial buildings will be sent out for review.
4. Utility Marking System – this evaluation is in the initial stages, plans for completion 4th Quarter FY06
5. Responses to TSG Workshop held at IMI January 2006 – Subject Matter Expert (SME) comments on installation issues surfacing during the TSG workshop at the January 2006 IMI are being answered via the Technology Standards Group site with AKO as SMEs are identified for each area.

The next TSG meeting is scheduled for June 21 in Crystal City, Va. PWD

Army's deputy to assistant chief of staff for installation management retires with 35 years of dedicated service

by Suzanne Harrison

Janet C. Menig, the deputy to the assistant chief of staff for Installation Management, who is one of the Army family's biggest advocates for quality of life improvements and transformation of Installation Management policies, programming and funding methodologies, recently retired after 35 years of service to the Army and our nation. We bid a heartfelt farewell and applaud the service she has given to hundreds of thousands of civilians, Soldiers and their families over the last four decades.

If you looked up the definition of OACSIM in Webster's dictionary, you would definitely find her name. Menig has been one of the most influential driving forces of change and improvements in the Installation Management field since the OACSIM was stood up in 1993. Visionary, transformative, persistent, courageous, tough but fair, and willing to be a true mentor are also words to describe her.

Menig began her career in government service with the U.S. Army Corps of Engineers in 1971, initially served as an analyst and then in a number of supervisory and management positions before entering the Senior Executive Service in 1991 as the deputy director of Management in the Office of the Chief of Staff of the Army. She was appointed deputy to the assistant chief of staff for Installation Management, Headquarters, Department of the Army, in 1993.

During Menig's tenure as the deputy, community and family support, environmental programs, competitive sourcing, military construction, installation and facility standards, utility and energy, barracks modernization, family housing, and installation management programs underwent major reform and improvements in processes, funding, modernization and transformation. Prestigious awards from both the public and private sector were the epitome of her empowering managerial style within the OACSIM and throughout the Department of Defense (DoD) because her focus encompassed improving quality of life and Soldier well-being and fighting for scarce resources to do the right things

at the right time and what was best for our Army.

One person can make a difference. It was her leadership and vision that promulgated the priority of the Army to fix the living and working conditions for Soldiers, families, the civilian work force and for visitors to Army installations worldwide. An example of her personal touch and commitment to Soldiers is the success of the barracks modernization and initial issue furnishings program. It is the transformation from dilapidated World War II wood and Korea and Vietnam era barracks for more than 100,000 Soldier spaces that demonstrate real commitment from policy words into action. As you visit Army installations worldwide, you can physically see the improved living conditions with privacy, quality furniture and amenities of apartment-type living our single Soldiers are proud to call home. She also oversaw an Army organization within DoD comprised of 10 separate divisions, four field operating agencies, 74,000 employees and an annual operating budget of more than $15 billion supporting 181 Army installations worldwide. She supported the President's Management Agenda, saved hundreds of millions of dollars annually and created partnerships with conservation agencies to purchase land near military installations that protects Army training and preserves the natural habitat.

Menig is a native of Tennessee and holds a master's degree in Public Administration from the University of Virginia and a bachelor's degree in Business Management from the University of Maryland. Some of you may not know, but she also studied Farsi at the Defense Language Institute in Monterey, Calif. Professional association affiliations include the American Society for Public Administration, American Society of Military Comptrollers, International City Managers Association, Association of the United States Army and Senior Executives Association. She is no stranger to the Professional Housing Management Association (PHMA) as she has been a member, guest speaker and policy discussion panel member representing the Army many times at the PHMA Professional Development Seminars.

As an Army wife and a civil servant, Menig's assignments took her to locations around the world to include Fort Holabird, Md.; Fort Huachuca, Ariz.; The Presidio of Monterey, Calif.; Tehran, Iran; Alexandria, Va.; and Washington, D.C. She has worked at garrisons, major Army commands, joint headquarters and headquarters, Department of the Army levels.

Among her numerous awards, she has twice been the recipient of the Presidential Distinguished Executive Award and the Presidential Meritorious Civilian Service Award. She is the also the recipient of the Department of Defense Distinguished Civilian Service Award and has been awarded the Decoration for Exceptional Civilian Service four times. Menig has been recognized for her strategic vision and leadership in support of the President's management agenda, the Base Realignment and Closure program, environmental programs and support to the war on terrorism. These awards not only depict her personal achievements and high standards, but also represent the climate she created through empowering her subordinates, reorganizing chains of command and funding streams into a fit, lean and effective working environment, and mentoring those who would stand up to the call.

Menig said she is very proud of the OACSIM organization and to have served for so many years in the "Green Suit" Army and her close association with Soldiers. Her personal resilience in improving the quality of life for hundreds of thousands of Soldiers and families will continue to influence Army installation management for years to come. PWD

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