A publication of the U.S. Army Installation Management Agency

Volume XVIII, No. 1 **January/February 2006**

Public Works Digest

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Base Realignment and Closure

U.S. Army Installation Management Agency

Public Works

January/February 2006
Vol. XVIII, No. 1

U.S. Army Installation Management Agency

2511 Jefferson Davis Highway
Arlington, Virginia 22202-3926

Public Works Digest is an unofficial publication of the U.S. Army Installation Management Agency, under AR 360-1, The Army Public Affairs Program. Method of reproduction: photo-offset; press run: 3,000; estimated readership: 40,000. Editorial views and opinions expressed are not necessarily those of the Department of the Army.

Address mail to:

U.S. Army Installation Management Agency
2511 Jefferson Davis Highway
Arlington, VA 22202-3926
Attn: Editor, ***Public Works Digest***
Telephone: (202) 761-0022 DSN 763
FAX: (202) 761-4169
e-mail:
Gregory.C.Tsukalas@HQ02.usace.army.mil

Donald G. LaRocque
Public Works Program Manager,
Installation Management Agency

Debra Valine
Acting Managing Editor
U.S. Army Corps of Engineers

Layout:
Corporate Visions, Inc.
Washington, DC

Printed on recycled paper.

Good news! A new editor has been selected for the Public Works Digest. Mary Beth Thompson of the Baltimore District, U.S. Army Corps of Engineers, has accepted the position and is expected to report for duty in late May. In the meantime, I will continue to fill in as acting editor.

This issue of the PWD focuses on Base Realignment and Closure. Articles by Jerry Harbison, Carol Sobel and Vincent Kam, among others, discuss such topics as Joint Basing initiatives; growth within installations and communities as they prepare for the arrival of additional troops; using relocatable buildings as a temporary measure to provide facilities for the influx of newly relocated Soldiers; and planning as the key to ensuring the Army BRAC initiatives are met.

Articles by Kim Gillespie, Jerry Rogers and Andrea Takash, highlight support provided to installations by the Engineering and Support Center in Huntsville, Ala., Norfolk District and Seattle District. Huntsville Center provided furnished homes to Soldiers returning from Iraq to hurricane-ravaged areas of Louisiana; Norfolk District expanded a MATES facility at Fort Pickett; and Seattle District completed Fort Lewis' modularity program ahead of schedule.

Among articles on military construction, Linda Tuttle discusses how the Installation Status Report – Infrastructure establishes a new baseline for assessing the condition of Army real property. Researchers from the Engineer Research and Development Center have completed a study to locate, map and assess the explosive status of the underground sewer system at Joliet Army Ammunition Plant in Illinois. And Mark J. Fisher helps solve the confusion with lead and lead based paint regulations on building construction projects.

The U.S. Army Combat Readiness Center has issued an electrocution advisory cautioning about the danger of improper operations and maintenance of facilities no longer in use. ACSIM offers low cost, no cost energy reduction actions.

The issue is rounded out with articles about unaccompanied personnel housing, renovated barracks and articles about a series of Master Planning classes.

Debra Valine

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

Joint Basing initiatives resulting from BRAC 2005

by Jerry Harbison

BRAC 2005 articulated a Department of Defense (DoD) strategy to create Joint Bases where two or more bases are contiguous or in close geographic proximity. The Pentagon recommended, and the BRAC Commission approved, a savings target with the DoD Joint Basing initiatives of $2 billion over 20 years. How will these joint basing savings of $100 million per year be earned? Are they realistic? And what are the obstacles to implementation?

Implementing details are being developed by the Joint Base Working Group (JBWG). However, there are some common sense fundamental principles that are keys to the success of this effort. This paper examines opportunities from Master Planning, Real Property and Real Estate perspectives.

Benefits From Joint Bases
• One DoD standard
• Elimination of facilities and personnel redundancies
• Processes "streamlined" and simplified
• Single Space Management Authority achieves optimized use of buildings and facilities
• Master Planning and Space Utilization provides more options, less construction required

DoD implementing precepts state that the responsibility for installation support shall be transferred to the supporting installation in order to take full advantage of efficiencies available through consolidation. A unified command and control plan under the leadership of the senior military commander on the Joint Base will ensure that everyone is working effectively and efficiently. Implementation of new names of the Joint Bases, imply a new strategy implementation.

While only eight Army Installations are directly affected (Table 1), in reality the DoD policies, standards and systems that will be developed to support these Joint Bases will affect every Army Installation in the future. To begin to achieve efficiencies there should be, early on, a transfer of ownership of the real property records to the designated lead service. From that one key task of clearly designating ownership (and responsibility) to the senior military commander, benefits will begin to emerge:

One DoD standard must be adopted that applies across the board for Air Force, Navy and Army facilities. This is not a trivial issue and serves as the largest threat to implementing truly joint bases. The services have uniquely different cultures and different standards for facilities that will need to become integrated. These differences will need to be hammered out under the auspices of evolving common standards, but should not be allowed to slow down the move to Joint Bases. Standards will evolve over time.

Having a single space management authority to look holistically will optimize use of land, buildings and facilities. A unified Master Plan puts all real property assets to their best use within the Master Planning Process, provides the Joint Base commander more options, will require less construction, and can ultimately save scarce resources especially during peak times (mobilization). Further, single space management provides more options and will require fewer resources for temporary or relocatable facilities when forces are re-stationed.

Streamlined and simplified processes will result from making a single joint base from two or three service bases. Current complicated Real Estate Out-granting processes executed through the Corps of Engineers (USACE) are eliminated between services and help establish best use of land and facility development. Need for detailed Inter Service Support Agreements (ISSAs) that spell out services to be delivered will not be required, as Common Output Level Standards (COLS) are articulated and understood. DoD Facility Sustainment Models (FSM) will program the resources required to support the Real Property Inventory and other models under development will provide fair and equitable resourcing for personnel and Installation Support services.

Elimination of facilities and personnel redundancies become the source of the savings. This is exciting as in effect the three services are being benchmarked, and the best processes and practices will rise to the top and become the "gold" standard. Recognizing and moving to the best system in place is a productivity enhancement by itself, but when the redundant system is eliminated, significant savings will be achieved.

Within the area of Real Property management, there is an important effort to establish one Real Property reporting system to be used within the DoD. Department of Defense Instruction (DODI) 4175.70 outlines the Real Property management, including responsibilities under Section 2667, title 10, United States Code. Having a standard Real Property system will enable the military service having real property accountability for a joint installation. The Chief Financial Officers Act of 1990 and the Federal Financial Management Act of 1994 require more accurate ➤

Key to Success for Joint Bases
• Unified Command and Control Under Senior Military Commander
• One DoD standard
• Changing the names reflecting Joint
• Real Property Transfer "early on" in the Process
• DoD Facility Sustainment Model (FSM) for Real Property funding
• Common Output Level Standards (COLS)
• Joint Master Planning and Space Utilization

Table 1.

Joint Installations Established by BRAC 2005 (Army Installations)		
Lead Service	**Supported Services**	**Remarks**
Fort Bragg, N.C.	Pope Air Force Base, N.C.	Specific BRAC Language Transferring AF Real Property to the Army HQ, FORSCOM, USARC
Fort Lewis, Wash.	McChord Air Force Base, Wash.	DoD Implementation Road Map Test
McGuire Air Force Base, N.J.	Fort Dix, N.J., Lakehurst NAES, N.J.	DoD Implementation Road Map Test
Lackland Air Force Base, Texas	Fort Sam Houston, Texas Randolph Air Force Base, Texas	IMA Headquarters, IMA West
Langley Air Force Base, Va.	Fort Eustis, Va.	HQ TRADOC, IMA East
Naval Station Norfolk Mid Atlantic Region, Va.	Fort Story, Va.	
Fort Myer, Va.	Henderson Hall, USMC, Va.	
Elmendorf Air Force Base, Alaska	Fort Richardson, Alaska	

Joint Installations Established by BRAC 2005 (Non Army Installations)		
Anacostia Naval Station, DC	Bolling Air Force Base, DC / Naval Research Lab, DC	DoD Implementation Road Map Test
Andrews Air Force Base, Md.	Navy Air Facility, DC	
Charleston Air Force Base, S.C.	Naval Weapons Station, Charleston, S.C.	
Pearl Harbor (Navy), Hawaii	Hickam Air Force Base, Hawaii	
Naval Forces Marianas Islands, Guam	Andersen Air Base, Guam	

Overseas Joint Installations	
Korea	Services are moving forward to Joint Bases under Unified Command Plan
Germany	Contiguous communities currently operate under some Joint Base principles and will benefit from Joint Basing standards, policies and procedures.

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accounting of real property in the Property, Plant and Equipment (PP&E) accounts. DoD is required by law to and has been working for several years to earn a favorable opinion on DoD agency wide financial statements.

In summary here are a couple of keys to success. First and foremost, a workable unified command plan under the senior military commander. Second, a real property transfer of ownership implying transfer of responsibilities and benefits to the lead service early on in the process. If these keys to success can be implemented, then the savings from the BRAC 2005 Joint Basing initiative will be realized to benefit our Soldiers, Sailors, Marines and Airmen.

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5. Korean Peninsula Joint Basing Roundtable, September 22, 2005
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8. DoDI 4175.70 Real Property Management

"This paper reflects the views of the author and should not be considered official DoD or Army policy which is currently being developed for Joint Bases."

Jerry Harbison has more than 29 years of federal service and serves in Master Planning and Real Property Management, IMA North West Region. He served as DPW in Schinnen, the Netherlands. Schinnen is an Army garrison serving a Joint military community for three NATO locations: Allied Forces Central Europe (AFCENT), Allied Rapid Reaction Corps, Rheindalen Germany, and Geilenkirchen (NATO) AFB, Germany. PWD

South East Region communities 'lean forward in the foxhole' to embrace movement due to BRAC, IGPBS

by Carol Sobel

The communities around five installations in the South East Region (SERO) of the Installation Management Agency (IMA) so anticipate the economic growth that the Base Realignment and Closure (BRAC) and Integrated Global Presence and Basing Strategy (IGPBS) movements will bring that they are spending to make improvements long before the additional troops arrive.

Doris M. Lundeen, SERO BRAC branch chief, said, "IMA installations are working aggressively to meet the challenges being presented; BRAC is readily apparent in IMA's Southeast Region," noting that the region will undergo dramatic change. She cited some examples that the changes will bring, such as moving the Armor School (Fort Knox, Ky., to Fort Benning, Ga.), moving and combining major headquarters elements (Forces Command and U.S. Reserve Command to Fort Bragg, N.C., Army Materiel Command to Redstone Arsenal, Ala.) and stationing two new Basic Combat Teams (Forts Bragg, N.C., and Campbell, Ky.). "These moves alone will touch approximately 22,600 civilians and service members, along with their families, and will significantly impact both our on-post and off-post communities, with all actions to be completed within a six-year window," Lundeen said.

Five SERO installations that will grow are Forts Benning, Knox, Bragg, and Campbell, and Redstone Arsenal. Each is surrounded by communities that thrive, in part, because of the military presence. The growth of the population at each installation is welcome; however, all acknowledge that an increase in infrastructure in the communities is necessary to support the newcomers.

To assist communities like these, the Department of Defense (DoD) is planning a community conference this spring so that there can be dialogue between DoD, communities being affected by the 2005 BRAC, and communities affected by past BRACs in a collaborative effort to make the transitions as smooth as possible. Lundeen said, "It has been 10 years since the Department of Defense has undergone a BRAC, and this one is significantly different from prior rounds. The primary focus of past BRACs was closure and disposal of excess infrastructure. This time, in addition to closures, it will significantly change where the Army stations, provides schoolhouse training and commands the force."

Housing is a concern for each of the five SERO communities. Residential Communities Initiative (RCI) housing is being built on post at all these installations to handle the increase in military families, such as the recently finished neighborhood at Fort Campbell called Summers Park. Construction of the 90 houses began in April 2004, with sizes ranging from 1,797 to 1,888 square feet, up to four bedrooms. Future plans call for the construction or renovation of 4,200 homes on post, with community centers and amenities such as walking trails. Fort Campbell has also refocused its $207 million MCA FY06 program to build barracks and administrative buildings to support transformation. AAFES is doubling the size of the Post Exchange, and the post is finishing up $26 million in Barracks Improvement Program projects.

Since these installations are gaining civilian employees as well as Soldiers, off-post housing needs to increase as well. Radcliff, Ky., a community outside Fort Knox, is already planning for the housing needs of its potential new residents. The city anticipates growth not only from the BRAC-directed addition of thousands of civilian employees of the Army Human Resources Command after the Armor Center moves to Fort Benning, but also from the 3,300-3,700 Soldiers arriving in FY06 to fill the new Infantry Brigade Combat Team being created as part of IGPBS. The Radcliff city planning director said the building boom started after the BRAC announcement in May, with the value of construction permits jumping from $1.6 million to $8 million within six months.

Along with an increased need for family housing is an increased need for schools. Muscogee County, Ga., voters approved $300 million in two tax sales referendums to improve local schools around Fort Benning. Additionally, eight school districts around Fort Benning put together a plan they called the Chattahoochee Valley Schools Project. In it, they requested $321.33 million from the federal government to build schools in anticipation of adding, in their estimate, more than 8,500 students that BRAC-directed moves and IGPBS might bring to Columbus, Ga., and Phenix City, Ala. This plan has become the basis for the Seven Rivers National Coalition for Military Growth in PreK-12 Schools, a lobby group of school districts near growing military installations.

The increased job opportunities and economic improvements that the 20,000 people BRAC and IGPBS bring to Fort Bragg are important to Fayetteville, N.C., and Cumberland County. School administrators are interested in the number of teachers and classrooms needed. College administrators are interested in knowing what classes need to be offered to future workers. Hospitals are interested in knowing how many more health care workers will need to be hired. County officials, as well as officials in other nearby counties, are interested in the need for works projects such as public transportation, airport improvement, roads, water and sewer. The Cumberland County Business Council has offered to be the liaison to coordinate all regional planning for strong economic growth.

Huntsville, Ala., the community outside Redstone Arsenal, has numerous projects in the works to support the approximately 4,800 people that BRAC will provide. ➤

Army using relocatable buildings to meet facilities shortage during transformation

by Vincent W. Kam

Providing facilities for our Soldiers has been in the news lately, showing potential opportunities as well as frustrations in execution. The Army is experiencing a tremendous challenge in the race to provide adequate barracks, maintenance and headquarters facilities in time for our transforming forces, expanding number of combat units, additional end-strength and in support of the return of forces from Germany and Korea. The Army has resorted to relocatable facilities – mobile home style trailers – to house Soldiers in such locations as Fort Hood, Texas; Fort Drum, N.Y.; and Fort Campbell, Ky. In some cases, interim solutions are necessary before the Army can provide permanent structures. In other cases, surge training missions require facilities for only a short duration. But these interim solutions are temporary by design and do not provide all the standards and amenities that permanent military construction (MILCON) will bring.

The use of relocatable buildings is one of the Army's tools to meet urgent facility requirements. Interim facilities satisfy requirements that are short-term (normally three years or less), urgent requirements for facilities due to transitory peak military missions, deployments, military contingency operations, disaster relief requirements, or pending approval and construction of real property facilities via normal MILCON programs. In the past two years, the Army employed relocatable buildings to provide more than 2,900 interim facilities consisting of nearly 5 million square feet at Fort Stewart, Ga.; Fort Campbell; Fort Drum; Fort Bragg, N.C.; Fort Hood; Fort Richardson, Alaska; Fort Huachuca, Ariz.; Fort Sam Houston, Texas; Fort Lee, Va.; Fort Dix, N.J.; Fort Polk, La.; Fort Irwin, Calif.; and Fort Lewis, Wash.

Relocatable buildings are not the preferred facility solution and the Army must minimize their use.

The use of relocatable buildings is not without challenge. The program is the subject of increasing audit agency and congressional concern over the huge numbers of relocatable buildings being procured, questioning our extensive use of relocatables in lieu of the programmatic, albeit significantly slower, MILCON program. Our many lessons learned through these reviews resulted in new Army policies and procedures for relocatable buildings that have been fully coordinated with the Office of the Secretary of Defense (OSD) and the Office of Management and Budget (OMB). But as an indication of their continuing concern, Congress has requested a full report on the volume, investment and utilization of relocatables within the Army.

Consistent in our new policies in the Army Secretariat is the approval authority for relocatable requests. Procurement and funding authorities must be strictly followed to preclude statutory violations while executing leases or purchases. A relocatable request must include an operational justification, a life cycle economic analysis, associated construction documentation, supporting legal opinion and site plans for the relocatable building project. The authorization for relocatable buildings will be based upon the duration of the need or completion of the replacement MILCON project. Relocatable buildings must have an exit plan as their earliest possible removal is essential for compliance with Defense relocatable building authorities.

Relocatable buildings are not the preferred facility solution and the Army must minimize their use. Relocatable buildings provide the alternative of last resort after all other facility solutions are exhausted. Strict attention to proper approval and funding of each project is essential lest the Army lose this highly flexible facility tool. The Army is addressing other facility solutions such as faster construction of permanent facilities resulting from the new MILCON transformation program. But in unique cases, mission changes may demand an interim facility solution. If commanders manage the program correctly, relocatable buildings can still provide a solution to our short-term, urgent facility needs.

Vincent W. Kam works in the Office of the Assistant Chief of Staff for Installation Management. PWD

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To expedite the transfer of military commands to the installation, the Huntsville City Council approved a deal to build seven general officers' quarters on the installation at a cost of $2.75 million. A highway project that would improve access to the Arsenal, called the Patriot Parkway, will receive $2.4 million of a transportation bill passed by Congress this past July. The groundbreaking of Phase II of the Von Braun Complex on the Arsenal increases the amount of much-needed office space and provides a home for the Missile Defense Agency.

The communities around these five installations recognize the economic engines they have in their midst, and are eagerly showing how much they appreciate having the opportunity to help their installations grow.

Carol Sobel is a public affairs specialist in the South East Region, Installation Management Agency, at Fort McPherson, Ga., (404) 464-0783; e-mail: Carol.Sobel@forscom.army.mil. PWD

Urban sprawl models for Army basing study: Resource for future planning to avoid encroachment

by William Goran, Col. William Tarantino and Brad Boesdorfer

Urban and suburban growth trend models created for nearly 100 installations to support the Total Army Basing Study (TABS) offer potential follow-on use in regional planning efforts. These "urban sprawl" analyses used a novel combination of data sources to consistently assess encroachment for all installations under the Base Realignment and Closure (BRAC) studies.

The models provide a forecast for urbanization to 2020 based on changes in land use from 10 years of historical data for one- and five-mile perimeters around an installation. Installations can use these results to augment planning activities with local communities for initiatives such as Installation Compatible Use Zones, (ICUZ, plus its Air Force and Navy counterparts), Army Compatible Use Buffers (ACUB), and the Joint Land Use Study (JLUS).

Encroachment and BRAC

The Defense community knows that encroachment constrains training and operations on land, in the skies and on the seas. For Soldiers to "train as they fight," it is essential that these critical resources remain accessible for the full array of military missions. Population growth, urban expansion and increased traffic are often competing demands for the availability of these resources, especially in the vicinity of military ranges and flight routes.

Over the past 30 years installations have been making concessions to their neighbors by moving ranges away from boundaries, curtailing night operations and taking other action that negatively impacts training. With the rapid pace of urban expansion during the 1990s, combined with growing constraints to training in compliance with the Endangered Species Act, the loss of range capability became a major concern to Army leadership. Encroachment was therefore included as an attribute in studying the military value (MV) of installations during BRAC05.

To measure encroachment consistently across all Army installations in the study, TABS needed a defendable, repeatable and auditable method. The U.S. Army Engineer Research and Development Center (ERDC) had previously developed several map series to model changing land use patterns around military installations using methods validated in the scientific community. However, these maps included differing data sources and features that could introduce bias in attempting to make fair comparisons. TABS asked ERDC's Construction Engineering Research Laboratory (CERL) to develop a method that would meet MV analysis requirements.

Visualizing Urban Change

In addition to providing certified, consistent and repeatable data sources, CERL needed to select data that was already available due to time and funding constraints. To meet the "consistent and comparable" criteria, researchers chose to leverage a product developed to support the base closure and realignment studies, the Installation Visualization Tool (IVT). This tool has included new imagery for several hundred installations. This source is commercially available as collected at high resolution (1 to 4 meters) from the Ikonos Earth observation satellite. While this data is available for all installations, it represents only one point in time (roughly 2001-03). Since "trend over time" data was also needed, at least one additional source was required. Two options were available: the U.S. Geological Survey's National Land Cover Datasets (NLCD) and U.S. Census Bureau data, which could be used as an additional source of information on local populations and land use.

CERL used both options, although the NLCD data provided the main data source for the second point in time (about 1992). This data set met the TABS requirement for "repeatability."

The resulting spatial analyses showed urban growth around installations from 1992-2003 as a percentage change. These historical models allowed the research team to develop projections for trends over the next 15 years.

Maps Available to Installations

Because of the TABS encroachment models' potential usefulness in future regional planning, the maps can be made available, upon request, to installation officials by the Office of the Deputy Assistant Secretary of the Army for Infrastructure Analysis. The information may be requested from Bill Goran at CERL, (217) 373-6735, e-mail: William.D.Goran@erdc.usace.army.mil.

William Goran is director of Strategic Planning at ERDC-CERL in Champaign, Ill. Col. William Tarantino is associate dean, Graduate School of Operational and Information Sciences, Naval Postgraduate School, Monterey, Calif. Brad Boesdorfer is a researcher with ERDC-CERL. PWD

Planning is key for BRAC/Transformation success

by Sally Parsons and Frank Hall

Facility planning is receiving a lot of attention at Senior Army levels these days due to the requirements to implement Base Realignment and Closure (BRAC) and Army Transformation. Proper planning is imperative for facility programming to support the timely execution of the various Army stationing initiatives. Some of this planning support is being centrally funded, prioritized and managed. This centrally funded planning and programming support is not a substitute for the installation's regulatory master planning responsibilities, rather it's there to augment the staff and to provide assistance in these turbulent times. The initiatives that will affect our facilities are more than force structure driven; there are weapons systems changes, equipment fieldings and adjustment in standard designs. To assist installations and districts during these rapidly changing times, the U.S. Army Corps of Engineers, Engineering and Support Center, Huntsville, Ala., provides several services for effective and timely facilities planning and programming.

Planning and programming initiatives:

Facility Reutilization Studies (FRS):

FRSes are centrally funded by the Office of the Assistant Chief of Staff for Installation Management (OACSIM) and prioritized by Headquarters, Installation Management Agency (HQ IMA). An FRS is similar to a Facility Utilization Survey with some further intelligence applied. The intent of an FRS is to measure space being used by a unit or activity, to identify the optimal use of that space considering future occupants' requirements and to provide an estimate of the cost to bring that space to current standards for the intended use.

Huntsville Center performed a pilot of an FRS at Fort Bliss, Texas, to identify optimal future use of space being vacated by the Air Defense Artillery School, the 6th ADA Training Brigade and other ADA units. This survey will assist Fort Bliss in providing facilities for future units, such as Modular Divisional HQ, FIRES Brigade, etc. The Fort Bliss FRS may be viewed on Engineering Knowledge Online (EKO) at: https://eko.usace.army.mil/virtualteams/asfs/asfs_library/facility_reutilization_study/. (You will be asked to login using your Army Knowledge Online (AKO) username and password.)

As of Jan. 6, HQ IMA has funded two additional FRSes: Fort Sam Houston, Texas, to address primarily administrative space, and Fort Polk, La., to identify primarily barracks facilities.

Requirements Analyses (RA):

RAs are centrally funded by OACSIM and prioritized by HQ IMA. The RAs are being conducted for specific unit/activity actions to address the requirements for mission critical facilities. These analyses are based on Army G-3 force structure documents and standard Army criteria. These analyses lay the foundation for consistent and auditable planning and programming documentation. This approach is being taken to address Army Modular Force, BRAC and Echelons above Brigade units/activities. Huntsville Center is overseeing the completion of RAs for more than 90 brigade-level actions. Executive Unit-level summaries from many completed RAs may be viewed on EKO at: https://eko.usace.army.mil/virtualteams/asfs/asfs_library/requirements_analysis/.

Planning Charrettes (PC):

The PC is the process that takes a validated requirement along with an installation-approved site plan and develops the DD Form(s) 1391 for specific stationing actions. Validated requirements can come from an RA, a proponent developed list of facilities or a Facility Planning System extract (assuming that all parties accept that the only solution is all construction). Ideally ➤

Examples of notional layouts to support BRAC/Transformation programming

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these PCs are facilitated by the local district. Involvement of all required players from the installation is crucial in the development of accurate and defendable project documentation. Real Property Planning Board-approved siting prior to the PC is critical to this process. Huntsville Center support for this process allows for consistent programming documents to be provided to OACSIM.

Training:

Training is available. The Proponent-Sponsored Engineer Corps Training Program (PROSPECT) courses are the primary source. Huntsville Center recently provided an informal training session (4.5 days) to Army Audit Agency (AAA) team leaders assigned to BRAC Military Construction (MILCON) and Fort Irwin, Calif., planning personnel. This training helped them better understand the processes involved in planning and programming. They learned how to access and use RPLANS, the PAX System and other Army systems, which should reduce the installation's requirements to provide on-site data-gathering support during AAA BRAC audits. This training could be adapted if required.

Planning Assistance Team (PAT):

This is a relatively new concept. The PAT would provide for focused planning assistance at any installation that requests it. The team would be comprised of U.S. Army Corps of Engineers personnel from different districts and Huntsville Center augmenting installation staff at their location to address a specific planning challenge. This assistance would generally be provided for a five-day period.

Infrastructure Assessments:

The condition and capacities of infrastructure systems (both within and outside installations) must be considered the Achilles' heel of our planning efforts. Thought needs to be given to the state and capacity of our systems to actually handle the current requirements and future significant increases in loads. This is especially true of utilities, traffic and training system/facilities.

In closing:

Master Planning remains the cornerstone for installation development. Never has this been truer than today in the fast and changing environment that we all find ourselves in. The ability to foresee and be prepared for evolving stationing scenarios is crucial in providing adequate facilities for our Soldiers. There are products and services available to assist the installation in facing those challenges that seem to just keep on coming. Help is available.

POC is Mark Fleming, Huntsville Center, U.S. Army Corps of Engineers, (256) 895-1535, e-mail: Mark.Fleming@usace.army.mil.

Sally Parsons is the program manager for Transformation/BRAC at the Engineering and Support Center, Huntsville. Frank Hall is a Master Planner at the Huntsville Center. PWD

Huntsville Center supports Military Construction in a variety of ways:

MILCON Transformation (MT). Huntsville Center has supported the MT initiative since December 2004, when Headquarters, U.S. Army Corps of Engineers (HQUSACE) assigned Huntsville Center lead roles in the MT Planning and Programming and MT Acquisition Strategy focus areas. The overall objective of MT is to provide quality facilities, leverage private industry standards and practices, and reduce acquisition/life cycle costs while meeting aggressive Army timelines. For MT Planning and Programming, Huntsville Center manages the Requirements Analyses and, in concert with districts, coordinates Planning Charrette efforts. The MT Planning and Programming point of contact is Mark Fleming, (256) 895-1535; e-mail: Mark.Fleming@usace.army.mil. Huntsville Center, together with divisions and districts, is developing the MT Programmatic Acquisition Strategy. The MT Programmatic Acquisition Strategy point of contact is J.R. Richardson, (256) 895-1110; e-mail: J.R.Richardson@usace.army.mil.

DD 1391/ENG 3086 Center of Expertise (CX). Huntsville Center supports USACE, Office of the Assistant Chief of Staff for Installation Management (OACSIM) and Installation Management Agency (IMA) elements by providing programmatic oversight of DD Forms 1391, supporting documentation and ENG Forms 3086 for the MILCON Program. We review, validate and approve the ENG Forms 3086 and perform consistency reviews of DD Forms 1391. Huntsville Center also reviews and approves economic analyses. Point of contact is Garry Runyans, (256) 895-1817; e-mail: John.G.Runyans@usace.army.mil.

DD Form 1391 Processor and Tri-Service Automated Cost Engineering System (TRACES). Huntsville Center maintains the systems, provides training and hotline support. The point of contact for DD Form 1391 Processor is Garry Runyans (256) 895-1817; e-mail: John.G.Runyans@usace.army.mil. The point of contact for TRACES is Jim Nichols, (256) 895-1842; e-mail: James.E.Nichols@usace.army.mil .

Ordnance and Explosives (OE) Center of Expertise (CX). The OE CX provides general support to OE Design Centers and Removal Districts, to include ordnance avoidance during construction. Point of contact is John C. Potter, (256) 895-1888; e-mail: OEDirectorate@HND01.usace.army.mil.

Facility Removal (Demolition). Huntsville Center centrally manages the Operations and Maintenance Army (OMA) funded program for reduction of excess Army facilities. The technical and contract acquisition services now being provided to installations under the Facility Reduction Program are also applicable and available to assist facility demolition requirements under MILCON. The point of contact is Lawson (Stan) Lee, (256) 895-1541; e-mail: lawson.s.lee@usace.army.mil.

Fort Worth district looking at $4 billion of construction over next five years

by Robert P. Morris Jr.

The 2005 Base Realignment and Closure (BRAC) legislation is providing excitement for the U.S. Army Corps of Engineers (USACE), the Office of the Assistant Chief of Staff for Installation Management (OACSIM), the Installation Management Agency (IMA) and military installations throughout the Continental United States (CONUS). But one should also consider that BRAC is only one piece of the work that is challenging those planning and executing the military's construction program in the next five years. We need to also consider the Army's Modularity Force (AMF) requirements where the Army is reorganizing 32 brigades into 40 smaller, but more lethal, brigades. Finally, we must consider the impacts of President Bush's announcement in August 2004 to relocate up to 70,000 military personnel and 100,000 family members from overseas locations back to CONUS, an initiative that is referred to as the Global Positioning Initiative (GPI) or the Integrated Global Presence and Basing Strategy (IGPBS).

In recognition of the magnitude of the work and the competition for resources to accomplish these three major initiatives, the Deputy Assistant Secretary of the Army for Installations and Housing directed USACE in November 2004 to embark on a program to change criteria and processes from prescriptive requirements to performance-based criteria. HQUSACE established three teams as part of this Military Construction (MILCON) Transformation to review programming and planning, standards and criteria, and acquisition and execution. The information gathered by these groups was consolidated into a model Request for Proposal (RFP) that more closely reflects private sector models. After review by HQUSACE and private industry groups, the model RFP was used on an FY06 MILCON project at Fort Campbell, Ky. The end result of this transformation is to provide processes that: deliver quality facilities in less time and with lower costs; permit faster project execution which will minimize the need for temporary facilities, provide facilities that are adaptable for future use; and create sustainable facilities with lower life-cycle Operations and Maintenance costs.

Against this background, the Fort Worth District has found itself in the middle of one of our most ambitious construction programs. To help put this into context, the military boundaries of the Fort Worth District include New Mexico, Texas and Louisiana (Air Force installations in New Mexico are supported by Albuquerque District, in Louisiana by the Navy and Sheppard Air Force Base in Texas by the Tulsa District). The major military installations impacted by the three programs within Fort Worth District boundaries are Fort Bliss, Fort Hood, Fort Sam Houston and Lackland Air Force Base, all in Texas.

The AMF transformation and IGPBS will bring a division headquarters, four Brigade Combat Teams (BCT) and a Combat Aviation Brigade (CAB) to Fort Bliss. This influx brings need for headquarters and administrative space, dining facilities, aircraft hangars, arms rooms, unit storage facilities and barracks for approximately 19,000 Soldiers. Construction is under way on temporary facilities to house the newly activated 4-1 Cavalry until permanent facilities are completed. BRAC will have an additional impact as the Air Defense Artillery (ADA) School and an ADA unit moves from Fort Bliss to Fort Sill, Okla., to form Net Fires Center with the Field Artillery School and a Fires Brigade moves to Fort Bliss from Fort Sill.

To handle the $2.5 billion of construction at Fort Bliss, the Fort Worth District is applying the tenets of MILCON Transformation and more.

- ***Land Development Engineer.*** With most of the units going into new construction in an undeveloped portion of Biggs Army Airfield, the district is using a Land Development Engineer (LDE) approach. The LDE brings large-scale development experience to the Corps and will be valuable, especially in the infrastructure planning and coordination of facilities construction.
- ***Forward Program Office.*** The district is in the process of establishing a Fort Bliss Program Office, a mini-district of sorts, at Fort Bliss. The FBPO will be led by a GS-15 program manager and will contain technical and contract administration resources as well as resident engineer offices for each BCT. The intent is to handle as much of the program execution at Fort Bliss rather than relying completely on the district staff in Fort Worth. The FBPO will be operational at Fort Bliss in May with interim support already being provided from Fort Worth.
- ***Product Line Support.*** Rather than hire a large number of new employees to handle this increased workload, the Fort Worth District is taking a regional approach to the work. The district is partnering with Sacramento, Calif.; Albuquerque, N.M.; Tulsa, Okla.; Little Rock, Ark.; and Galveston, Texas, districts. Each district is responsible for a particular product line and will handle the facilities in that product line from "cradle to grave." A regional acquisition plan incorporating the product line approach was approved by the Principal Assistant for Contracting in December 2005. Each BCT project will be assigned a project manager from the Fort Worth District to synchronize the activities of the Product Line Districts and to provide our customers with point of contact to the USACE project delivery team. Besides sharing the workload, this approach also builds expertise levels which should result in time savings and institutionalizing lessons learned.
- ***Adapt-Build.*** While the first iteration of structures will be constructed as Design-Bid-Build or Design-Build, follow-on structures will be acquired using an ➤

Baltimore District preparing for increased BRAC workload

by Chris Augsburger

In May, 2005, the 2005 Base Realignment and Closure initiative became a reality. While the Department of Army and the Assistant Secretary of the Army for Installations and Environment work to solidify plans that will efficiently manage the workload created by BRAC, Baltimore District has already begun preparing for the anticipated onslaught of new work.

Whether a base is gaining new customers or losing current missions, Baltimore District can expect to be busy between now and Fiscal Year 2011, according to Bill Wilson, chief of Military Branch, Programs and Projects Management Division. Current BRAC plans project Baltimore District to receive a 500 percent increase in military construction over the next six years, totaling more than $6.8 billion. The peak year for construction will occur in Fiscal Year 2008 when construction costs are expected to spike to more than $2.5 billion.

"Our projects will range from building new hospitals and training centers to closing down major facilities on installations that have lost missions," Wilson said.

More specifically, some of the largest BRAC projects in the district will occur at Fort Belvoir, Va., and Aberdeen Proving Ground, Md. Along with currently scheduled military construction projects, the amount of work will stretch the work force already in place.

In response to the expected demands, the district will set up program offices at key locations to help manage the larger military projects. Ed Musial, Programs and Projects Management Division, recently was selected as the local program manager for military construction at Fort Detrick, Md., while an additional program office is to be established at Fort Belvoir.

In addition to providing on-site project management, John Chubb and his staff from the district's Career Management ➤

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Adapt-Build approach that site adapts designs used in the initial structures.

The San Antonio area – Fort Sam Houston and Lackland Air Force Base – brings another set of challenges to the Fort Worth District: realignment of two major military medical centers and bringing medical training for all services to one location at Fort Sam Houston. Additionally, a number of Army agencies will be relocating to Fort Sam Houston, including the Installation Management Agency, the Army Environmental Center, the Community Family Support Center and, possibly, the Center for Health Promotion and Preventive Medicine. With a gain of more than 9,000 personnel at Fort Sam Houston, there also will be a need to increase the capacity of the community support activities such as a Child Development Center, chapel, physical fitness center and shoppette. The challenge for the Fort Sam Houston Directorate of Public Works and the Fort Worth District will be to integrate all these facilities into the current cantonment area.

To handle the $2 billion workload in the San Antonio area, the district is proposing the establishment of a MEDCOM Program/Area Office (MPAO). This office will serve the same purpose as the Fort Bliss Program Office – move as much of the execution forward as possible. There will be two resident offices underneath the MPAO, one focused on the realignment and expansion of the Brooke Army Medical Center and one focused on the realignment of Wilford Hall Medical Center into an ambulatory care clinic. A resident office will be established within the existing San Antonio Area Office to oversee the design and construction of the Defense Medical Education and Training Center (DMETC). While many medical facilities have requirements best suited by a Design-Bid-Build process, the DMETC and other facilities lend themselves to application of a Design-Build (or Adapt-Build) approach and to use of the product line relationships established for the Fort Bliss work.

The USACE, Southwestern Division and the Fort Worth District are working with the entire Department of Defense team to develop ways to accomplish the work in the best possible manner that also provides the quality facilities in a shorter time period. We will continue to investigate the available acquisition strategies and look to contracting tools available to the other services. Some of the facilities, by their size or complexity, will require unrestricted competition, but the district remains committed to providing opportunities for small and disadvantaged businesses, whether through individual projects or by set asides within product lines. We have partnered in the past year with the military garrisons and local communities to inform the small business community of the opportunities and we will continue to provide developmental sessions to foster these relationships.

We are cognizant of the tremendous amount of work that has already been accomplished by OACSIM, IMA and the garrisons in response to informational requirements to support Congressional and Army programming actions. We are joining those folks to work the transition from planning to execution. It will be a wild ride with plenty of challenges but, as a team, we will provide quality facilities for our Soldiers, Airmen and Sailors on a timeline to meet Department of Defense needs.

POC is Robert P. Morris Jr., (817) 886-1407, e-mail: Robert.P.Morris@swf02.usace.army.mil.

Morris is a professional engineer and the BRAC Program Manager assigned to the Fort Worth Engineer District. PWD

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Program have initiated a campaign to hire approximately 25 interns who can assist with the anticipated workload. Jeff Werner and Michele Bistany from the Bay Area Office attended the career fair at Virginia Polytechnic Institute Feb. 23 and focused on getting the most talented candidates to serve for years to come.

"Our mission in attending many university career fairs in the Mid-Atlantic region is to identify the best and the brightest engineers and architects and integrate them into the Corps' team," Bistany said.

The Department of Defense expects to release a plan to implement BRAC commission recommendations in the next few months. More than 800 installations across the country from the active, National Guard and Reserve components will be affected, with about 40 percent of the changes affecting more than one service.

The general plans for implementing the BRAC recommendations will be in place later this month, according to Wilson. At that time, DoD will be in a better position to develop detailed implementation plans for each installation.

Fort Belvoir is the biggest gaining installation in the district, scheduled to gain about $3 billion in construction, mainly related to National Capital Region customers relocating to the installation. Most construction will include projects such as child development centers, access roads, physical fitness centers, headquarters buildings and a state-of-the-art hospital.

Aberdeen Proving Ground will experience large gains in research oriented missions. Some of the work there includes the Chem-Bio Defense Lab, Non-Medical Chemical Biological Administration Facility and an Army Research Lab Facility.

At Fort Detrick, BRAC will close the Flair Memorial Armed Forces Reserve Center and its organizational maintenance shop in Frederick, Md., and relocate U.S. Army Reserve and U.S. Marine Corps Reserve units to a new consolidated Armed Forces Reserve Center and organizational maintenance support facility on the installation.

This recommendation transforms Reserve Component facilities in Maryland.

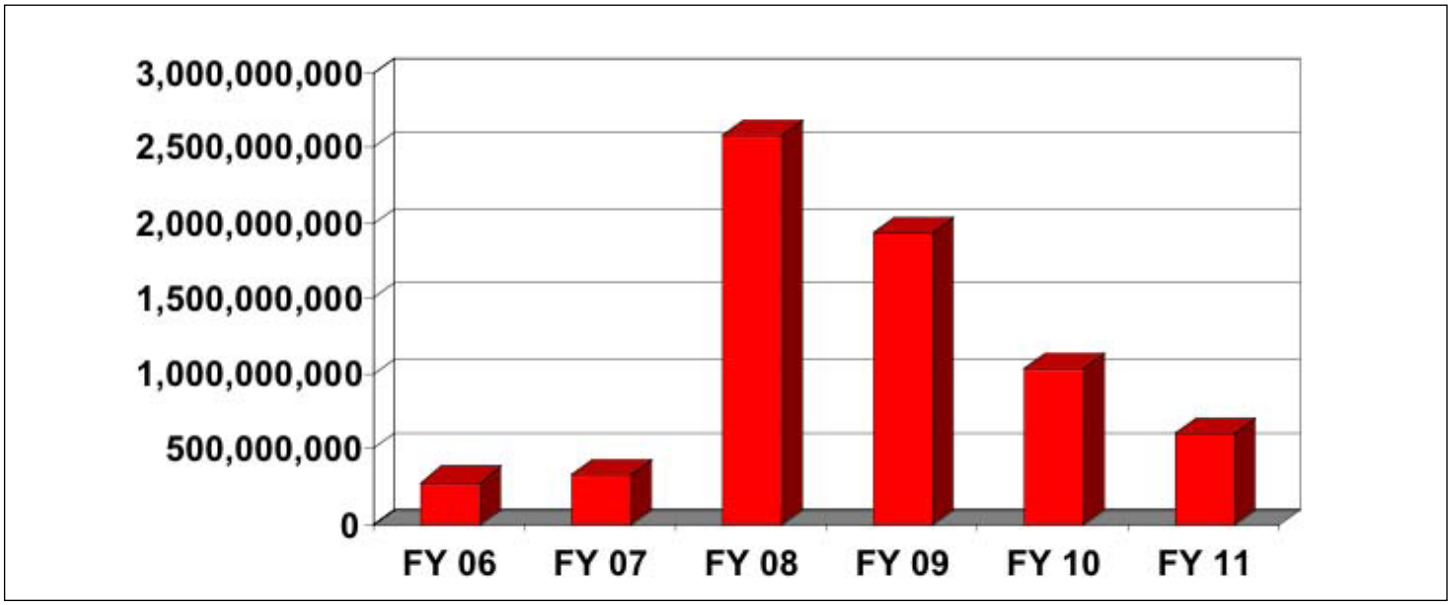
The implementation of this recommendation will enhance military value, improve homeland defense capability, greatly improve training and deployment capability, create significant efficiencies and cost savings, and is consistent with the Army's force structure plans and Army transformational objectives, according to the Secretary of Defense.

Fort Meade, Md., will receive customers ranging from various news and information services, such as Army Broadcasting Service, Soldiers Radio and Television, the Air Force News Agency and Army Hometown News Service, the Defense Information Systems Agency, the Deployable Joint Command and Control Program Office and the Joint Network Management Systems Program Office. These relocations will consolidate headquarters agency components and realign scattered Combatant Commander Development and Acquisition activities into a single activity at Fort Meade, according to the BRAC commission.

"We are excited about the challenges that these new missions will bring," Wilson said. "And we're looking forward to meeting every one of them."

POC is Chris Augsburger, (410) 962-7522, e-mail: Christopher.Augsburger@nab02.usace.army.mil.

Chris Augsburger is a public affairs specialist with the U.S. Army Corps of Engineers Baltimore District Public Affairs Office. PWD



Projected Military Project Workload for Baltimore District

Army, Huntsville Center provide housing, furniture for Soldiers displaced by Katrina

by Kim Gillespie

"This is a great example of the Army family rising to the challenge and taking care of its own," said Ken Pierson, chief of staff, Southwest Region, Installation Management Agency (IMA). The challenge was to provide furnished housing to Soldiers from the Louisiana National Guard's 256th Combat Brigade Team returning after more than a year in Iraq.

The Soldiers returned in early September 2005, shortly after Hurricane Katrina's devastating destruction, to find their homes, and in many cases the businesses that had employed them, gone. Soldiers were given the opportunity to continue on active duty for another year, with housing available at Fort Polk.

"These families showed up with the clothes on their backs and ... we were able to provide them shelter, furniture and everything needed to get them back on their feet," said Fort Polk Garrison Command Sgt. Maj. Ricky L. Jones. The Fort Polk team also provided linens, kitchen wares and other everyday items.

"The devastation they suffered as a result of the hurricanes served as an opportunity for us to show how much we appreciate the courage and resolve they have shown during the challenges of long deployments, family separations and frequent relocations," Jones said.

Pierson arrived as an advocate and adviser for the installation. The garrison's priority was supporting the Soldiers of the 256th and finding them suitable housing if they needed it. Pierson said a number of options were considered, such as purchasing mobile homes, but it was ultimately decided to use the family housing at Fort Polk. The problem with this solution was that Army family housing does not come furnished, and many of these families had lost everything.

"It was at that point that a very nice woman named Debbie Reynolds stepped in," explained Pierson. Reynolds is chief of the Family Housing Branch, Headquarters Department of the Army, Assistant Chief of Staff for Installation Management (ACSIM). Reynolds said she realized they were struggling with the situation because they initially requested furniture for 256 families, and a furniture contract would have to be awarded before the end of the fiscal year, which was only two weeks away. "I knew if anyone could do it, Huntsville Center was the place," Reynolds said.

Reynolds contacted Alicia Allen of Huntsville Center's Barracks Furniture program in mid-September and asked if Huntsville Center could take on the challenge. "The original furniture request was for 256 families, so we had to do market research for this large quantity," Allen said. "We were limited to GSA (General Services Administration) furniture because of the compressed time schedule. We started with UPH- (Unaccompanied Personnel Housing) approved vendors, and were lucky enough to have multiple vendors who indicated they could at least provide a partial solution, and potentially the entire solution," she said.

Capt. Jarvis Darensburg, with the Louisiana National Guard's 256th Combat Brigade Team, his wife Earline (left) and daughter Lauren Jimerson (center), were displaced by Hurricane Katrina and are now staying in Fort Polk Family Housing in Army-furnished homes. The furniture contract was awarded by Huntsville Center's Barracks Furniture team in less than two weeks prior to the fiscal 05 year-end. The 256th Soldiers and their families had moved into their newly furnished homes by the end of October. (Photo courtesy of Fort Polk)

Shortly before the contract was awarded at the end of September 2005, the number of houses requiring furniture was modified from 256 to 100, reflecting commitments received from Soldiers following a 30-day leave where they assessed their personal situations.

Another challenge faced the contract vendor, Rodco Brandt, as they prepared to install the furniture. The houses were scattered throughout the installation, so it would take more time for delivery. But Rodco Brandt never complained once," Allen said.

Instead, every house was fully furnished by Oct. 27, 2005. A contract also was awarded for furnishings for the unit's single Soldiers who chose to stay at Fort Polk.

"Every family that moved into the housing had expressions of gratitude for the Army," Pierson said. "I've heard that many of the families had tears in their eyes when they walked into their new homes," Reynolds said.

Both Pierson and Reynolds were effusive in their praise of Rodco Brandt and Huntsville Center. "I had full confidence in Huntsville Center, and we were absolutely pleased with their efforts and with the vendor."

Reynolds gives special credit to J.C. Menig, deputy assistant chief of staff for Installation Management, and to William Campbell, deputy assistant Secretary of the Army for Financial Management. "Without their support, nothing would have been possible," Reynolds said.

While it's hard to make a happy ending even happier, significant cost savings resulted from the use of Huntsville Center's furniture program.

"We fully furnished five rooms, and in some homes, six rooms, for a little more than $5,000 each," Allen said. "We literally saved hundreds of thousands of dollars below the GSA published prices," added Reynolds.

And the value to the Soldiers and their families – priceless.

Kim Gillespie is the chief of Public Affairs at the Engineering and Support Center, Huntsville.
PWD

Norfolk District delivers expanded MATES facility to Army National Guard

by Jerry Rogers

3-D image of expanded MATES Facility. (Photo courtesy Army Corps of Engineers)

Fort Pickett, located in southeastern Virginia near the town of Blackstone, has historically played a key role in providing quality maneuver training areas for active, reserve and Army National Guard units. Since World War II, Fort Pickett has evolved to meet the changing missions of the Army, and today is home to the Army National Guard. With more than 42,000 acres of prime maneuver training areas and ranges, Fort Pickett offers the best in both mounted and dismounted training for combat arms, combat support and combat service support units.

On Nov. 22, 2005, Norfolk District transferred for beneficial occupancy the final three structures of the $17.9 million, 153,000-square-foot Maneuver Area Training Equipment Site (MATES) facility. The project was delivered on schedule and well within budget, said Norfolk District Construction Representative Kevin D. Arthur.

The Norfolk District design-build military construction project, under the leadership of Chief of Engineering Branch Peter G. Reilly started in December 2003. The expanded MATES facility eliminates existing World War II vintage buildings, where much of the maintenance on more than 600 items of equipment took place. Equipment maintained at the MATES facility includes Abrams tanks, self-propelled howitzers, armored and command carriers, as well as related support equipment from more than 80 Army National Guard units in Pennsylvania, Virginia and West Virginia.

The expanded MATES facility contains four new structures and additions to two buildings updated in 1986. Key in the development process was ensuring that the project constructed was flexible enough to adapt to the ever-evolving mission of the Guard at Fort Pickett, explained Project Manager Reilly.

"Special care and attention went into the details of mission requirements, as well as the requirement to keep the project as 'friendly' with the environment as possible," Reilly said. "Probably the one most important feature that the new facilities have is the absence of interior columns. The equipment maintenance crews are now able to work more freely on all the armored vehicles, especially the Abrams tank, with its 360-degree rotating turret."

"I see this project as one of several initiatives that support Virginia's vision of making Fort Pickett the premier maneuver training center on the East Coast, providing quality training opportunities to a variety of units," said MATES Superintendent Lt. Col. Tom Perkins. "One of the many factors required to support this vision is to provide outstanding maintenance support to those units that come here to train, as well as those units that preposition equipment here in what we call the MATES package. A first-class maintenance facility is a key factor in providing outstanding maintenance support."

Perkins has a long history with Fort Pickett and the MATES facility. In the 1980s, then-Army Staff Sgt. Tom Perkins repaired armored vehicles in one of the WW II facilities.

"For those of us who work at the MATES, this new facility provides us a safer working environment, one that meets the most current construction requirements, and one that will accommodate just about any piece of equipment currently in the Army inventory," Perkins said. "This construction also gives us a facility we can be proud of, especially when people ask you where you work. This wasn't necessarily true when we were working out of the old WW II-era buildings."

Throughout the project's planning phase, all the way up to the award of the contract, Perkins had the opportunity to work with numerous Norfolk District personnel. "Everyone was very professional, knowledgeable and willing to do whatever it took to get us the facility we needed," Perkins said.

Perkins also revealed that their mission had been made more difficult during project construction due to the high number of deployments to Afghanistan and Iraq in support of the nation's War on Terror. "We had to restructure our specialized equipment maintenance crews to ensure that our equipment inventory was maintained," Perkins said. But despite the juggling act, he stressed, "We continued to complete our mission."

The Corps representative during ➤

Aerial Panoramic view of expanded MATES Facility. (Photo by Pete Reilly)

(left) Aerial view of expanded MATES Facility. (Photo by Pete Reilly)

New expanded MATES Facility – no interior columns; added work space. (Photos by Kevin D. Arthur)

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the construction process was Arthur. "One of my biggest concerns during the entire process was to phase the project in a manner that would allow us to continue our day-to-day maintenance operations simultaneous with the construction," Perkins said. "Kevin was instrumental in making this happen. By having the Corps involved with this project, it enabled me and my employees to concentrate on our mission and not so much with the construction."

"Our experience using the Corps has been a pure delight," said Guard Facility Management Project Manager Bob Tabor. "Many architectural and engineering firms speak of their impeccable record of few change orders and project completions within budget. The Corps proved it. It was nearly a 'hands-free' experience for the client and we thank you for a job well done."

"Bottom line: I thoroughly enjoyed working with Norfolk District, and from my point of view, one of the smartest decisions we (The Army National Guard) made was to get the Corps involved in this project," Perkins said.

POC is Expanded MATES facility Project Manager, Peter G. Reilly, Chief of Engineering Branch, Norfolk District, Army Corps of Engineers (757) 201-7693. **PWD**

Summer 2004 construction work on expanded MATES Facility. (Photo by Jerry Rogers)

More than 600 items of Army equipment inventory are maintained at the MATES Facility. (Photo by Jerry Rogers)

MATES equipment maintenance crews worked in cramped, obsolete WW II facilities. (Photo by Jerry Rogers)

Seattle District finishes Fort Lewis modularity program ahead of schedule

by Andrea Takash

Under budget and ahead of schedule, Seattle District, U.S. Army Corps of Engineers turned over the last relocatable buildings to Fort Lewis, Wash., in November 2005.

Fort Lewis Public Works and Seattle District worked closely together to prepare the post for the arrival of the 2nd Cavalry Regiment, which occurred in April 2005.

They also included the chain of command of the 2nd Cavalry Regiment in the planning process from the very beginning.

"The Soldiers are the end-users. So, it is important that we got their feedback early on," said Thomas Poole, Seattle District modularity program manager.

"The Fort Lewis modularity program completed the design, construction and delivery of approximately 465,000 square feet of administrative and maintenance relocatable buildings in 11 months at a contract cost of $64 million," Poole said. "The facilities were constructed on 53 separate sites scattered throughout Fort Lewis.

"The project was completed two weeks ahead of schedule and $6 million under the original budgeted amount," Poole said. "All of the buildings are occupied and warranty inspections have commenced.

"Alutiiq Manufacturing Contractors, an 8a Alaska Native Corporation, did a fantastic job managing the many twists and turns on this contract," Poole said.

As part of the Modularity Program at Fort Lewis, Seattle District constructed a helicopter parking apron at Gray Army Airfield. The large excavation is for a stormwater detention vault. (Photos by Thomas Poole)

In addition to the relocatable buildings, the modularity program consisted of five other areas: $4 million in barracks repairs, $5.7 million for a new helicopter parking apron, $3.8 million for administrative furniture, $3.6 million for the renovation of four dining facilities, and $1.1 million for the renovation of two hangars and repair of an existing helicopter parking apron.

"Under the modularity program, Seattle District executed a total of 11 contracts with a total value of approximately $82 million," Poole said. "This was a successful project because the modularity team worked hand-in-hand with the contractor, Fort Lewis Public Works and the Soldiers of the 2nd Cavalry Regiment."

"Thomas Poole and our district team's accomplishments are truly remarkable and inspiring. Thomas was the right person to lead this critical mission," said Col. Debra M. Lewis, Seattle District commander.

Work is ongoing for the hangar renovations. Seattle District expects completion in April 2006.

To accommodate all of the functions of a company, the relocatable buildings were designed in a set of three. Each company set accommodates the administrative, operational and storage functions of one company.

Andrea Takash is a public affairs specialist with the Engineering and Support Center, Huntsville. At the time she wrote this article, she worked for the Seattle District. PWD

ISR Infrastructure 2005 – A New Baseline

by Linda Tuttle

The Installation Status Report-Infrastructure (ISR-I) is the tool that has been used to assess the condition of Army real property for the past nine years. ISR-I calculates facility quality and quantity ratings and improvement cost estimates. The annual data collection is completed by building tenants and real property managers worldwide using Army-wide inspection standards. The installation garrison commander approves the results prior to submitting data to Headquarters, Department of the Army (HQDA). While the quality ratings and costs are based on the facility inspection results, the quantity rating is determined by comparing the amount of facility assets to the facility requirements for each facility type. The ISR-I process has matured each year with minimal improvements and adjustments, but in 2005, major changes were made to the ISR methodology and process to comply with Department of Defense (DoD) direction. The ISR-I 2005 reflects a new quality view of Army facilities and therefore a new baseline.

What is new with the ISR-I quality assessment?

- First, the facility inspection standards were re-written by the HQDA functional proponents to reduce the subjectivity and to foster more consistent facility evaluations.
- Second, the software automatically calculates a quality improvement cost estimate for each facility, for use in calculating the quality rating (Q-rating) in accordance with DoD-directed methodology. This quality improvement cost is based on the facility component ratings and component level cost factors developed by the Deputy Assistant Secretary of the Army for Cost and Economics (DASA-CE). Only components rated Amber or Red are included in the facility "cost to fix." The ISR-I quality improvement cost should not be compared to an engineer cost estimate.
- Third, the ISR-I software computes a Q-rating for each facility using the DoD ratio of "cost to fix" divided by Plant Replacement Value (PRV). The DoD Q-rating break points are: Q-1 is less than 10 percent of PRV; Q-2 is 10 to 20 percent of PRV; Q-3 is 20 to 40 percent of PRV; Q-4 is greater than or equal to 40 percent of PRV. All military services report Q-ratings using the same DoD methodology. The Army Q-rating calculations are integral to the ISR-I process.

New Mission Support and Readiness Ratings.

ISR-I added two new ratings for 2005:

- A Mission Support rating was developed to identify how well a facility meets the mission of the assigned organization. It is calculated by weighting the Red, Amber and Green component ratings using an importance factor (1 to 5 scale). The component weightings were developed by the HQDA proponents for each facility type. Each facility receives a condition rating (C-rating), C-1 to C-4, based on percent of total points.
- The Commander's Readiness Rating is a commander's judgment of how well each facility class contributes to or detracts from the ability of assigned units, organizations and tenants to accomplish their wartime/primary missions. To determine this rating, the installation commander considers the quality, quantity and mission support ratings that ISR-I calculates as well as the commander's experience and knowledge of installation-specific issues. A C-1 readiness rating would indicate facilities fully support the wartime/primary missions of the organizations, and that the condition, configuration and quantity of facilities present no limitations to unit readiness. A C-4 readiness rating would indicate facilities present significant challenges to organizations, and that the condition, configuration and quantity of facilities require assigned units to expend considerable effort to compensate for shortcomings.

How do ISR-I 2005 Quality results compare to 2004 and prior years?

The 2005 ISR-I establishes a new baseline for quality assessments and improvement cost estimates. The ISR-I 2004 and earlier relied heavily on "critical" components to determine the overall facility rating and quality improvement cost estimates. This methodology produced lower facility ratings and overstated improvement costs. Even though the 2005 ISR-I cost estimating methodology does not include critical components, it produces a more accurate Army-wide quality improvement cost estimate that is 32 percent lower than the 2004 ISR-I cost.

ISR-I 2004 and earlier generated improvement costs to C-1 and C-2 levels, the Army used these estimates when analysis of less than full restoration was required. For ISR-I 2005, Q-1 to Q-4 ratings are **not** on the same scale as the previous C-1 to C-4 ratings. The Q-1 range is broader than the C-1 range, therefore more facilities are rated as Q-1 than were rated C-1 in the past. Since more facilities are rated Q-1, the cost to Q-1 and Q-2 are significantly lower than the cost to C-1 and C-2 in 2004. Only the ISR-I 2005 "Total" improvement cost is comparable with 2004 and should be used for analysis of quality issues.

What is next?

ISR-I will continue to evolve to meet the ever-changing environment and user requirements. ISR-I transitioned to a year-round, "real-time" rating process as of Oct. 3, 2005, with quarterly data "snapshots" visible in the ISR Command Viewer. The Office of the Assistant Chief of Staff for Installation Management will continue to reassess the new ratings for usefulness and effectiveness. DoD is evaluating Q-ratings across all military services for consistency.

POC is Linda Tuttle, (703) 604-2442, e-mail: Linda.tuttle@us.army.mil.

Tuttle is a system integration specialist with the Office of the Assistant Chief of Staff for Installation Management (OACSIM, Plans and Operations Division). PWD

ERDC characterizes buried sewer pipes to assist land transfer at Illinois ammo plant

by Stephen Cosper and Michelle Hanson

A team of researchers from the Engineer Research and Development Center (ERDC) completed a study at Joliet Army Ammunition Plant, Ill. (JOAAP) to locate, map and assess explosive status of the underground sewer system. Inactive since 1976, the plant, which is a Superfund site, will ultimately be transferred in large part to the U.S. Forest Service to become a nature area.

A handheld field data collection device was an efficient way to log findings as the team mapped the sewer system at JOAAP.

JOAAP dates to 1941 when it was quickly built to support the World War II effort. It originally had two separate facilities: the Kankakee Ordnance Works (KOW) and the Elwood Ordnance Plant. KOW produced trinitrotoluene (TNT) and other energetic materials (EM), once setting the national record for TNT production. Elwood was a Load-Assemble-Pack (LAP) plant that processed artillery shells, bombs, mines and small arms ammunition. Activities also included ammunition testing, washout and shell renovation.

The Army has begun decontaminating aboveground structures from the LAP area, most of which is slated for transfer to the Forest Service. However, the underground structures posed a challenge. The sanitary sewer, storm water and subsurface industrial piping all potentially contained residual EM, which would create an explosive hazard in the event of future excavation. Existing maps and other drawings of the system were incomplete and inaccurate. Before the land could be transferred, the Army had to provide an accurate map of all buried structures and assurance that the sewer system does not pose an explosive hazard.

The Base Realignment and Closure (BRAC) Office asked ERDC's Construction Engineering Research Laboratory (CERL) to locate and document all the buried components, then to test the identified sections for presence of EM. If the team found levels of EM exceeding safe limits specified by the Environmental Protection Agency, the Army has the option to dig and remove the entire sewer system or to remediate in place.

Smoking Out and Mapping the System

Sewer structures to be recorded and mapped included manholes, sewer mains, laterals, catch basins, surface inlets and septic connections. Buildings, roads, fence lines and other features also were to be mapped to provide context to the sewer layout. First, the installation "archives" were searched for historical information. A few maps were found that showed approximate locations of the sanitary sewer, storm sewer and associated manholes. However, the incomplete information, combined with overgrowth of vegetation, made it impossible to characterize the system using those maps.

To find sewer structures and verify the sources of laterals and mains, CERL used smoke testing, a method commonly used in the sewer maintenance industry to locate pipes and to test the integrity of known (and unknown) pipelines. This test is conducted by placing a blower over a manhole and forcing smoke-filled air through the sewer line. Under the pressure of the blower, the smoke fills the sewer line and any connections, then follows any path of low resistance to openings to the surface. These openings may be storm inlets, catch basins, holes in manhole covers and even leaks in the sewers and buried inlets that are not too deep.

This technique was especially valuable in finding connections to sewer mains ➤

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where there were no manholes. Specific portions of the sewer system were isolated by plugging selected sewer pipes, allowing maximum pressure to build up in sections of sewer mains where buried lateral connections were suspected.

Finally, an electronic system involving radio frequency transmission and detection was used. This system allowed CERL personnel to map underground piping at locations where smoke detection was not effective.

As researchers collected data and coordinates from the smoke and radio detection testing, they entered this information into a hand-held device called the ikeTM. Developed by ERDC for installation field applications and built by Surveylab of New Zealand, the tool has a data collection feature that integrates mobile geographic information system (GIS) with a global positioning system (GPS), digital camera, laser distance meter, compass and inclinometer. The ikeTM allows a user to aim at a target, photograph it and at the same time calculate and log the coordinates of the target location. It is an efficient way to map structures and geographical features, and to record reference data associated with specific GPS locations.

Once the manholes and other surface structures were located, GPS coordinates were obtained from the ikeTM. These coordinates were later used to develop a complete, detailed digital map of the sanitary and storm sewers.

Testing for Explosive Residue

Using the newly created map, CERL next took samples at strategic locations within the system to test for EM. Jar samples were collected for analysis at an accredited laboratory using USEPA Method 8330, "Nitroaromatics and Nitramines by High-Performance Liquid Chromatography." This method determines the concentration of several different energetic compounds in a water, soil or sediment sample. The team also used two commercial products in the field, Exspray and Drop-Ex, to test for the presence of EM.

Findings showed very little EM contamination in the sanitary sewer system. The levels detected at most locations were well below the EPA limits. The locations discovered to contain higher EM concentrations were almost all nearby heavily contaminated production buildings, as expected. CERL has provided a complete report with findings and recommendations to the BRAC Office and JOAAP site manager.

Each section of the underground sewer system was tested for presence of explosives.

For more information, please contact Stephen Cosper at CERL, (217) 373-5569, or e-mail: Stephen.D.Cosper@erdc.usace.army.mil.

Stephen Cosper is a project manager at ERDC-CERL and Michelle Hanson is chief of the Business Processes Branch, also at ERDC-CERL in Champaign, Ill. PWD

Solving the confusion with lead and lead based paint regulations on building construction projects

by Mark J. Fisher

The two main regulatory bodies responsible for Lead and Lead Based Paint (LBP) health protection are the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA). OSHA's focus is worker protection and EPA's focus is protection of public health and the environment.

Many times, the proper application of OSHA and EPA regulations is not thoroughly evaluated nor properly specified during the design and planning phases of building construction (including renovation and demolition) projects involving lead based paint. The consequences of improper application of these standards are: 1. Overqualified contractors/workers are hired to perform "normal" construction activities impacting lead based paint (such as remodeling or building demolition), where it is not necessary; or 2. Unqualified contractors/workers are hired to perform lead based paint "hazard abatement" in residential or child-occupied facilities, which is not in compliance with EPA regulations.

In either case, improper application of OSHA and EPA lead standards may unnecessarily increase construction costs. Payment may be made for services and qualification that are not necessary, or project completion may be delayed while going though the process of finding and hiring qualified contractors to perform the work.

Know the regulations and whom they are intended to protect.

OSHA's "Lead in Construction" regulation is published at 29 CFR 1926.62. It is intended to protect workers who work with lead. In building construction, this most often means demolition or remodeling activities that disturb lead based paint.

EPA's lead based paint regulations that primarily affect construction projects are published at 40 CFR 745, Subpart L (Lead-Based Paint Activities). These regulations are intended to protect children under the age of 6, and apply to projects involving lead based paint "hazard abatement" in residential housing or child-occupied buildings where lead based paint hazards have been identified, and where children under the age of 6 live or visit frequently for fairly long periods of time.

Much of the building construction work performed at Army installations does not fall into this category. Unfortunately, the applicability of EPA's lead based paint regulations (40 CFR 745, Subpart L) is not always properly evaluated, and often the requirements of this standard are incorrectly and unnecessarily applied to building construction activities. Some of the costly implications associated with improper application of 40 CFR 745, Subpart L to building construction include:

a. Hiring over-qualified and hard-to-find contractors. The training that contractors have to attend in order to be "qualified" under 40 CFR 745, Subpart L, is very rigorous and the technical requirements of the training focus solely on lead hazard abatement procedures. This specific knowledge is not required when performing normal construction work that may impact lead or lead based paint. (*NOTE* Compliance with OSHA (29 CFR 1926.62) is not dependent on successful completion of EPA training in 40 CFR 745, Subpart L)

b. Implementing strict technical requirements of the standard. The EPA standard is very specific about dust control and clearance sampling following the lead hazard abatement process. Dust control and clearance sampling, as specified in 40 CFR 745, Subpart L, are proper and make sense for buildings where true lead based paint hazard abatement is being performed in order to leave residential housing and child-occupied facilities clean and safe enough for children under age 6. These requirements are not necessary for simple construction work that may impact lead or lead based paint.

Some states have developed their own lead based paint regulations that are more conservative than EPA 40 CFR 745, Subpart L. Application of state-specific lead based paint regulations to construction projects that impact lead based paint should be considered and their applicability evaluated. Such regulations vary from state to state, but usually target a specific lead based paint "hazard" for a very specific population (e.g. deteriorated lead based paint in public buildings).

Apply what you know during project planning and design.

Project-specific evaluation and application of the appropriate "lead" and "lead based paint" regulations during the planning and design stages of a building construction project is the best way to avoid unexpected project delays and expenses. It is important to have qualified industrial hygiene staff (or other staff with working knowledge of OSHA and EPA regulations related to lead and lead based paint) review construction project objectives to determine if "lead" or "lead based paint" issues might impact the project, or, that abatement of identified lead based paint hazards for protection of children under age 6 is the project objective.

There are Unified Facilities Guide Specifications (UFGS) available that can be edited by qualified personnel to meet project-specific "lead" or "lead based paint" needs and to assure compliance with the applicable OSHA, EPA and state-specific regulations. The pertinent guide specifications are UFGS 13282N - LEAD IN CONSTRUCTION and UFGS 13281A - LEAD BASED PAINT HAZARD ABATEMENT, TARGET HOUSING & CHILD OCCUPIED FACILITIES. UFGS 13282N guides the editor to focus on compliance with OSHA's lead in construction standard, and allows the designer to deal with high profile public health lead and lead based paint issues on construction projects. UFGS 13281A guides the editor to focus on compliance with EPA's Lead Based Paint Regulations, and is intended to be used when lead based paint "hazard abatement" in residential housing or child-occupied facilities is a requirement of the project.

Don't throw valuable building materials in the landfill! New guidance for salvaging is here

Army installations are required by the Department of Defense Measure of Merit (MoM) to reduce non-hazardous solid waste by 40 percent. The construction and demolition (C&D) component is 67 percent of the Army's solid waste Army wide, although C&D debris is more than 80 percent of some installations' solid waste stream. Therefore, reducing the C&D debris burden is critical to achieving the DoD MoM.

A newly published Public Works Technical Bulletin (PWTB) provides Army installations and Corps of Engineers districts with procedures, information and resources that will enable them to plan and manage building removal projects by applying alternative strategies to conventional building demolition and landfilling. The materials that result from construction, demolition or deconstruction, and remodeling have many potential applications. Depending on the condition and types of materials, many of these materials can be donated or sold for reuse. Other materials may be recycled into new products. These materials also may be used as feedstock for new materials instead of using virgin sources. PWTB 200-1-26, "Market Valuation of Demolition Salvage Materials" will serve as a reference for those responsible for reducing C&D debris burdens.

Public Works personnel and Corps project managers must be familiar enough with the used materials and recycling markets to establish reasonable debris diversion requirements and to evaluate C&D Waste Management Plans developed by building removal contractors. This PWTB can help installations achieve diversion goals by identifying market sources for reusable and recyclable materials generated from construction and/or demolition projects.

The new PWTB describes the most commonly salvaged, reused and recycled construction materials and demolition waste, end uses for these materials, approximate market values for salvaged and recycled materials, options for marketing materials, and resources for developing local market data.

PWTB 200-1-26 is posted on the TECHINFO Web site at http://www.hnd.usace.army.mil/techinfo/CPW/pwtb.htm. Malcolm McLeod at HQUSACE Environmental Division was the technical proponent for this work. For more information, please contact Stephen Cosper at the Construction Engineering Research Laboratory (CERL), 217-373-5569, Stephen.D.Cosper@erdc.usace.army.mil. PWD

Plumbing fixtures in a used building material store.

Lumber from a deconstructed warehouse is bundled and banded to be sold at a used building material retail business.

(continued from previous page)

Conclusions

OSHA's Lead in Construction standard has widespread application to the building construction industry, especially when construction, remodeling or demolition activities impact lead based paint. The standard is fairly flexible with regard to contractor qualifications and project technical requirements. EPA's regulations (and state regulations where they exist) concerning "abatement" of lead based paint hazards are very strict regarding contractor qualifications and training, and project technical requirements. To avoid turning what otherwise would be a normal construction project, which would only fall under OSHA's Lead in Construction standard, into an EPA-regulated lead based paint hazard abatement project, it is important to have qualified design staff evaluate project objectives and determine the pertinent regulations to be followed. Proper project planning and design will help to deliver quality, cost effective and on-time projects that comply with appropriate and applicable OSHA, EPA and state regulations.

POC is Mark Fisher, (402) 697-2587, e-mail: mark.j.fisher@nwd02.usace.army.mil.

Fisher is an industrial hygienist at the U.S. Army Corps of Engineers' Hazardous Toxic and Radioactive Waste Center of Expertise (HTRW CX). He is responsible for advising Army Corps district customers on application and implementation of lead regulations on construction projects. PWD

Estimating vegetative cover on training lands: New guidance published

by Michael Denight

The Corps of Engineers has issued a new Public Works Technical Bulletin (PWTB) that describes a method to estimate vegetative cover on training lands using digital photographs and commercially available imagery analysis software. PWTB 200-1-37, "Method to Estimate Vegetative Cover on Army Training Lands," is available on the TECHINFO Web site, http://www.hnd.usace.army.mil/techinfo/CPW/pwtb.htm.

Installation land managers must inventory and monitor vegetative cover to estimate erosion potential and ecological health of training lands. Ground cover assessment is a necessary component of land management models since this is a primary indicator of a stable and sustainable soil base needed for protection from soil erosion.

The Army uses vegetative cover surveys to monitor land condition; however, methods for determining vegetative cover are not universal and vary among installations. These methods can be so labor-intensive and time-consuming that repeated estimates per plot during the year become unrealistic. Installations need quantitative, accurate and inexpensive techniques that do not require extensive technical skills to estimate ground cover and vegetative damage on training lands.

The U.S. Army Engineer Research and Development Center (ERDC) analyzed digital photographs taken randomly to document vegetative cover and compared the results with three other common methods: visual ground cover estimates, GIS vegetative layer analysis and basal cover estimates using the point-intercept method.

The vegetative cover analysis method using digital photography is less labor-intensive than the point-intercept method, while providing a temporal record of ground cover conditions. Results from the project show that imagery analysis is as accurate as the other three common methods currently used by the Army. The collection and analysis of the photographs took less time than the point-intercept method and the results were not significantly different. The method also allows for the standardization of ground cover estimates among sites, something that cannot be accomplished when using gross visual estimates.

Based on the results from this project, analysis of digital photographs using image analysis software is an accurate, cost-effective way to estimate vegetative and basal cover. The method is best suited for basal cover estimates later in the growing season. Photographic analysis can easily determine the amount of vascular growth in an area, especially when the plants are in the latter part of the growing season.

Standardized method of estimating vegetation makes comparisons possible.

For more information about this project, please contact Michael Denight at ERDC's Construction Engineering Research Laboratory (CERL), 800-872-2375, ext. 6749, e-mail: Michael.L.Denight@erdc.usace.army.mil.

Denight is an environmental biologist in the Land and Heritage Conservation Branch, ERDC-CERL, Champaign, Ill. PWD

IMA announces Fire & Emergency Services Award Winners

The Army's top fire departments and fire fighters for 2005 are announced by the Installation Management Agency. Here are the Army winners:

Small Fire Department of the Year
Winner: *Fort Gordon Fire & Emergency Services Department, Georgia*
Runner-Up: *Fort Riley Fire & Emergency Services Department, Kansas*

Large Fire Department of the Year
Winner: *Fort Bliss Fire & Emergency Services Department, Texas* **NOTE: This is the second year in a row that Fort Bliss has won this award.**
Runner-Up: *Fort Drum Fire & Emergency Services Department, New York*

Fire Prevention Program of the Year
Winner: *Fort Lewis Fire & Emergency Services Department, Washington*
Runner-Up: *Fort Drum Fire & Emergency Services* Department, New York

Military Fire Fighter of the Year
Winner: *Sergeant Scott P. Hankins, Fort Lewis Fire and Emergency Services, Washington*
Runner-Up: *Sergeant Stephanie A. Slater, Fort Hood Fire and Emergency Services, Texas*

Civilian Fire Fighter of the Year
Winner: *Fire Fighter Aaron Z. Hunter, Fort Leonard Wood Fire and Emergency Services, Missouri*
Runner-Up: *Fire Fighter Ronald F. Harness, Fort Knox Fire and Emergency Services, Kentucky*
Special Recognition (posthumous): *Fire Fighter Chad E. Wessels, Fort Hood Fire and Emergency Services, Texas*

Military Fire Officer of the Year
Winner: *Staff Sergeant Chylciale Washington, Fort Hood Fire and Emergency Services, Texas*
Runner-Up: *None*

Civilian Fire Officer of the Year
Winner: *Assistant Fire Chief Christopher McGuire, Fort Bliss Fire & Emergency Services, Texas*
Runner-Up: *Assistant Fire Chief Gert Fuchs, USAG Hohenfels, Germany*

Heroism Award (Team)
Winner: *Fire Captain William Donahue, Firefighter Jason Brown, Firefighter William Chyzik, Firefighter Paul Wind, Fort Monmouth Fire & Emergency Services, New Jersey*
Runner-Up: *Assistant Fire Chief Jay D. Skaggs, Assistant Fire Chief Donald W. Hansen, Fire Captain Jeffrey J. Gassmann, Fire Captain Santino Maestas, Fire Lieutenant Kenneth D. Skaggs, Fire Lieutenant Christian A. Howell, Firefighter Robert E. Allen, Firefighter Daniel D. Doyle, Firefighter Jason A. Picklesimer, Firefighter Brian Valdez, Firefighter James T. Herken, Firefighter Richard T. Baggett, Fort Leavenworth Fire & Emergency Services, Kansas*

Congratulations to all! Winners will be recognized at the Army Awards Luncheon scheduled for Sept. 13 during the annual DoD F&ES Training Conference, Dallas, Texas.

POC is Charles Butler, HQ IMA, (703) 602-4641, e-mail: charles.butler@hqda.army.mil PWD

Landmark construction project debuts in Korea

by Joe Campbell

K-16 AIR BASE, South Korea – Quality of life for U.S. Forces Korea Soldiers took another giant step forward with the groundbreaking for unaccompanied officers' and senior non-commissioned officers' quarters at K-16 Air Base Dec. 9, 2005.

The "Build to Lease" $26 million, 144-unit project is the first of its kind for USFK and will be constructed at virtually no cost to the U.S Army. It is scheduled to be completed July 2007.

"This facility will be constructed, owned and operated by the private sector for the exclusive use of U.S. military personnel authorized to reside at K-16," said Build to Lease Program Manager Richard Byron, U.S. Army Corps of Engineers Far East District.

The U.S. Army will lease the housing project on a pay-as-you-go basis for up to 15 years, renewable for up to another 15 years. The annual lease cost, approximately $3.5 million annually, will represent a 40 percent savings over off-post housing at the full overseas housing allowance entitlements, Byron said.

"This project is one of the cornerstones of the master plan to make this installation (K-16) both enduring and a community of excellence for our warfighters," said Col. Ronald C. Stephens, Area II Support Activity commander and master of ceremonies for the event. "It is also a tangible symbol of the resolve and cooperation that continues to define the Republic of Korea – United States Alliance."

SEOHEE Construction began work at the project site in November 2005 following a lease signing between USFK and SB Sungnam, a joint venture between Baum Architects and SEOHEE and financed by Shinhan Bank.

"We strongly feel the protective presence of USFK in the Republic of Korea, and we owe much gratitude to America, specifically to the U.S. forces for maintaining security on this peninsula," said Bong Kwan-lee, chairman, SEOHEE Construction.

Gen. Leon J. LaPorte, (far right), commander, United Nations Command, Combined Forces Command, United States Forces Korea, and members of the official party break ground for the first Build to Lease project on the Korean peninsula. (Photo by Kim Chong-yun)

Gen. Leon J. LaPorte, commander, United Nations Command, Combined Forces Command, U.S. Forces Korea, praised the combined team effort leading up to the landmark groundbreaking and spoke of its positive impact for USFK personnel.

"Today is very significant because it marks the first of many new and exciting developments supporting our ongoing transformation plan. In the next three to five years we will break ground for a number of new projects to provide an improved quality of life for our service members," LaPorte said.

This approach to providing quarters for USFK personnel has three key benefits, LaPorte said.

"First, it has the potential to save both the U.S. and ROK governments up to $1 million annually by moving people from local housing to on-post housing; second, it provides a significant boost to our service members' quality of life; and third and most importantly, it will improve our readiness by shortening the response time of key personnel who are now housed at great distances from their work places," LaPorte said.

"I want to thank our Korean partners in the government ministries and business sectors for their assistance and the Korean government for its cooperation with this venture. Without that support we would not be here today. I also want to personally thank everyone who has committed to this project, the design engineers, SB Sungnam and Shinhan Bank."

The Soldiers who will be residing in the new quarters will have separate living areas, private baths and multi-purpose rooms available.

"This greatly enhances the quality of life for the Soldiers at K-16, a project long time coming, but well worth the wait," said Command Sgt. Maj. Kevin N. Witt, Area II Support Activity Command Sergeant Major.

Joe Campbell is a public affairs specialist working in the Far East District, U.S. Army Corps of Engineers. PWD

Studying engineering process can lead to best work, lowest cost

by Debra Valine

At the Engineering and Support Center, Huntsville, the Corps of Engineers uses the value engineering process to improve the quality and value of projects. A demolition project at Fort Hamilton, N.Y., saved the Installation Management Agency (IMA) $2.1 million. Another project to upgrade a storage area road at the Pueblo, Colo., Chemical Depot used a geotechnical investigation to optimize the design for the road upgrade. And a third project improved the function and quality of a non-standard military operations in urbanized terrain (MOUT) site at Fort Irwin, Calif.

Value engineering is a management tool that can be used alone or with other management techniques and methodologies. The complementary relationship between value engineering and other management techniques increases the likelihood that overall management objectives are achieved.

"The thing that makes it different from other analyses is that it uses a creative team approach and analyzes the function of the item or method or whatever you are looking at," said Gina Elliott, the Huntsville Center's value engineering officer.

"In today's environment of tight budgets, short schedules and competition, value management should be important to you," Elliott said. "Performing value management/value engineering efforts can allow you to 'team' with your customer, optimize your project and reduce cost. The value methodology used in performing value management/value engineering efforts is a proven, systematic approach to getting the best value project."

Fort Hamilton, N.Y.

The Facilities Reduction Program saved $2.1 million on the Fort Hamilton, N.Y., deconstruct project.

"Fort Hamilton had requested $3.3 million to do what they considered to be fairly standard demolition at Fort Hamilton," said Valerie Clinkenbeard, the chairperson for developing the acquisition plan. "IMA thought the original cost estimate was totally out of line, so they asked Huntsville Center to do a value engineering study using in-house resources and contractor support. Our study concluded that if you incorporated some of our recommendations that this project could be done for approximately $1.2 million."

Because Fort Hamilton had already received a bid from a small business that was double what the study recommended, officials there said the study was ridiculous. However, using that project as a hypothetical scenario for acquisition planning purposes, Clinkenbeard's team was able to prove to Fort Hamilton and IMA that the value engineering approach worked.

"We received 19 proposals for the job," she said. "One was determined not to be qualified, so that left us with 18 proposals. We ended up with an average cost — determined by DCAA and our cost evaluation people — which was in line with the value engineering study we had prepared. Out of the 18 proposals, not even one approached the cost provided to Fort Hamilton by the small business."

The Army has used construction firms for deconstruction, which amounts to reverse construction, Clinkenbeard explained. If a company that specializes in deconstruction is used, they can re-use 80 percent of the material. They can do the job for about half of what Army traditionally paid for the same job.

Pueblo, Colo.

When planning for the Storage Area Road Upgrade Project at the Pueblo Chemical Depot in Colorado, the value engineering study proposed a cost-effective way to verify the existing conditions, according to Art Dohrman, the project manager. The value engineering team members looked at the in-house design, which was conservative and provided no geotechnical data. The value engineering study proposed performing a geotechnical investigation, then optimizing the design.

"The geotechnical investigation gave us more confidence that the design would work," Dohrman said. "We initially did a visual inspection of the road. During the value engineering study, it came out that we probably should verify what was there. Lynn Helms in Geotechnical Branch knew people at ERDC and got them lined up to go do some nondestructive testing. Those tests verified that conditions were what we thought they were — our assumptions were correct for the project."

The geotechnical investigation verified the underlying base was in consistent good shape throughout, but the top layer was coming up in pieces. We proposed that they replace the top layer with two inches of asphalt, Dohrman said.

Fort Irwin, Calif.

The Range and Training Land Program used value engineering when planning for a non-standard MOUT at Fort Irwin, Calif. Of 10 value engineering proposals received, five were at least partially implemented. These were value-added proposals — no cost savings, but improved function and quality. "The value engineering effort allowed the Range Design Team to look at the project in a different light, instead of looking at it from a compliance viewpoint. This allowed us to go beyond ensuring a correct design to proposing a better design," Sheron Belcher.

"The value engineering process, while synchronized with mandated training requirements and standards, allows the Corps of Engineers to provide our Soldiers with the highest quality training facilities at the most feasible cost," said Mark Fleming, program manager, Ranges and Training Land Program. "As tax payers, this integrated process adds value."

"I want the VE effort to be helpful to the project managers wherever help is needed – quality, sustainability, saving time or money, etc.," Elliott said. I want to target the areas that need optimization, not just do it for the sake of doing it."

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

PWD

Kansas City District ramping up for military construction growth

by Diana McCoy

In anticipation of a military construction spike in its workload to accommodate global repositioning and other Army-wide efforts, the Kansas City District, U.S. Army Corps of Engineers, is repositioning itself throughout military bases within its boundaries to meet the needs of the nation.

Construction is dotting the district map at military installations such as Fort Riley, Fort Leavenworth and McConnell Air Force Base in Kansas, and Fort Leonard Wood and Whiteman Air Force Base in Missouri. This workload is expected to significantly affect the district.

"The district will have more than $200 million added to the 2006 budget over last year," said Bill Waugh, chief of Military Programs in Kansas City. "The military program budget was $290.1 million in 2005."

He explained the construction growth occurring everywhere is credited to modularity, Global Repositioning and the Base Realignment and Closure Commission; the district could be affected for the next five years (the length of the BRAC legislation).

"Modularity has to do with the way Army units are structured, and if structures change, the result is people get moved somewhere else," said Col. Michael Rossi, district engineer. "With BRAC, if they close one base, they have to take those people and move them to another base, and it's the same thing with Global Repositioning."

New Personnel

"One thing we do know is we've got more work coming, and we're not getting substantially bigger," Rossi said. "Something's gotta give."

During an open forum in October 2005 in which the district engineer gave a "state of the union address" and took questions from district employees, Rossi briefly mentioned part of his strategy, introducing his "80 by 180" initiative.

"We want to get the right people on the bus," Rossi said, "and our goal is to hire 80 new people by the 180th day of the year. Although we will add staff, we can't solve the challenge by just adding more people."

Barracks being constructed at Fort Riley, Kan., will support the 10,000 Soldiers expected to arrive by the year 2011. The increase of Soldiers is a result of the BRAC closing military installations in Germany and moving the1st Infantry Division headquarters to Fort Riley. (Photo courtesy John Schreiner)

Rossi explained with the extra work and virtually the same number of personnel to accomplish the mission, the district's current processes would have to change.

"We have to be more efficient, and we have to be faster in order to handle the workload," Rossi said.

Regionalization

Rossi mentioned the district is looking at making the acquisition strategies more regional as part of the solution and suggested the district join its counterparts by sharing its workload.

"We might have to cross traditional boundaries by sharing design and procurements," Rossi said. "Such workload sharing is not unprecedented. We have great folks in Kansas City, and other districts give us their design work. For instance, we do design in New York and New Jersey, but that district handles all the construction."

Another part of the possible solution Rossi mentioned was grouping projects together and doing more design-build projects.

Prioritization

The third part of the district's strategy is focused on prioritization, as directed by HQDA/IMA.

An example is the construction taking place at Fort Riley, which is expected to double in size, going from 10,000 Soldiers at present to 20,000 by 2011.

"We're renovating some of the existing barracks which are left over from the World War II era," Waugh said. "We're also constructing re-locatable buildings which should be completed by January."

The re-locatable buildings will support those Soldiers already arriving, while permanent barracks are in the process of being renovated.

Timing also will have a large affect on the district. Because priorities continually change and the date the last Soldier arrives is unknown, long-term funding for the program is still uncertain.

With the construction spike expected to last the next five years, district leaders are certain Kansas City employees can handle the challenge ahead and help meet the needs of the nation.

Diana McCoy is a public affairs specialist assigned to the Kansas City District. PWD

Electrocution Advisory

The U.S. Army Combat Readiness Center has asked that the following information receive the widest dissemination. A local installation safety board recently finished its investigation of an electrocution accident and recommended publishing the results to warn installations of the danger of improper operations and maintenance of facilities no longer in use.

During the summer of 2004, an accidental fatal electrocution occurred at a Military Training Base. A service member leaned up against an old metal latrine building and was electrocuted. The insulation on the wiring inside the building switch box housing deteriorated causing the wire to be exposed. The wire came into contact with the metal switch box and created a short circuit. The metal conduit was connected to the metal building and this caused the building to become electrified. The connection between the grounding rod and the building's ground wire was corroded. The deteriorated wiring was hidden from view inside the metal conduit and would not have been discovered by a visual inspection. The electric service had not been properly maintained nor properly terminated. In the past six years, there have been four electrocutions due to improper facility O&M procedures.

Please review your procedures for properly maintaining electric service to facilities and properly terminating service when no longer in use.

Army regulations, guide specs and technical manuals, as identified below, discuss proper procedures for operating and maintaining electric service and the demolition of unused facilities. Existing standards, specifications and regulations specify the safe operation of utilities. Until the utility is disconnected, these requirements remain valid.

Once the decision is made that there is not a need for the utility, the installation should terminate the utility service to the unused facility and decide on the proper future disposition of the facility. Providing warnings and limiting access to buildings no longer in service is also advisable.

Proper electric grounding is defined in AR 420-49 paragraph 8-6 with additional guidance for electrical wiring in TM 5-683 Facilities Engineering, Electrical Interior Facilities. http://www.army.mil/usapa/eng/DR_pubs/dr_a/pdf/tm5_683.pdf

Abandonment of natural gas lines is defined in CFR 49 part 192.727. http://ecfr.gpoaccess.gov

The Unified Facilities Guide Spec on demolition, UFGS-02220, "Demolition" contains guidance on terminating utility services for facilities no longer in use. http://www.wbdg.org/ PWD

Low cost, no cost list of ACSIM energy reduction actions that all locations can incorporate into their activities

- Turn off lights every time the last person leaves a room regardless of when one intends to return
- Use after-hours set back (heating) and reset (cooling) temperature controls and recommended temperatures
- Activate energy sleep mode features on all desk top and laptop units (including monitors) to be activated after any 30 minutes of inactivity
- Turn off all general purpose office equipment, copiers, printing devices, FAXes, all-in-one devices, and similar equipment at the end of every business day. Computer monitors and peripheral devices such as speakers, scanners, and external drives, shall also be turned off when not in use.
- Use motion sensor controlled power strips for controlling personal electric resistance heaters and window a/c units.
- Change vending machine contracts to include a utility cost reimbursement clause to at least cover the annual cost of utilities provided.
- Remove light bulbs from vending machines.
- Set water heaters to no more than 120 degrees temperature. Install "booster" for kitchen areas rather than raise storage tanks to 180 degrees.
- Add insulation blankets to water heaters
- Close doors to conditioned space rather than permitting "propped open" doors.
- Install timers on outside building lighting and signs that stay illuminated all night (use motion sensors if a security or safety issue).
- Install occupancy sensors in conference rooms, break rooms, bathrooms, copy rooms, common area and hallways.
- Reduce illumination in over lit areas (hallways and office areas) by disconnecting and removing fixtures.
- Replace T-12 fluorescent lamp and ballast with T-8 fixtures and electronic ballast. Only install one ballast per fixture (not two).
- Review rate structure for electric/gas service for other rate schedules eligibility and review billings for accuracy.

POC is Don Juhasz, chief, Utilities and Energy, Office of the Assistant Chief of Staff for Installation Management, (703) 601-0374; e-mail: don.juhasz@hqda.army.mil PWD

Improving quality of life
IMA director stresses support during Wiesbaden visit

by Kelly Deichert

> *"If you want to keep forces in the Army, then we need to support families," he said. "If we treat them badly, then they walk."*

WIESBADEN, Germany — Getting feedback from customers and using it to improve their quality of life is an essential part of managing a successful garrison, said the Installation Management Agency director.

"What I need is for individual garrison commanders 'to connect the dots' in such a way as to meet customer demand," said Maj. Gen. Michael D. Rochelle during a visit to Wiesbaden Army Airfield Dec. 13, 2005.

Staffing and resources are an issue. Since the military community has changed over the years, the services need to change too, Rochelle said.

Col. Herman "Tracy" Williams III, commander of U.S. Army Garrison Hessen, said the garrison is focused and active, despite the possibility of installation closures.

"If you want to keep forces in the Army, then we need to support families," he said. "If we treat them badly, then they walk."

The Army Family Action Plan is an important method of collecting customer feedback, the general said. Community members complete comment cards, and conference delegates develop resolutions. Managers and directors can plot issues to create a mosaic and identify new demands.

Rochelle asked many questions about the Interactive Customer Evaluation service and wanted to hear more about the 96 percent satisfaction rate across USAG Hessen.

Customers make comments online or through an evaluation card. Managers have a responsibility to respond and change accordingly, Williams said. This leads to more positive responses.

Maj. Gen. Michael D. Rochelle, IMA director (left), asks Markus Schirmer, chief architect and construction supervisor, about projects on Wiesbaden Army Airfield. (Photo by Kelly Deichert)

"If I see something that appears to be a pattern, we can zero in on it. It's something we need to improve," he said.

One of the challenges Williams faces is balancing the "haves" and the "have nots," he said. Customers must have the same high quality of life across USAG Hessen, despite the possibility of installation closures, he said.

Since Rochelle is a former recruiter, he said he knows that families' and Soldiers' relationships with the military can be fragile.

"We recruit Soldiers, but retain families," he said. The best way to maintain a high quality of living is to adapt to the situation and create innovative solutions.

"We want to save money by working smart," the general said. "We spend every dollar we need to spend, but not one dollar more."

Senior leaders must predict the future, which helps garrisons operate during obstacles, especially if money is no longer available, he said.

The best and brightest ideas are from the garrison level, he added.

"We have to make some hard choices, or someone else will make them for us," he said. "I don't want someone from outside dictating to us what tough choices we should make."

The general's visit concluded with stops at the new fitness center and child development center at Wiesbaden Army Airfield and Army Community Service in Hainerberg Housing.

Kelly Deichert is a public affairs specialist with the U.S. Army Garrison Wiesbaden Public Affairs Office

PWD

Welcome to the ICE Age!

Interactive Customer Evaluation System provides avenue for instant feedback

by Yi, U-Nan

How many times have you either been extremely delighted or terribly disappointed about the kind of service you received? And, during those times of either joy or frustration, I'll bet you wished that you could speak directly to the manager to either deliver a well-deserved compliment — or to give the manager a good piece of your mind. Well, you can do just that! Military personnel, civilian employees and family members on military installations throughout the world have the opportunity at their fingertips to let managers know how well their staffs are providing goods or services – through the Interactive Customer Evaluation, or ICE, System.

ICE is the Department of Defense's online customer feedback network. This easy-to-use system gives customers the chance to use electronic comment cards to rate – and to voice their opinions – on the services offered on installations.

Access to ICE

ICE is a very simple – yet powerful – tool. A customer can easily access ICE at dedicated computer terminals. However, a dedicated terminal is not really needed. Anyone can access ICE on a personal computer by visiting its Web site at http://ice.disa.mil. Once at the ICE main page, simply point and click. It is that simple! A customer, coming into the main ICE page, can effortlessly navigate to specific providers on active ICE sites.

Customer Relationship Management (CRM)

Zig Ziglar, a master at inspirational and motivational presentations, said, "The complaining customer represents a huge opportunity for more business." ICE, as a principal component to CRM, lives up to the expectations in Ziglar's quotation.

Basically, CRM is a strategy used to learn more about customers' needs and behaviors in order to develop stronger relationships with them. However, CRM is also a process that will bring together lots of pieces of information about customer expectations, interests, needs and wants. Essentially, for CRM to be effective, a two-way interactive process has to exist: A medium for Installation Management Agency (IMA) organizations to listen to the voice of the customer and, on the flip side, a mechanism for service providers to respond to the wants and needs of key stakeholders and customers.

> *"Your most unhappy customers are your greatest source of learning."*
> — Bill Gates.

IMA's Strategic Goal 3 is for the agency to: "Be a streamlined, agile organization that is customer-focused and results-driven in support of current and future missions." To meet this goal, Strategic Objective 3.4 states that IMA will: "Build relationships of trust and confidence through open communication with all customers and stakeholders." ICE is one of the primary tools that helps IMA build lasting relationships with customers and stakeholders.

The electronic customer evaluation cards are transmitted directly to responsible managers and appropriate command officials. Hence, ICE provides an excellent two-way feedback mechanism that permits customers to voice issues and concerns, as well as allowing managers the opportunity to take immediate actions to improve the delivery of goods and/or services. This interactive process gives IMA the ability to constantly listen to the voice of its customers, thereby permitting IMA to be agile in its ability to meet emerging customer requirements, demands and business needs.

Additionally, with ICE, there is absolutely no chance of a hard copy comment card getting lost in the process. To ensure that the system remains viable, a service provider manager will get in touch with a customer – that is, of course, if contact information (name, phone number and e-mail address) is provided on the comment card.

Communication Tool for Managers

ICE offers managers a user-friendly – and flexible – tool to market their products and services. For example, service provider managers can post their operating hours or special events on the ICE Web site. Links to other sites can also be placed on the ICE Web pages. Managers can also post "Frequently Asked Questions (FAQs)."

The Korea Region Office takes ICE comments very seriously, even sincere comments that are submitted anonymously. The ability to post FAQs allows managers a unique way to respond to anonymous comments – or questions – that surface with some regularity.

DoD has "hard-wired" six questions on the electronic card. Managers have the ability to add questions to the comment cards, thereby making them more specific to the actual services provided.

Army Performance Improvement Criteria (APIC) and ICE

Malcolm Baldrige Criteria/APIC consists of a set of criteria that is based on a factual compilation of management practices shared by the world's top performing organizations. The criteria are broken out in seven categories – Leadership, Strategic Planning, Customer and Market Focus; Measurement, Analysis and Knowledge Management; Human Resource Focus, Process Management and Business Results. When applied, the criteria help senior leadership examine all aspects of a garrison to identify strengths and opportunities for improvement.

ICE can aid the garrisons in strengthening their APIC posture. As a tool, ICE is linked to the seven APIC categories. Hence, fully deploying and implementing ICE; and using results derived from ICE to improve processes and procedures, helps a garrison to mature as an organization. ICE statistics can also be used in the Performance Management Review process. ➤

Meet Dee Dee; she'll help you fill out that DD Form 1391

by Andrea Takash

A vivacious blue tour guide named Dee Dee greets people as they enter the new Department of Defense Form 1391 Tutorial, which guides users through the procedures involved with DD1391 forms.

In response to customers' needs and requests, the U.S. Army Corps of Engineers, Engineering and Support Center, Huntsville, created a fun and informative tutorial that covers all topics normally presented in the 32-hour DD1391 Processor System course.

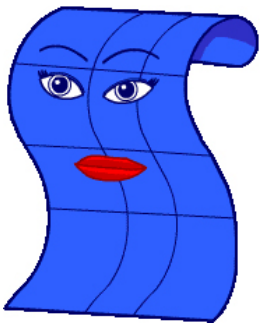
DoD uses the DD Form 1391 to submit military construction requests and justifications to Congress. The Programming Administration and Execution system, better known as PAX, is the only system that provides computer assistance to all engineers throughout the Army in support of the DD Form 1391 review process. More than 900 activities worldwide access the PAX system, which is available 24 hours a day and accessible via the Internet.

"The PAX team conducts workshops across the world to teach users the ins and outs of electronically preparing the DD1391 form. For many reasons, whether it be budgetary restraints or schedule conflicts, it isn't always feasible for people to attend an onsite workshop," said Betty Fletcher, program lead for the tutorial. "Based on feedback, we made the tutorial flexible, accessible, self-paced and directly relevant to tasks inherent in the military construction review process."

The development of the tutorial was a full team effort that involved the government PAX support team and two contractors, Management Technology Associates, Inc. and Computer Sciences Cooperation.

MTA developed the tutorial with the use of RoboHelp software. The design of the tutorial matches the layout of the DD1391 module. This allows the user to actually get the feel of completing a DD1391 form.

"Before diving into the tutorial, users should view the tutorial overview to gain an understanding of how the tutorial works," Fletcher said. "They should follow the tutorial as sequenced because the modules are numbered to logically take them through the process for preparing and editing the entire form and supporting documentation, as well as using the functions and special features that are available in the DD1391 module."



The tutorial consists of 52 colorful and interactive modules and four links that access reference materials related to the DD1391 form. A navigation bar is available to users throughout the lesson to facilitate movement.

"The PAX team is very customer oriented. We are always looking at better ways for our customers to do their work more effectively as they support our Soldiers," Fletcher said. "Our goal is to provide the program development, enhancement, training and help desk support needed to ensure the PAX system can give our customers what they want and need. Dee Dee and the tutorial are innovative ways of meeting one aspect of our goal."

To access the tutorial, go to www.hnd.usace.army.mil/paxspt. The tutorial icon is on the bottom right side of the screen.

Andrea Takash is a public affairs specialist at the Engineering and Support Center in Huntsville, Ala. PWD

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Lean Six Sigma and ICE

ICE is definitely a tool that can be applied to CRM. However, did you know that ICE can also be instrumental in Lean Six Sigma applications? From a macro perspective, Lean Six Sigma focuses on ways to reduce "defects" – procedures or products that add no value to customer expectations of the final output – either through improving the process or reducing variation in the delivery of a good or service. Customer comments can be an indicator that a service or product is not meeting expectations. Using the DMAIC – Define, Measure, Analyze, Improvement, Control – roadmap on customer comments can, perhaps, help the organization to find ways to either improve a method or procedure, or to even deliver a product or service with greater consistency, thereby reducing "defects."

Summary

ICE is the Department of Defense's customer feedback tool; it can be accessed by visiting its Web site at http://ice.disa.mil. ICE is effective; it is easy to use. This two-way, interactive Web tool promotes CRM. As such, ICE is consistent with IMA Strategic Goal 3, building an organization that is customer-focused. The system can be used by customers to rate and comment on the goods and services they receive. On the flip side of the coin, service provider managers can use ICE to market goods and services, to announce special events and operating hours, and to post FAQs. ICE is linked to APIC, since it can be – and has been – used to make worthwhile improvements in the way an organization conducts its business, customer satisfaction, and in quality of life and well-being efforts. That being said, ICE comments can be an indicator that a procedure or product can benefit from Lean Six Sigma applications to either streamline the process or reduce the amount of variation.

ICE has to be used to be a viable tool to help organizations realize their strengths, as well as to discover opportunities for improvement. Therefore, if you have something to say about a product or service – either a "pat on the back" or pointing out an opportunity for improvement, then submit an ICE comment today.

Yi, U-Nan is a management analyst at the Korea Region Office (KORO), Plans Division, Management Integration Branch. She is the Korea Region Administrator for ICE. PWD

Fort Carson implements sustainable principles in barracks renovation project

by Jim Schloss, Directorate of Public Works

Fort Carson, Colo., faces a monumental challenge in the next few years with the restationing of new units under base realignment and closure actions slated – where will all the new Soldiers and families assigned at Fort Carson live? New construction is planned and under way to address that question, however, older facilities are also being looked at for renovation potential.

The installation was notified in August 2004 that it would gain 1,700 single Soldiers from the Second Brigade Combat Team, Second Infantry Division, after their deployment to Iraq. Finding adequate barracks space in a timely manner for the additional troops was critical.

In support of the Army's "1 for 1" demolition requirement, the Fort Carson master plan had called for demolishing 14 rolling pin barracks, constructed in the late 1960s and early 1970s with open squad bays and gang latrines. The barracks were slated for replacement with new barracks under the military construction program over a five-to-10 year period. With the 2-2's imminent arrival, Fort Carson had to change this plan.

Continuing to house Soldiers in the existing outdated rolling pin barracks did not meet the Army one-plus-one standard (one Soldier per bedroom in a module with two bedrooms and a common kitchenette and latrine) and the barracks didn't meet current fire protection and force protection standards.

A team of architects, engineers and technicians from Fort Carson's Directorate of Public Works brainstormed alternatives in renovating the rolling pin barracks. With all alternatives considered, existing private vehicle parking would be retained since it met current force protection requirements. Also, the existing site utilities would be retained.

An economic analysis showed that the most cost effective solution was to gut and rebuild the rolling pins barracks and add an exterior walkway system. The DPW began the working drawings in November 2004. Design reviews were conducted with Soldiers from the rear detachment of the 2-2, Physical Security, Fire Department and other Fort Carson directorates.

The working drawings were completed in January 2005 and contract negotiations with an 8A contractor, JKT of Seattle, Wash., and Denver, Colo., (a Jamestown S'Klallam Tribaaly - Owned Enterprise) teamed with Torix Construction of Colorado Springs, Colo. Alternative HVAC systems, details and finishes were evaluated and a contract was signed at a cost of $5.3 M per building, less than half the cost of new construction. The total savings by reconfiguring the existing buildings, instead of demolishing them and constructing new buildings was $107M.

The performance time was established at seven months per building and 18 months total time for the 14 rolling pins. Construction began in April 2005 and the first rolling pin was turned over to Fort Carson in November 2005.

Before and after photos of the rolling pin barracks renovation project. Photos taken by Larry Lakin, Fort Carson Directorate of Public Works

Principal design features of the renovated barracks:

- Retained as much existing floor area as possible for living space, placing circulation on the exterior of the building.
- Constructed a standardized exterior window wall unit, with windows and force protection features for the majority of the rooms.
- Constructed all new interior partitions made of metal stud and drywall framing, with sound insulation at each bedroom and between units for privacy and climate control.
- Applied a sprayed-on texture finish to the underside of the existing concrete floor and roof slabs for the finished ceilings for enhanced appearance and sound insulation.

Reimbursement for damages to unaccompanied personnel housing facilities and furnishings

Over the past few years the issue of collecting reimbursement for damages caused by Soldiers, pets or family members to government facilities or furnishings has been elevated to the Headquarters, Department of the Army level. There are times when the most prudent thing to do is to require Soldiers to reimburse the government for damages to government facilities or furnishings caused by non fair wear and tear. To perform this leadership function, commanders must establish local processes as well as educate Soldiers on their responsibilities associated with residing in government-provided housing. To provide adequate information, commanders already have several guidelines and directives at their disposal.

First and foremost, 10 United States Code (USC), section 2775 authorizes individual Service Secretaries to collect for damages to Army Family Housing (AFH) and Unaccompanied Personnel Housing (UPH). Collection of these reimbursements will be credited to the Service's (e.g., Army) Operations and Maintenance (O&M) fund. Army guidelines, articulated in the document, "Secretary of the Army for Financial Management – Resource and Budget (SAFM-RB) Guidance: Sources of Funds for Army Use; Other Than Typical Army Appropriations" of March 2003, allow establishing separate installation reimbursable O&M accounts for both AFH and UPH damage reimbursement. Additionally, Army Regulation 210-50 provides additional amplification on the process by which garrison commanders are to abide by when collecting for these damages.

There are several parts to this process whereby Army leaders throughout the chain of command are able to ensure that responsibilities at all levels, from the Soldier to the garrison commander, ensure the Army's interests were considered. Every Soldier is responsible for ensuring Army resources are used to the best extent possible. Ensuring all resources come to bear collectively is every Soldier's responsibility, thus Army leaders must hold Soldiers accountable when required. This will provide the continued sustainment and maintenance of the quality of life Soldiers come to expect in UPH.

Garrison commanders are encouraged to apply the guidelines and regulations identified herein, and through budget personnel, establish separate O&M reimbursable accounts for the purpose of collecting for these damages. Additionally, leaders are encouraged to educate Soldiers on their responsibilities and hold Soldiers accountable for their actions. The reimbursement for damages will provide the proper fund source to enable the Army's Flagship installations to better sustain and maintain the real property inventory. This will also enable Army programmers and Public Works personnel to program cyclic maintenance repairs as needed.

Applying all available resources will generate significantly higher degrees of facility quality condition, and more importantly will provide the future Army with quality installations from which to successfully accomplish the missions of the future. Soldiers' conduct today will have lasting impacts on the Army in the future. Through successful planning and programming, focusing assets where they are best utilized and fostering total responsibility will have a dramatic impact on the Army Team. Taking care of Soldiers is paramount to Army success. Army leaders must focus all available efforts and assets to ensure the facilities supporting the Quality of Life of today's Soldiers are sustained at the highest quality condition.

POC is Jerry Pederson, a program analyst with DAIM-FDH-U, OACSIM Army Housing Division, (703) 601-2487; e-mail: Gerald.pederson@hqda.army.mil. PWD

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- Routed utilities in the middle of the building in a utilidor, allowing for easy maintenance access and future utility runs.
- Constructed a pre-engineered steel rigid frame and exterior walkway system independent of the building to speed up construction time and not place any additional structural loads on the building.
- Used individual climate control for each one-plus-one. Individual air handling units are located above a suspended ceiling in the kitchen areas.
- Provided state-of-the art fire detection and fire suppression service throughout the building to increase safety.
- Provided individual telephone, internet and cable TV service capability to each Soldier's room to increase Soldier well being.
- Located a central laundry on the first floor with a mud room and lounge adjacent to the laundry.

The rolling pin project meets the Army's Sustainable Project Rating Tool, or SPiRiT, "bronze" standard for sustainability.

Before demolition work started, some items were identified for recycling: the mailboxes were taken out and later reinstalled in the renovated buildings, interior solid core doors were removed and donated to an Indian tribe in Arizona, copper piping and electrical wiring were removed and sent to recycling, and the interior concrete block walls were demolished and loaded into dumpsters and then sent to a concrete plant for reprocessing in the new concrete used in the new sidewalks. In all, 80 percent of demolished material (by weight) was recycled.

"The renovation of the barracks saves the Army money when compared against new construction while meeting several key SPiRiT criteria, most notably the reuse of buildings and associated infrastructure," said Lt. Col. Barrett Larwin, Fort Carson's director of public works. "Fort Carson's approach to the renovation of rolling pin style barracks can be used as a model for the Army to follow at other installations." PWD

Planning for the Future: Master Planning Class another success

JD Cubbage, a member of the MP instructor team, provides insight to students.

Army garrison commanders are facing a big challenge – managing extensive re-development of their communities due to extensive re-stationing actions. Portland, Ore., conducted a Property Master Planning Course Dec. 5-10, 2005. Portland is one of America's leading cities where planning has succeeded. This course provided a valuable opportunity to learn about the basic tenets of Master Planning and obtain skills needed to plan military installations comprehensively and holistically.

The course provides students a comprehensive overview of the Real Property Master Planning Process and essential planning considerations that must be included in comprehensive planning. This includes sustainability, environmental stewardship and critical infrastructure protection. Students were provided an overview of the process of Area Development Planning, Site Planning and defining real property requirements.

Gil Kelly shares successes in Portland planning.

Gil Kelly, the director of Planning for the City of Portland, visited the class to discuss planning in Portland – the recipe for success. Portland's success has been grounded upon long-term sound mixed use/land use planning framed around a sound vision for development for the next 40-50 years. This vision for development is a shared vision for the community that is understood throughout the community. The city uses the city plan as a tool to guide how near-term development should be approved and nurtured. It is a city that is walkable and sustainable and is a vibrant major metropolitan area that is growing smart.

Orenco Station provides great mixed-use development.

The class also conducted a field trip, where they rode the "light-rail' from the hotel out to a major planned community called Orenco Station a mixed-use community in the rapidly expanded area of Hillsboro just outside of Portland. Orenco Station has been designated by the Urban Land Institute as one of the "Great Planned Communities." Orenco Station offers cottages, town homes, row houses, condominiums, lofts, office and retail space bound together by a formal system of open spaces and parks. The community plan places an emphasis on walkability and the concept of connectedness. The designs promote and try to facilitate interaction rather than isolate pods.

Site planning exercise 1.

Another highlight of the class was the interactive site planning exercise where students were provided the opportunity to use these planning techniques to complete a basic area development site plan for a small stationing action.

Site planning exercise 2.

The students came away with a new perspective on master planning that is framed around long-term visionary planning and comprehensive holistic area development. They realized that planning is a process, that must be sustained and always evolving.

Please contact Beverly Carr, USACE Professional Development Training Support Center, Huntsville at (256) 895-7432, e-mail Beverly.carr@usace.army.mil for information or for registration for an upcoming class. PWD

New Advanced Master Plan Class kickoff July 2006

A new Advanced Master Planning class is scheduled for July 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 quality urban design solution that is sustainable and compatible to 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

Installation Status Report (ISR) Centralized Training Jan. 8-12, 2007, Atlanta, Ga.

The Office of the Assistant Chief of Staff for Installation Management (OACSIM) is sponsoring the 2006 Installation Status Report (ISR) Centralized Training. The goal is to train new ISR users and share ideas on how to use ISR tools and products more effectively to support installation management.

This training opportunity will be held Jan. 8-12, 2007, in Atlanta, Ga., at the Hilton Atlanta Hotel. It will be conducted concurrently with the Installation Management Institute (IMI), also being sponsored by the ACSIM.

This ISR training is being targeted for attendance by personnel from Continental U.S. regions. Separate training is being conducted for the Army National Guard and IMA overseas regions (Korea, Pacific, Europe) at their designated locations. This training is currently unfunded.

ISR training provides the fundamentals needed to successfully complete the 2007 ISR data collection. It also highlights the ISR software and process changes. Each course also focuses on using the system to aid in strategic planning. Training will be provided on all four ISR components:

- ISR Infrastructure (ISR-I)
- ISR Natural Infrastructure (ISR-NI) (pending approval)
- ISR Services (ISR-S)
- Services Based Costing (SBC)

In addition to ISR training this January training will be provided for both:

- Army Stationing and Installation Plan (ASIP)
- Real Property Planning and Analysis System (RPLANS)

The OACSIM will provide specific information regarding content and registration at a later date. If you have any questions, please contact the ISR Centralized Training Coordinator at (703) 377-0506, e-mail: kotch_joseph@bah.com. PWD

SWARWeb moving to Army Knowledge Online

by William F. Eng

There's a new way to access the SWARWeb. The Solid Waste Annual Reporting System, Web-based, commonly called SWARWeb, is a tool for tracking and reporting solid waste information on Department of Defense facilities. SWARWeb is intended to eliminate the need for installations to enter data into more than one system. It serves as a flexible data tracking and analysis tool at the installation level, as well as a reporting tool to provide data to higher levels.

Those here long enough to remember will recall back in 1998 when the Defense Environmental Security Corporate Information Management or DESCIM Program selected SWARs, which was then a PC-based system, for migration from the Navy to become the standard software for use by the military services.

The Army, having abandoned in 1997 the "Tech Data Report" and the voluminous "Red Book," an annual summary of each installation's facilities engineering operation and maintenance expenditure, eagerly adopted SWARs as the official solid waste and recycling database. The first few years saw marked growth in the number of installations using the software and reporting credible data that indicated the Army's progress toward achieving the DoD environmental measure of merit of 40 percent diversion of solid waste from landfills by 2005. And, in spite of the difficulties of program version control, data entry and exporting data files for e-mailing up through the major commands to the Office of the Assistant Chief of Staff for Installation Management (OACSIM), the Army was able to demonstrate notable levels of solid waste reduction and increased diversion.

Jumping ahead to 2003, when SWARs went on the World Wide Web and was renamed SWARWeb, many of the problems associated with the personal computer version went away. The number of Active Army installations using SWARWeb grew, and a few of the large Army Reserve installations also began reporting through SWARWeb; however, none of the other Services signed onto SWARs or SWARWeb. By the beginning of 2005, the EITM (Environmental Information Technology Management) Office, the successor to DESCIM, determined that it could no longer sustain SWARWeb, since it did not meet the criteria of being a DoD-wide system, and steps were begun to move it under Army management and place it behind Army Knowledge Online (AKO) Authentication.

Effective Jan. 3, SWARWeb became accessible via the Army Environmental Reporting Online (AERO) portal. Current users of SWARWeb are required to use their Army Knowledge Online (AKO) user name to access SWARWeb. See sidebar for step-by-step instructions. Current users are being notified by e-mail, however because e-mail addresses and installation points of contact change all the time, Directorate of Public Works management staff with responsibility for solid waste management or recycling operations need to ensure that whoever is assigned the duty to track and record solid waste and recycling data and to make the annual report is aware of this new way of accessing SWARWeb.

POC is William F. Eng, (703) 602-5827, e-mail: William.eng@us.army.mil.

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

INSTRUCTIONS FOR ACCESSING SWARWEB THROUGH AERO PORTAL

Step 1. Enter the following URL in your Web browser: https://aero.apgea.army.mil/

Step 2. Enter your Army Knowledge Online (AKO) username and password to access AERO

Step 3. After you have entered your AKO username and password, click on the SWARWeb link located under the ARMY Systems list on the left side of the screen.

Step 4. Click on the SWARWeb link located under the "SWARWeb Login" section. The first time you login to SWARWeb from AERO you will be taken to the SWARWeb External Application Login Screen.

Step 5. Enter your current SWARWeb username and password

Step 6. Click on the box next to "Remember My Login Information For This Application" - this will register your SWARWeb username and password for single sign on.

In the future you will only have to perform steps 1-3 to access SWARWeb.

PLEASE NOTE:

If you do not currently have an Army Knowledge Online account, you can request one.

- To request an AKO account use the following URL: https://www.us.army.mil.
- Click on the "Register for AKO" link.
- Department of the Army Civilians (DACs) can request an account directly.
- Non-DAC users will require a Department of the Army point of contact to sponsor their account — please contact your chain of command for a sponsor.

Once your AKO account has been created, please provide your AKO username to the USAEC Help Desk using the e-mail address below.

If you have any questions please contact the USAEC Helpdesk:
USAECHelpDesk@aec.apgea.army.mil

Commercial (410) 436-1244
DSN 584-1244

Installation Management Agency
2511 Jefferson Davis Highway
Arlington, Virginia 22202-3926

http://www.ima.army.mil