

Public Works DIGEST

Volume XXI, No.1,
January/February 2009

This Issue:
**Master Planning
and Construction**

Master Planning	3
Construction	14
Professional Development	28
Who's Who	34



Illustrative site plans like this one from Fort Stewart, Ga., are included in area development guides. Graphic by HDR/Colorado DataScapes. Page 8

U.S. ARMY INSTALLATION MANAGEMENT COMMAND

IMIGOM



Public Works DIGEST

Volume XXI, No. 1,
January/February 2009



U.S. Army Installation
Management Command
2511 Jefferson Davis Highway
Arlington, Virginia 22202-3926

Public Works Digest is an unofficial publication of the U.S. Army Installation Management Command, under AR 360-1, The Army Public Affairs Program. Method of reproduction: photo-offset; press run: 1,600; estimated readership: 40,000. Editorial views and opinions expressed are not necessarily those of the Department of the Army. Mention of specific vendors does not constitute endorsement by the Department of the Army or any element thereof.

Address mail to:

U.S. Army Installation Management
Command
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:
mary.b.thompson@usace.army.mil

Donald G. LaRocque

*Public Works Program Manager,
Installation Management Command*

Mary Beth Thompson

*Managing Editor
U.S. Army Corps of Engineers*

Layout:

*Corporate Visions, Inc.
Washington, DC*



Printed on recycled paper.

Master Planning



- 3 Master planning, *by Maj. Gen. John A. Macdonald*
- 4 Planning imperative: Create great installations today and tomorrow, *by Maj. Gen. Jeffrey J. Dorko*
- 5 Army Master Planning Portal – source for planning info, *by Jerry Zekert*
- 6 Importance of installation real property master plans, *by Gregory Brewer*
- 8 Area development guides help create places people want to be, *by Maureen Goodrich and Ed McConnell*
- 9 Changing the face of installation master planning, *by Gregory Brewer*
- 11 Army installation master planning taken to the next level, *by Linda Tuttle*
- 12 Mastering master planning in Germany, *by Rebecca Lippman*

Construction



- 14 USAG Humphreys continues \$12.9 billion transformation, *by Lori Yerdon*
- 15 \$52 million allocated for barracks at Fort Meade, *by Rona S. Hirsch*
- 17 Fort Leavenworth renovates oldest home in Kansas, *by Melissa Bower*
- 18 Innovative program trains Afghans to care for their new facilities, *by Brenda L. Beasley*
- 20 Building Information Modeling to benefit entire facility life cycle, *by Beth Brucker*
- 21 Fort McCoy builds IED-Defeat Complex to train Soldiers in real-world scenarios, *by Rob Schuette*

Environmental and Sustainability



- 22 Fort Leavenworth saves energy, money with electric cars, *by Becky Steed*
- 23 Fort Meade plans green design for DISA headquarters, *by Alan J. McCombs*
- 23 DISA's new headquarters, *by Rona S. Hirsch*
- 24 Bulletin describes floristic quality assessments, *by Sarah Nemeth and Bruce MacAllister*
- 25 Fort Stewart restores longleaf pine, wiregrass ecosystem, *by Broc Davis and Gary Hart*
- 26 Study to assess 30-year installation water issues, *by Elisabeth Jenick*
- 27 USAG Ansbach encourages energy audits to save energy, dollars, *by Ron Toland*

Professional Development



- 28 With a new year comes change, *by Lt. Gen. Robert L. Van Antwerp*
- 29 New Year's career resolutions – Taking care of No. 1, *by John Krajewski*
- 30 Make a difference in Afghanistan, *by Orrin M. Israel*
- 31 Master planning classes offered in 2009, *by Andrea Wohlfeld Kuhn*
- 32 Army master planning training starts another exciting year, *by Jerry Zekert*
- 32 Acquisition career field transition ordered, *by John W. Wehmanen and Michael Ostrom*
- 33 Planning Great Communities Army symposium scheduled, *by Jerry Zekert and Andrea Wohlfeld Kuhn*

Who's Who



- 34 Ward guides Public Works Transformation, *by Mary Beth Thompson*
- 35 Hulbert tackles Army's mold problems, *by Mary Beth Thompson*
- 36 Marin is director of Installation Services
- 37 Wilson returns to USACE Installation Support, *by Mary Beth Thompson*
- 38 Nerger is IMCOM's executive director
- 39 Army housing pros collect awards



Master planning

by Maj. Gen. John A. Macdonald

Master plans must be achievable.

You have all been updating your real property master plans, catching them up with all the top-driven initiatives of the last few years, such as Base Realignment and Closure, Global Rebasing, Army Modularity, Army Campaign Plan, Army Growth and others, and these plans are summarized in the master plan digests you are completing. These digests are excellent products and are a reflection of the Planning Process in work at your garrisons. Installation mission, vision and goals are being redefined and specific Real Property Planning objectives and projects reevaluated. Excellent work.

However, we must be cautious to ensure our updated plans are achievable. We will not likely soon see a Military Construction Army program such as we are currently seeing in fiscal year 2011. In fact, the MCA program will be reduced to 25 percent of the current level we are experiencing.

We have prioritized and programmed the most critical of our mission facility needs but have done so at the expense of legacy revitalization, community support and infrastructure needs. These projects will now be coming into the pool for programming as we build the FY 2015-FY 2020 programs. Our MCA priorities must



Maj. Gen. John A. Macdonald
U.S. Army photo

be carefully considered and evaluated to ensure every project provides the maximum benefit to the garrison.

The competition will be intense as garrison planners work to fill in the non-mission-critical, but still essential projects in their MCA programs. It will take years before the MCA program can afford the backlog of these type projects, but, during those years, we fully expect that our Operations and Maintenance, Army Sustainment funding will be supported and that we will also see an increase in OMA Restoration and Modernization funding.

OMA R&M programs are the secret to the success of master planning for the next decade. Much can be achieved with judicious use of R&M funds to mitigate the MCA shortage and, in some instances, actually eliminate MCA projects by intelligent reuse of legacy facilities — most notably Rolling Pin barracks and Hammerhead barracks that are scheduled for replacement with new barracks. These can be, and at many locations are being, modernized to company and battalion headquarters facilities that meet current standards.


Two of the best examples of permanent facility reuse are the Trainee

Barracks Upgrade Program projects that restore and modernize failed or failing Rolling Pin barracks into fully adequate Basic Training and Advanced Individual Training barracks. Both programs eliminate a need for MCA construction. Some garrisons have already modernized.

Sustainable, aesthetically appealing landscaping is an area that lends itself to creative use of OMA SRM funding. By now, your installation design guides are complete, you have completed land use designations, your visual themes are mature, you have completed several area development guides and identified numerous IDG priority improvement projects. Our buildings are being well built and, for the most part, have an architectural look that complies with the IDG.

Construction projects have often sacrificed exterior landscaping features in order to construct the most building space possible within the programmed amount. These landscape features were usually designed as part of the total package but ended up as unawarded “preferences” to the MCA projects. Taking these to completion, one small bite at a time, is achievable.

The reduction of the MCA funding might be lamentable to some but, to a true master planner, serves only to challenge us to sharpen our pencils, be more creative, think out of the box and continue to find the achievable and integrated OMA and MCA solutions that will keep our progress sure and steady.

Maj. Gen. John A. Macdonald is the deputy commanding general of the Installation Management Command. 



Sustainable, aesthetically pleasing landscaping is an area that lends itself to creative use of SRM funding. Photo by Dick Devlin, U.S. Army Corps of Engineers, Seattle District

Acronyms and Abbreviations

FY	fiscal year
IDG	installation design guide
MCA	Military Construction, Army
OMA	Operations and Maintenance, Army
R&M	Restoration and Modernization
SRM	Sustainment, Restoration and Modernization



Planning imperative: Create great installations today and tomorrow

by Maj. Gen. Jeffrey J. Dorko

As we start 2009, our installations are facing some of the most rapid changes of the past 50 years. Many installations are in the peak of intensive facilities construction to support Base Realignment and Closure missions, Growing the Force efforts and Army Transformation. While all of these efforts address today's mission needs, they should not take away our focus on meeting the future challenges that the Army will face.

Our installations are invaluable assets. They are the platforms from which we train and will remain so in the future. They are required to meet not only today's missions but will also need to meet tomorrow's challenges. Our installations must be developed in a way that keeps them flexible to changing doctrine and stationing and also self-contained within their boundaries.

At the same time, our installations are facing other challenges.

Our Army, in embracing the tenets of sustainability, must address the principles of sustainability in the planning and development of installations. Our development patterns must embrace compact or mixed-use, transit-oriented development that promotes walkable communities and reduces our dependency on the use of automobiles.

By embracing sustainability at the planning level, huge opportunities to reduce carbon dioxide released into the air come into play. It is estimated that through effective, sustainable planning, that one neighborhood at Fort Lewis could save more than 17 million vehicle-miles annually and decrease CO2 emissions by more than 18.7 million pounds if compact, mixed use development is implemented. This type of success can never be accomplished by single project improvements.



Maj. Gen. Jeffrey J. Dorko
Photo by F.T. Eyre

Concerning energy savings, we need to find more compact solutions that enable development of alternative energy sources. Consideration of micro grid energy sources and solar, wind and geothermal solutions in a holistic manner with the planning process can create a self-supporting installation that reduces dependence on petroleum products and is more sustainable.

Another challenge is changing quality of life expectations. Army Soldiers and their Families today have different expectations for the communities in which they live. In many planning visioning sessions, installation community members have said they want to live in communities where they can walk to work, stores and schools, and where they can live near town centers so they need not use their cars on post. These expectations require us to rethink our concepts of sprawling "big-box" development and instead focus on building compact, walkable neighborhoods.

Meeting these challenges requires the Installation Management Command-Army Corps of Engineers team to conduct planning comprehensively in a manner that —

- 1) meets mission requirements today but assures long term mission capabilities are preserved in the future;
- 2) creates great installations that are developed around sustainable neighborhoods that are walkable, compact and transit oriented; and
- 3) promotes broad stakeholder involvement such that all requirements are planned holistically.

The process starts with supporting our installation garrison commanders in forming a long-term vision and associated goals and objectives for real property planning and development. These planning principles frame all development in the future. Further, our planning efforts should be focused around area development planning packages.

The area development planning process is a method that divides a post into focused nodes and, in effect, constructs a mini-master plan for each neighborhood. While each area development plan must meet the installation's overall master planning principles, each neighborhood plan can be refined to meet sustainability goals and create compact, walkable, great places to live and work.

Lastly, we must ensure that all stakeholders participate in the process. A



In planning sessions, installation community members have said they want to live in communities where they can walk to work, stores and schools. Graphic courtesy of Urban Collaborative LLC

Acronyms and Abbreviations	
AICP	American Institute of Certified Planners
CO2	carbon dioxide
IMCOM	Installation Management Command
PROSPECT	Proponent Sponsored Engineer Corps Training
USACE	U.S. Army Corps of Engineers



Army Master Planning Portal – source for planning info

by Jerry Zekert

Have you ever wanted to find out about current trends in master planning? Do you want to bounce off some ideas with one of your peers? Do you want to maintain your knowledge in the rapidly changing world of installation planning?

The Army Master Planning Portal has been set up as your one-stop source for master planning information. The portal is a collaborative web environment that provides a source for master planning guidance, a calendar of upcoming events and links to important planning sites, including



Jerry Zekert
Photo by Mary Beth Thompson

the Army Master Planning Community of Practice page.

The portal is located on Army Knowledge Online at <https://www.us.army.mil/suite/page/528504>.

To go directly to the Master Planning Community of Practice page, visit <http://www.baseplanningpractices.net>.

POCs are Jerry Zekert, 202-761-7525, jerry.c.zekert@usace.army.mil; and Frank Hall, master planner, Headquarters, Installation Management Command Public Works, 256-541-3667, frank@modularmy.org.

Jerry Zekert is chief, Master Planning Team, Headquarters, U.S. Army Corps of Engineers.

(continued from previous page)

collaborative planning process encourages all to take part. With this approach, the installation garrison commander and staff, along with all stakeholders, are assured that the installation can be developed in a way that meets today's issues but is flexible enough to meet future unforeseen needs.

IMCOM and USACE are working closely together to enable great planning. First, we are ensuring our planning practices and techniques follow the current practices of cities and towns throughout America. Further, we are making sure these practices are being achieved in a consistent manner. The *Master Planning Technical Manual* and the new Army Master Planning Portal on Army Knowledge Online are great tools for our planning community. These planning practices must consistently translate into the design and construction practices our centers of standardization are developing to ensure great planning transforms posts into great places.

Down the road, we are going to see a space and planning manual that will provide a one-stop repository for planning criteria. We will also update the master planning regulation to embrace newer techniques.

Achieving great planning requires a

commitment to ensure that our Army Planning Community of Practice maintains its skills and knowledge in all aspects of installation master planning. We have established a master planning curriculum that is the most comprehensive in the Department of Defense.

Our four Proponent Sponsored Engineer Corps Training courses, led by experts in urban planning who are certified by the American Institute of Certified Planners, provide a comprehensive understanding of installation planning and the techniques needed to be successful. In addition, we are in the process of obtaining approval for AICP certification maintenance credits for these courses through the American Planning Association. We also annually host the Army Planning Symposium. The symposium provides an opportunity for the Army planning community to develop innovative solutions in a collaborative manner for meeting our tough challenges. *(Editor's note — See page 31 for information about PROSPECT courses and page 33 for the 2009 symposium.)*

Master planning is installation focused, and the challenge is huge for the garrison planning staff. The USACE team is part of the IMCOM garrison planning support team in ensuring that planning is successful at every installation.

Master planning support is a major tenet of the recently implemented USACE Campaign Plan. Supporting districts and centers are engaged to provide both in-house and consultant planning expertise. In addition, we are ensuring that all master planning project managers are fully trained and knowledgeable in various aspects of installation planning and are available to meet installation needs.

Master planning also affects other communities of practice, such as design and construction, program management, natural and cultural resources and environmental management. We are providing our divisions with a series of one-day regional master planning workshops to broaden the understanding of planning in the related communities of practice. These workshops, built from our successful planning-awareness training given to garrison commanders, are quite effective in teaching the importance of planning and how collaborative, holistic planning can meet today's needs and create tomorrow's opportunities.

It all starts with a vision, and that vision is implemented in a successful master planning program.

Maj. Gen. Jeffrey J. Dorko is the deputy commanding general for military and international operations, U.S. Army Corps of Engineers.



Importance of installation real property master plans

by Gregory Brewer

The garrison commander has a very difficult job. He or she is the equivalent of a city manager. One of the most important managerial tools available to the commander is the installation real property master plan.

The RPMP involves input from installation stakeholders — mission commanders, garrison staff, Soldiers, Families and civilians — that forges a unified installation vision and provides informed management guidance. With the value of most installation real property in the hundreds of millions of dollars and its management and development big business, the RPMP becomes one of the garrison commander's keystone documents for success.

Recognizing that almost all mission and operation actions on an installation require real property support, the RPMP reflects the requirements for facilities, infrastructure and land. It establishes the relationship of activities on the installations and plans land use accordingly.

The basic areas on an installation are: housing; community services, which include the commissary, post exchange, library, churches, youth centers and child care; health services; administrative/school; industrial; troop housing; troop equipment, i.e., motor pools; and training. The relationships among these areas and how they interact are shown on the RPMP. Adverse impacts can be minimized and convenient relationships maximized.

The RPMP is the amalgamation of several plans and maps showing land use and other real property factor relationships. What plans and maps an installation has will vary from installation to installation depending on its missions, but some of the most common and important are:

- range and training land development plans;
- integrated natural resource management plans;
- traffic management plans;
- force protection plans;
- facilities site plans; and
- utilities plans.

By overlaying one on another, the maps and plans reveal potential real property use or conflicts, such as potential environmental problems that may conflict with training land use or desired construction projects. Overlaying traffic plans and maps on the site plan will show potential traffic bottlenecks or potential better traffic patterns for future development. Overlaying the force protection plan with its restrictions on site maps and development plans can show the need to change building uses, where barriers may need to be erected and even if upgrading or spending large amounts of Sustainment, Restoration and Modernization dollars on a facility makes sense. These plans and maps also reflect the potential for installation growth and future development.

The RPMP also details the carrying capacity of the installation. The plan ties important management data to real property. Real property inventory data shows facility usage, age, condition, value, size and type of construction, utility support available and land acreage.

This information is useful in determining what to repair and when; what to replace and when; what is under- or over-utilized; and how to prioritize the spending of SRM funds. This information, in conjunction with unit population and



The real property master plan expresses the installation vision and supports its mission. Graphics courtesy of Urban Collaborative LLC

mission data, suggests what an installation's major construction programming needs are. RPMP data tied with environmental constraints can yield the expansion capacity for the installation.

As the Army embraces the tenets of sustainable development, the RPMP can help to ensure land and facilities are efficiently and effectively used today and that future needs can also be met. All this data provides the basis for the garrison commander to prepare an installation vision statement with associated goals and objectives for managing and developing the installation.

With the rapidly changing composition of the Army and repositioning of Army units both inside and outside the continental United States, garrison commanders must rely on master planning to ensure they can accommodate and sustain these changes. The new brigade configurations and sizes under Army Modularity are forcing the redesign of installations to accommodate them. New standardized facility designs, additional training land and range requirements and Military Construction Army programming methods now require resourceful master planning.

The return from overseas to CONUS facilities of up to 70,000 troops will require more intensive master planning. ➤

Acronyms and Abbreviations	
BRAC	Base Realignment and Closure
CONUS	continental United States
RPMP	real property master plan
SRM	Sustainment, Restoration and Modernization



This Phase I photo rendering of Pendleton Avenue at Fort Lewis, Wash., depicts existing conditions.



The Phase II photo rendering shows the scene after through-lanes are renovated.



In the Phase III photo rendering, landscaping features have been planted.



When Phase IV is complete, access lanes have been constructed. The real property master plan, developed with installation stakeholders, helps decision makers achieve the installation vision.

(continued from previous page)


RPMPs will have to be updated to meet requirements for housing troops and Families, community support issues and unit missions. The RPMPs provide the “maps” on how to rapidly meet these necessary changes.

Base Realignment and Closure 2005 has also demonstrated the importance of master planning. Most of the actions required by BRAC 2005 are realignments. Moving units from installation to installation affects carrying capacities and, thus, RPMPs. These actions compete for space and facilities on the involved installations. The information in the RPMPs helps resolve potential conflicts and satisfy facility requirements.

The RPMP is the ultimate funding decision support tool. It helps decrease expenditures of funds on unneeded or improperly sited facilities. It reduces costly redesigns due to environmental issues. It supports the logical and orderly upgrade of the Army’s infrastructure, including information technology networks. It prevents repair or replacement of utilities that will be abandoned. It allows sizing of facilities and systems to accommodate future development.

Garrison commanders are faced with a growing Army and its associated expanded support requirements but also with a future of constrained and reducing resources. Based on a good RPMP, a commander can justify the resources necessary to operate an installation and demonstrate the installation’s future viability and capabilities. Many management tools are available to them, but, central to these tools, is the RPMP.

POC is Gregory Brewer, 703-601-2529, gregory.brewer@hqda.army.mil.

Gregory Brewer is a master planner, Planning Division, Operations Directorate, Office of the Assistant Chief of Staff for Installation Management. 



A far different and more pleasing appearance than what was started with greets the eye after completion of the project using the real property master plan as a guide.



Area development guides help create places people want to be

by Maureen Goodrich and Ed McConnell

The Army is committed to creating great communities and places where people want to be. The area development guide is one of the newest master planning tools to ensure the Army can bridge the gap between the intent of the installation's development plans and the associated Military Construction projects that collectively create Army communities.

The ADG is a tool intended to more clearly identify and communicate the installation's development intent prior to initiation of any project design efforts. These ADGs support Army senior leadership's renewed interest in master planning as the critical first step toward improving the design of installations and the mandate to reduce the execution timeframe from design to occupancy for new construction projects.

It is a tool requested by the Office of the Assistant Chief of Staff for Installation Management; Headquarters, Installation Management Command; and Headquarters U.S. Army Corps of Engineers to support the MILCON Transformation process to jump start project development concepts at the request-for-proposal stage of project acquisition.

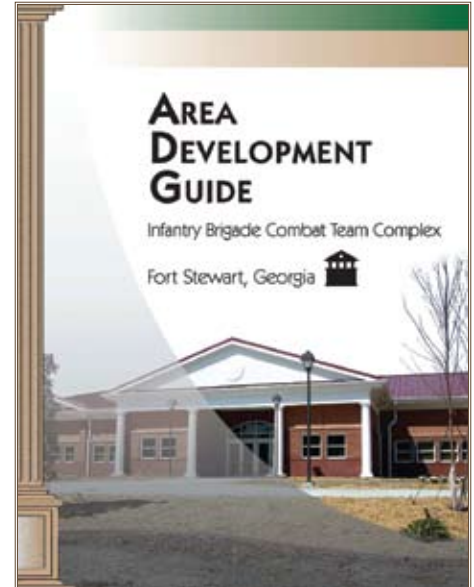
The U.S. Army Engineering and Support Center, Huntsville is currently managing the completion of numerous ADGs for Grow-the-Army project initiatives as well as fiscal year 2012 and 2013 Military Construction, Army projects.

The ADG was initiated primarily as a means to provide the installations and the Army Corps of Engineers' Centers of Standardization with cohesive development themes that ensure similar architectural and site planning techniques are used when implementing the Army's major recapitalization and growth programs currently

underway. Coordinating with established design guidance in the overall installation design guide but applying project- and complex-specific planning and development guidelines, the ADG provides the installation with the tools to implement its development or redevelopment vision at the neighborhood, complex and project level.

The ADG merges the efforts of a charrette process with project requirements, site-specific constraints and existing architecture to create easy-to-visualize and -understand guidelines that outline the installation's preferred and approved architectural and site-development themes. The ADG will be used to support the design-build RFP process, which is the primary execution mechanism supporting the Army MILCON Transformation initiative.

These ADGs will be incorporated into the RFP package in order to inform the interested bidders at the outset of the site development approach and architectural themes that each installation expects on each project on which they are proposing.



One of Fort Stewart, Ga.'s ADGs addresses its Infantry Brigade Combat Team Complex. Graphics by HDR/Colorado DataScapes

Five factors summarize how the ADG is a proactive tool toward improving project acquisition and implementing the installation's master planning vision. ➤



The ADG includes illustrations of architectural themes for types facilities.

Acronyms and Abbreviations	
ADG	area development guide
MCA	Military Construction, Army
MILCON	Military Construction
RFP	request for proposal



Changing the face of installation master planning

by Gregory Brewer

The way of living for Americans is changing and with it, the look and feel of the towns in which they live. People no longer want to be strangers to their neighbors. They want to live in safe “homey” communities. They want easy access to schools, shopping, medical facilities, recreation and even their work places, all conveniently located near where they live. They want townscapes with squares, parks and open spaces, well-thought-out transportation systems and road networks, walking and bike paths. In short — community neighborhoods.

Soldiers and their Families expect nothing different, but most installations currently are not planned that way. The planning thought process has not been oriented to creating mixed-use, sustainable “hometown” communities.

Traditionally, installations have been

planned with mission first and living second. They are power projection platforms that provide sustainment support and tough, realistic training. They are segregated into “compound areas” by land use and building function — color codes on a map mandating single uses that are not to be intermixed, the traditional zoning method of city planning.

This type of planning stifles creative thinking and garrison commander visioning. It does not readily support the concept of sustainable development necessary to keep our installations viable in the future. Traditional planning does not put planning for people first, with mission following.

Shaping the form of the public realm should come first, followed by controlling land and building use. Enter the changing direction of city planning and installation real property master planning using the

concepts of form-based coding.

Real property master planning is a major management function of the garrison commander. Its purpose is to guide the development of the installation. Real property master planning is governed by Army Regulation 210-20, *Real Property Master Planning for Army Installations*, which is currently under revision. The concepts of form-based coding will be included in the revision.

Form-based coding promotes mixed-use, compact, walkable development. It emphasizes spatial principles that support sustainable development, making building form and character more important than building use. Form-based coding focuses on elements that are necessary to create sustainable communities.

In general, traditional real property master plans will change to building ➤

(continued from previous page)

Originality – The ADG is a new master planning tool specifically developed to meet a validated shortfall in effectively communicating expectations to contractors bidding on MCA projects. These ADGs facilitate an early visualization and explanation of the preferred development concept from the end-user’s perspective that will promote a better opportunity to ensure the planning investments influence the design and construction of the new facilities.

Transferability – To better support the construction requirements across the Army, a common approach was needed to provide a consistent means of presenting the Army’s expectations to contractors in executing project-specific designs. The ADG program provides a standard product template that can be applied at any Army or Department of Defense installation using either design-build or conventional design-bid-build implementation.

Visualization – The quality of the

visualization graphics, publications and 3D fly-through animations are critical to giving a sense of the planned project’s intended outcome without dictating the specific outcome. The animation is an invaluable executive-level “marketing” tool for garrison commanders to showcase the installation’s vision to visiting dignitaries or at congressional or other staff-level briefings.

Implementation – The development expectations captured in each installation’s ADG reflect the Army’s level of commitment to creating military communities of design excellence. Although the IDG remains an overarching tool for assisting visualization of the installation’s standards for development, the ADG provides a nonprescriptive representation for how the IDG intent should be executed for specific projects.

Comprehensiveness – The ADG demonstrates how similar project initiatives must adapt to the differing contextual and climatic conditions of their locations — Northern cold, Southern humidity,

Western dryness — which validates its effectiveness as a comprehensive approach to improving Army communities. ADGs communicate how separate but related project actions must be coordinated in a cohesive development plan in order to achieve the well-designed communities all want to live and work in.

As the Army moves toward implementation of the Modular Force and the Grow-the-Army initiative, it is also dedicated to building great communities. The ADG is invaluable for ensuring that the large investments the Army is making today result in places that go beyond supporting the mission to creating places people want to be.

POCs are Maureen Goodrich, 256-895-1787, maureen.e.goodrich@usace.army.mil; and Ed McConnell, 719-635-7128 ext. 213, edward.mcconnell@hdrinc.com.

Maureen Goodrich is a project manager, Combat Readiness Support Team, Huntsville Center; Ed McConnell is the ADG program manager, HDR/Colorado DataScapes. 



(continued from previous page)

blocks of illustrative plans, regulating plans and architecture, streetscape and landscape standards. Traditional land-use plans will still be used for describing large areas such as range and training lands.

Form-based coding works best for cantonment area planning, because form evolves in support of social-cultural values and human behavior. The coding can guide density and building form rather than focusing on building functions. This focus can lead to mixed-use development and desirable, integrated neighborhoods that include living, shopping, libraries, medical facilities and offices, i.e., hometowns.

The form-based code for an installation is a tool that can condense the garrison commander's installation vision, goals and objectives into a clear, enforceable development plan. The code provides graphical parameters for height, massing, siting and basic architectural building elements for each development area on the installation.

AR 210-20 emphasizes sustainable development. Form-based coding supports this by promoting compact development leading to higher density, more efficient land use. Compact development is supported by the concepts of horizontal and vertical mixed-use development. Multi-story, multi-use development saves land and can create interesting architectural diversity in a cantonment area.

Not all land uses are compatible, however. Some land uses require segregation, but the Army must make a better effort to incorporate mixed-use development into installation master planning, because land as a resource is limited and sprawling development is wasteful.

Transportation systems and road networks must also be examined. Developing community neighborhoods means establishing pedestrian traffic patterns and mini-



This conceptual rendering depicts proposed form-based coding at Fort Lewis, Wash. Graphic by Urban Collaborative LLC

mizing the requirement for automobile use.

Finally, adding appropriate landscaping not only makes neighborhoods more attractive and desirable, but can further promote compact development while conserving the environment. Applying the form-based code tools of illustrative plans, regulating plans and architecture, streetscape and landscape standards can bring this change about.

Form-based coding is not incompatible with current real property master planning, and it does not require current installation RPMPs to be scrapped. Army Regulation 210-20 has recommended, and will continue to recommend, the preparation of area development plans to make up the installation RPMP.


Most installations currently have identified planning districts, because they make installation planning more manageable and allow emphasis to be placed on areas that need planning attention. These districts have ADPs showing their planning and development. Form-based codes can be applied incrementally to installation ADPs as regulatory plans are updated. Over time, the entire installation real property master

plan will be updated and integrated with the form-based coding concepts in master planning. This incremental approach recognizes imposed resource constraints and ADP priorities but also allows for changing installation missions and garrison commander visioning.

The RPMP is a regulation-required management tool for the garrison commander. The introduction of form-based coding will provide the commander greater planning flexibility while providing clearer and more enforceable planning guidelines for installation development.

The introduction of form-based coding into Army real property master planning will help installations create the desired atmosphere of a town neighborhood while retaining the uniqueness and military-mission orientation of the installation.

POC is Gregory Brewer, 703-601-2529, gregory.brewer@hqda.army.mil.

Gregory Brewer is a master planner, Planning Division, Operations Directorate, Office of the Assistant Chief of Staff for Installation Management. 

Acronyms and Abbreviations

ADP	area development plan
RPMP	real property master plan



Army installation master planning taken to the next level

by Linda Tuttle

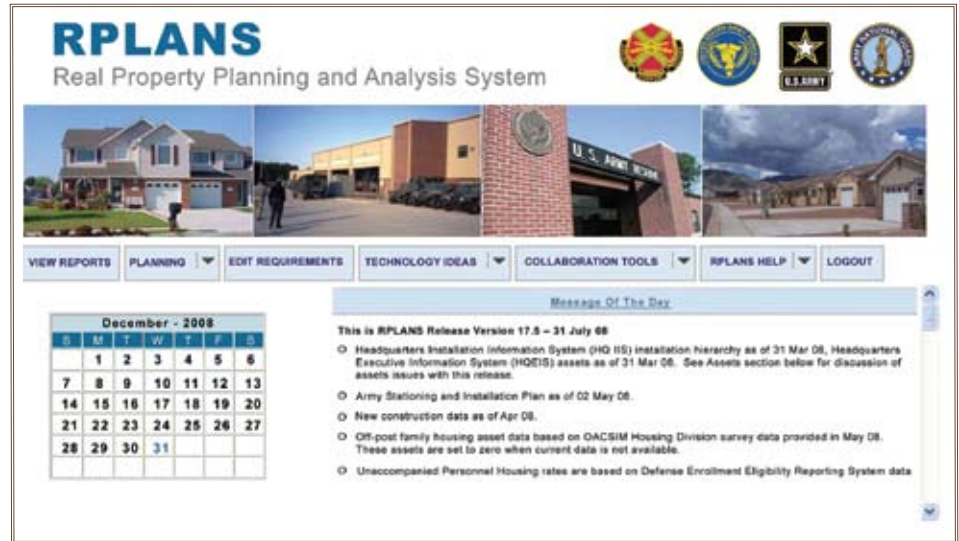
The new Real Property Planning and Analysis System, introduced Dec. 31, is more than just a web-based conversion; it is a one-stop application for installation master planners. Master planners can now log into a single application to access installation, region and headquarters facility requirements as well as the Army mission unit calculations and space planning criteria that were previously provided separately in the Facility Planning System and the Army Criteria Tracking System.

About 20 years ago, RPLANS started as a top-driven system, updated twice annually from Army headquarters databases. This new generation of RPLANS uses a bottom-up approach, with all installation data stored within the same database. Therefore, when installations make updates to their RPLANS, reviewers, approvers and headquarters-level personnel can see the changes instantly.

For analysis and decisions that require locked data positions, the RPLANS retains quarterly locked snapshots. RPLANS data will be more accurate and current due to quarterly updating of all official data sources.

The web-based system provides enhanced capabilities in reporting and editing. Reporting is faster, allows each user the ability to drill into the data to validate the accuracy, and it provides more options on how data is displayed. Editing now allows for better communication between master planners, reviewers and approvers by providing a time-stamped log of user comments and validation.

A typical user benefits significantly from the increased speed and ease of use. The system provides quick access to information that was previously stored in the RPLANS black box. With the click of the mouse, the user can see the units that generated a specific facility allowance, the new construction projects that produced new square footage on an installation as well as



the space planning criteria and algorithms that were used to generate each facility allowance.

RPLANS provides a more dynamic reporting capability. All of the standard reports are still available within the new system, but the user can easily revise these reports to add or delete fields, sort by clicking on the column heading, change the fiscal year and download to database software. The user can also employ “interactive reporting” to generate pie, line or bar charts based on selected data fields and attributes.

Interactive reporting requires only minimal training to generate basic reports and graphics. When a user saves a report, the report will not only be available upon log in, but it will be automatically updated with any system changes.

If the user wants to access previous locked data positions, historical data is available. The user will also see new reports, such as the Essential Facility Requirements charts that used to be produced manually after each update.

RPLANS provides the user with drill-down capability within the reports. When the user moves the cursor across the fields of a report, the fields change color and can be clicked to show underlying details. For example, a user can click on the permanent,

semipermanent and temporary asset totals to reveal the real property building details that were used to generate them and ensure their accuracy. Again, this happens with one click — no need to generate a new report.

The new system’s editing capability is much more flexible, allowing the installation master planner to edit requirements directly. The edit module will record a history of the edits so the master planners, reviewers and approvers can see what edits have transpired and when, eliminating the need to contact the RPLANS help desk for a separate report.

In April, the web-based RPLANS will provide a new and improved planning module to assist the installation master planner in determining the impact of potential facility and unit changes. This feature integrates stationing, assets and new construction editing, mission unit allowance generation, Reserve Component unit packages and “complexing” to provide a powerful “what-if” analysis capability. It will also allow installation master planners the ability to change algorithm parameters to determine what the edited requirement should be.

Complexing allows users a way to define planning areas of interest by grouping facilities, sites and bases into master planning areas, range complexes, training center ➤

Acronyms and Abbreviations	
RPLANS	Real Property Planning and Analysis System



Mastering master planning in Germany

by Rebecca Lippman

In 2007, it was Babenhausen, Friedberg and Giessen. In 2008, it was Würzburg, Hanau and Darmstadt. And soon, Mannheim, Pirmasens and other posts throughout Germany may be closing down, triggering the enduring U.S. military communities in the country to bulk up in preparation for the hundreds of restationed Soldiers and civilians.

Consolidating installations can save money and result in higher efficiencies — but only if done correctly.

To the U.S. Army Corps of Engineers' Europe District Planning Section, that means lots of collaborative brainstorming sessions called charrettes. Charrettes are intense, multi-day meetings where invested parties draft solutions to design or planning challenges.

"Army transformation, the spate of base closures and the fact that many military facilities in Germany are old has meant plenty of charrettes for us recently," said Eric Garcia, architect and technical team leader in the district's Planning Section. "We're on the road all the time."

The charrettes have ranged from planning or designing new or renovated buildings, landscaping efforts, transportation corridors and even entire military installations. But one recent session was a first for the district's team of designers and archi-



Europe District's planning team, led by master planner Paul Ramey (third from left), heads up an effort in early December to plan a new vehicle maintenance center for the U.S. Army Garrison Ansbach, in northern Bavaria. Photo by Eric Garcia

tects. The team was asked to plan a \$9.1 million military prison.

Hard time in Mannheim

The Department of Defense's only prison in Europe — officially known as the U.S. Military Confinement Facility-Europe, or MCF — is located in Coleman Barracks, an Army airfield about one mile north of the city of Mannheim. Although originally built in 1963 to house 236 inmates, the MCF today houses only a few dozen detainees, varying in rank and crime, and all awaiting trial or serving sentences of less than one year.

With Mannheim's projected closure in the next few years, the planning team, led by Paul Ramey, was asked to plan a new facility.

"The architecture of a prison is a very interesting prospect," said Ramey. "Generally we try to build our buildings to be inviting ... but in this case, we want to keep those people in."

When designing a prison, there are some important concepts to keep in mind, he said. Sprinkler systems can't hang from the ceiling, as in most buildings. Security and monitoring systems have to be sensitive, layered and durable.

"We had to approach the design from different angles," said Marcus Ballnath, a district architect, who toured the current facility to learn about the operations. "The design we finally came up with was a combined effort by the user and our design team. ... The round shape of the cell block was actually brought up by a user and

Acronyms and Abbreviations

MCF	Military Confinement Facility
USACE	U.S. Army Corps of Engineers

(continued from previous page)

complexes and enclaves inside or outside of a normal reportable area. This approach gives master planners a tool to better estimate facility shortfalls and excesses for programming new construction requirements. This capability will support the Army National Guard and Army Reserve planners who often need to view sites by city or other geographic area.

In the future, RPLANS will also pro-

vide the ability to identify future events — such as disposals, acquisitions and new projects — to illustrate the facility impacts of these events.

For master planners at all Army levels, the new web-based RPLANS greatly facilitates their ability to access, edit and improve facility requirements. The system provides more flexibility to create algorithms in detail and the ability to separate algorithms by unit, fiscal year or location and to add

new capacity-based algorithms for space planning. As RPLANS evolves over the next few years, the user benefits will equate to an overall cost savings for the Army in efficiencies and improved data quality.

POC is Linda Tuttle, 703-604-2442, linda.tuttle@us.army.mil.

Linda Tuttle is RPLANS program manager, Operations Division, Office of the Assistant Chief of Staff for Installation Management.



(continued from previous page)

derives from the desire to have direct sight lines into every space from a central control point.”

An important precaution, said Ramey, was that the guards must be able to shut anything down at any time. Prisoners who want to shower or even flush a toilet, he said, must call the guard on duty who controls the water usage.

“All those things need to be very carefully designed so that inmates can’t hurt themselves or disrupt the facility,” he said.

Other design considerations include common areas for inmates, lockers for personal possessions, a visitors’ and in-processing section, and two layers of concertina-wire-topped fencing encircling the facility.

“You don’t get to design a new prison every day,” said Ramey.

Elsewhere in Germany

In Wiesbaden, two recent charrettes were held for operational and community support facilities for the relocation of the 7th Army from Heidelberg, the 5th Signal Command from Mannheim and the 66th Military Intelligence Brigade from Darmstadt. One covered the design of 7th Army’s new command and control facility, valued at \$119 million.

The other charrette was for planning a townhouse community of 326 dwelling units, estimated at \$133 million. The housing will flank the south side of the Wies-

baden Army Airfield in what are now farmers’ fields.

Projects for facilities like these call for many preconstruction plans, including —

- the rerouting of traffic for truck access, storage, parking and pedestrian routes;
- the surveying of groundwater, soil and native species;
- the clearing of unexploded ordnance; and
- a complete upgrade of the water, sewer, electrical, heating and telecommunications infrastructure, including running new lines to the proposed construction sites.

In the Air Force-heavy German states of Rheinland-Pfalz and Nordrhein-Westfalen, the largest charrettes were for two U.S. high schools — one for the Air Force and one for the Army.

At Spangdahlem Air Base the new facility will replace the current high school located 10 miles away down the winding road to the Bitburg Annex. At the U.S. Army Garrison Kaiserslautern, plans are in the works for an elementary and middle school, which includes a stadium, as well as a \$70 million high school that would replace the original one, built in the 1950s.

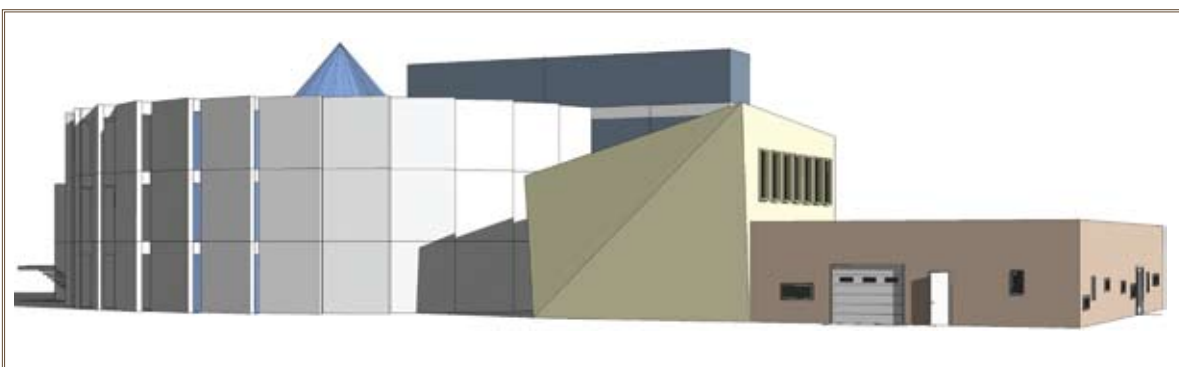
“Another thing the Army’s trying to do



An overhead rendering shows the design for several additions to the Kaiserslautern school complex, including a joint elementary and middle school, a multi-purpose room, a sports complex and a bus parking area. Graphics courtesy of Europe District, USACE

is make their facilities as nice as the Air Force’s,” explained Ramey. “There’s always been this rivalry in the Kaiserslautern Area, with Ramstein always having all the nice stuff, and then the Army side having kind of second best.”

During other recent charrettes, the team worked plans for a fitness center and a vehicle maintenance facility in Ansbach, valued at \$16.5 million each; three barracks in Vilseck, Grafenwoehr and Kaiserslautern, ranging from \$17 million to \$33 million; and the relocation of the American Forces Network-Europe headquarters from Mannheim.



The notional design for a new military confinement facility, one of the most unusual requests the Europe District planning team has received, includes a gym, chapel, dining room and 80 inmate cells.

POC is Justin Ward, +49 (0)611-9744-2720 or DSN 314-570-2720, justin.m.ward@usace.army.mil.

Rebecca Lippman works for USACE’s Europe District Public Affairs.





USAG Humphreys continues \$12.9 billion transformation

by Lori Yerdon

Several years ago, the plan to move all of U.S. Forces Korea stationed north of the capital city of Seoul to Pyeongtaek, 55 miles to the south, set in motion vast changes for U.S. Army Garrison Humphreys. This small installation — formerly home to Quonset huts and Soldiers on one-year, unaccompanied tours — is now well on its way to being a Family-friendly post with some of the best amenities an Army installation can offer.

Snapshot of a plan

“The volume of work happening here is immeasurable,” said David Voelker, acting chief, USAG Humphreys Master Planning Division. “Personnel-wise, USAG Humphreys is going to grow by 271 percent. As for funding, the entire program right now is at \$12.9 billion, and we’re going to be adding 25 million square feet of facilities.”

To put it into perspective, 25 million square feet equates to about 600 new facilities, Voelker said.

Thus far in the transformation, several facilities have already opened and are in use, including three state-of-the-art physical fitness centers, a child development center with a capacity for 303 children and the Humphreys Lodge extension. The lodge’s upgrade not only doubled the number of rooms but also added conference space and several other practical amenities.

Part of the Humphreys master plan includes barracks equipped with two elevators, exercise rooms, laundry rooms and mud rooms, common kitchens, lounge areas and storage areas, which are scheduled to open soon.

Currently, there are 48 construction projects within the existing 1,210 acres of Humphreys. Simultaneously, construction is underway on land acquired through the Yongsan Relocation and Land Partnership Plan. When the transformation is com-



The old and the new share space at USAG Humphreys, South Korea. Here, construction is underway on the newest land, dubbed Parcel One (top of photo). Photos by Bob McElroy

plete, Humphreys will have almost tripled in size to 3,538 acres.

“Two sets of four Soldier barracks are in the process of being built on Parcel One, and work there has gone very well,” said Voelker.

Work on Parcel K is underway as well. When the land is ready for construction, it will be the site of Family housing, a new high school and an elementary school.

Challenges, considerations, solutions

Despite the smooth progress of the construction to date, building a new post creates considerable challenges.

The biggest challenge so far has been synchronization of projects — not just constructing buildings, but ensuring new buildings tie into the master plan, Voelker said. That requires an overall holistic look at facilities.

“Identifying the fact that facilities in the original master plan were overlooked has been a challenge — as well as ensuring we have the right amount of space for everyone,” he said. “Finding solutions to these issues is fun and challenging.”

Maximizing the use of existing structures and space during construction while accommodating the needs of the garrison and ensuring future facilities mesh



Construction of six single-Soldier barracks is underway on Parcel One, the newest land added to USAG Humphreys. In the distance are two new Soldier barracks and a dining facility.

Acronyms and Abbreviations	
IDG	Installation Design Guide
USAG	U.S. Army Garrison



\$52 million allocated for barracks at Fort Meade

by Rona S. Hirsch

Fort Meade, Md., will spend \$52 million of fiscal years 2008-2010 funds to renovate four 1960s-era barracks for service members in Advanced Individual Training at the Defense Information School. The Army Installation Management Command allocated \$26 million for FY 2008 that was earmarked for the upgrade of two barracks. That allocation will be followed by \$13 million for FY 2009 and an additional \$13 million in FY 2010.

"I'm grateful we'll be able to address a long-time problem in such a way that we

can provide first-class accommodations to students for decades to come," said Col. Kenneth O. McCreedy, the installation commander.

Single service members — student detachments in the Army, Navy, Air Force and Marines — occupy the four barracks, which are part of the Freedom Center complex.

"We rate all our facilities green, amber and red," said John Moeller, deputy installation commander. "All four are rated red."

IMCOM initially allocated \$26 million for FYs 2009 and 2010 after contractors for the Army Training and Doctrine Command conducted an engineering study of the rundown barracks.

"They said, 'These are the worst barracks we've seen so far,'" Moeller said.

The funds were designated for renovation of two of the barracks. An additional \$26 million was allocated for 2008 after Lt. Gen. Robert Wilson, commanding general of IMCOM, visited Fort Meade last July. During his one-day visit, Wilson toured the AIT barracks area.

"We explained we needed more for the other two," said Thomas White, Fort Meade's housing officer and the Residential Communities Initiative project manager. "So he said, 'Here is '08 money — if you can spend it in time.'"

"He confirmed the decision to give us money in '09 and '10, and he made the decision to give us dollars in '08 to start the project," McCreedy said.

Crediting IMCOM, DINFOS and TRADOC for their efforts in obtain- ➤

Acronyms and Abbreviations

AIT	Advanced Individual Training
DINFOS	Defense Information School
FY	fiscal year
IMCOM	Installation Management Command
TRADOC	Training and Doctrine Command

(continued from previous page)

into the master plan remain priorities for Humphreys officials. A key component in the Humphreys master plan is the installation design guide, which provides guidance for standardizing and improving the visual quality and efficient operation of the installation.

The Humphreys IDG includes standards and guidelines for the design issues of site planning: architectural character, colors and materials; vehicular and pedestrian circulation; utilities; and landscape elements, including plant materials, seating, signage and lighting. The design guidelines also incorporate sustainable

design, energy efficiency, quality of design, antiterrorism measures, maintenance efficiency and safety, historical and cultural considerations into every facet of Humphreys' transformation.

Other objectives of the IDG that will improve Humphreys during and well after its transformation include use of natural areas, putting parking lots behind instead of in front of new buildings, and ensuring garbage dumpsters and central utility plants are meshed into the construction of new facilities.

Forging ahead

Looking at the big picture, Humphreys' officials understand that the quality of the garrison environment has a direct effect on the people who live and work on the installation. They also remain committed to improving Humphreys' infrastructure and to becoming the new home of U.S. Forces Korea.

POC is Lori Yerdon, 031-619-6132, DSN 754-6132, lori.yerdon@korea.army.mil.

Lori Yerdon is a public affairs specialist, USAG Humphreys. 



Construction is ongoing on the newest land at USAG Humphreys, called Parcel One (top of photo). When the transformation of Humphreys is complete, the installation will almost triple in size and be home to nearly 45,000 people.



(continued from previous page)

ing the funds, McCreedy said the allocation was unexpected.

“It was a pleasant surprise, because I didn’t know how to address the issues in those barracks, because BRAC [Base Realignment and Closure] is eating up the military construction dollars available to the Army,” he said. “There weren’t any construction funds available.”

DINFOS was constructed in 1997 to consolidate three service schools into the only Department of Defense facility that trains students in public affairs-related career fields.

“The initial plan was that once DINFOS was built, Fort Meade would get added construction money to build barracks,” White said.

These barracks were designated as temporary student housing, but new barracks have not been built. Constructed in 1964 in a Hammerhead design, each three-story barrack has 84 rooms that sleep about two per room. On each floor are two latrines with three showers, sinks, toilets, a bathtub, a washer and a dryer.

“We have crowded corridors, mold, mildew, problems with the heat exchange,” White said. “But they [the Directorate of Public Works] have determined people who have done their best to keep them safe

and inhabitable.”

The barracks will be upgraded as part of the Training Barracks Upgrade Program, or T-BUP. Funds will also provide for new furnishings.

“We will still keep the Hammerhead footprint and walls — so we will renovate the building, not replace it,” White said. “We will raise the installation status report standard from red to green and get 25 to 30 years of quality living in these buildings. And now, we can meet our obligation to folks starting their careers.”

Two vacant barracks will be upgraded first. Renovations are expected to be completed and students moved in during 2010. The third barrack is scheduled to be ready for occupancy in 2011, followed by the fourth barrack in 2012. Two other barracks, which were in the poorest condition, will be demolished.

Fort Meade’s Directorate of Public Works is working with the U.S. Army Corps of Engineers’ Baltimore District to set contracts in place for the renovations. The Corps of Engineers will hire a construction company for the project. T.J. Singh, director of Public Works, estimates that the first renovation will take about 12 to 18 months from the time the initial design is approved until execution.

“As funds become available, we’ll get the ball rolling,” Singh said. “I’m excited, because those barracks are in pretty bad shape. We will have to redo the entire heating, plumbing and electric systems, and perhaps the windows and roof, because the buildings are quite old.”

Renovations will follow current Army guidelines.

“We have to make sure designs are within these guidelines,” Singh said. “We determine how many rooms are needed, but the size is determined by regulations and grade of Soldiers. Basically, the rooms will be the same size in all the facilities.”

After classes last week, members of the Army Signal School Detachment gathered in the day room of a barrack slated for renovations. Red couches and chairs lined one wall opposite a pool table and vending machines. Nearby, couches and recliners faced a large flat panel TV in a glass-enclosed room.

“We try to keep them entertained, but we can only do so much,” said Staff Sgt. Julien Lauture, supply noncommissioned officer for U.S. Army Signal School Detachment. “They need more TVs, video games. This generation likes that.”

“A lot of them are into gaming,” 1st Sgt. Paul Malace said. “I’d like an area where they could hook up to an Xbox and, if monitored, Internet games.”

Many AIT Soldiers were unaware of the upcoming renovations.

“I’m happy about that,” said Pvt. Tyler Maulding, a journalism student. “You can tell they’re old.”


“They need to completely gut it,” said PFC Robert Williams, who has lived in the barracks for the past six months.

But several of the newly-arrived AIT Soldiers said they’re satisfied with the accommodations.

“I have no complaints; it is what it is,” Pvt. Christopher Rogers said. “But we need better furniture in the rooms.”

“I think they’re nice,” Pvt. Michael Broughney said. “Just the fact we get our own room is better than what we had at basic training.”

POC is David Ruderman, 410-962-7536, david.j.ruderman@usace.army.mil.

Rona S. Hirsch is a staff writer with Fort Meade’s Soundoff! 



Construction workers labor on the AIT barracks project at Fort Meade, Md. Photo by Pfc. Ali Hargis



Fort Leavenworth renovates oldest home in Kansas

by Melissa Bower

Polished wood floors, granite countertops and a gas fireplace belie the age of the oldest residence on Fort Leavenworth — and in the state of Kansas. The Rookery, as the residence is known, received an age-defying makeover this year by Frontier Heritage Communities and Prestige Renovations.

The building, now an expanded duplex, had its beginnings with the construction of Fort Leavenworth in 1827. Although the building has had several expansions and renovations through the years, one element of the early 1800s building is still visible — hand-hewn logs that form floor joists for the Rookery’s main floor.

Those log floor joists are still able to safely support a load, according to Bryan Market, project director for FHC.

“This tree was probably about 50 years old [in 1827],” he said pointing to one of the log joists. “Given that, you’re talking about a tree that was growing during the Revolutionary War. I doubt we’ll ever close these in.”



Floor joists, viewed from the Rookery’s basement, are estimated to be about 180 years old.

There is some debate whether the wood is walnut or Osage orange tree, Market said. Original limestone foundations are also still in place under the home.

The two dwelling spaces that make up the Rookery were unoccupied for about two years. Restoration took place for about six months during 2008. Both homes were updated with new appliances, and new kitchen and bathroom fixtures. Each unit comprises three floors, with space for storage and laundry facilities in the completed basement.

The townhouse on the south side is about 4,000 square feet with four bedrooms. The unit has three fireplaces, but two are for decoration only.

The north side townhouse is about 5,000 square feet with five bedrooms. This side of the structure was made larger by an addition built in the early 1900s. Within the addition, one of the bathrooms still has a vintage claw-foot bathtub and marble-top sink. This unit also has three fireplaces, one of which is functional.

FHC estimates the last renovation at the Rookery was done in the 1990s, but the remodeling wasn’t as extensive as the 2008 job. For example, one of the bathrooms had lime green tiles. Now, the bathroom is updated with new tile and fixtures.

Workers were able to keep much of the



The Rookery on Fort Leavenworth, Kan., has undergone updating and restoration. Photos by Prudence Siebert, Fort Leavenworth Lamp

original brass and copper fixtures, Michael Lierman, project manager for Prestige Renovations, said. A double hinge on the kitchen door, for example, was so old they had trouble finding replacement parts. The hinge still works, allowing the kitchen door to swing in both directions. The Rookery homes also feature keyholes in the doors and nonoperational radiators.

Several of the existing fireplaces cannot be used because the old flues in the chimneys were showing signs of decay, Lierman said.

“If you were to light a fire in there, it would deteriorate it even more,” he said.

However, Prestige cleaned and refurbished those fireplaces for display. The one fireplace that can be used in each home has a special liner inside the chimney to prevent decay. Gas fire units were installed in each, complete with remote controls.

Renovations also included balancing the heating and cooling in each room. Although it’s impossible to perfectly heat and cool an old building such as the Rookery, Prestige was able to make some improvements, Lierman said. The company also rescreened some windows and peeled away paint that had glued some shut.

Acronyms and Abbreviations

FHC	Frontier Heritage Communities
-----	-------------------------------



Innovative program trains Afghans to care for their new facilities

by Brenda L. Beasley

As new facilities and infrastructure are turned over to the Afghan National Army, the need for technical competency training will be addressed by a program called “Off-Ramping.” This pioneering program will train ANA craftsmen in skills such as carpentry, masonry, electrical wiring, heating and ventilation equipment repair and plumbing as well as basic English language proficiency.

Under the ANA Construction Program, nine brigades or garrisons were completed in fiscal year 2008. In 2009, the Combined Security Transition Command-Afghanistan plans to execute about \$1.4 billion in construction contracts for permanent ANA facilities, including plans to build five more brigades and four more *kandaks* (battalions).

Rapid growth in a war zone, cultural issues, a high rotation rate among the U.S. civilians and military support staff, water conservation efforts, facility care and maintenance concerns, facilities’ property theft and technical competency training are just some of the daily challenges faced by the CSTC-A.

The Off-Ramp Program will help build technical capacity in the ranks of the ANA facilities support staff and allow for the



An ANA facility in Kabul, Afghanistan, undergoes renovation work. Photos by Bruce Huffman, AED Public Affairs

transition of the facilities to the Afghans. This program includes a parallel management training program. While the craftsmen undergo training, the management staff, such as the ANA directors of Public Works at the installation level and the command staff at the Afghanistan Installation Management Directorate, will be receiving training in the management and operation of a DPW.

Communicating and coordinating is the key to successfully combating O&M challenges, according to CSTC-A staff members.

“We’re in a different culture with a different language,” said Navy Cmdr. Joseph Y. Kan, deputy director, Combined Joint

Engineering Directorate, at a September conference. “We have constant turnovers, multiple services and multiple acronyms. We have to be able to communicate and coordinate with each other to enable Afghans to stand on their own educationally, culturally and literarily.”

Another innovative program is the development of a design guide specific to Afghanistan that is being prepared by Chester S. Nakamura of the Corps of Engineers’ Afghanistan Engineer District. These programs have one goal — to see that the facilities now being constructed will continue to be cared for after CSTC-A has completed its mission. The road ahead calls for properly maintaining facilities, curbing theft and waste and devel- ➤

Acronyms and Abbreviations

AED	Afghanistan Engineer District
ANA	Afghan National Army
CSTC-A	Combined Security Transition Command-Afghanistan
DPW	Directorate of Public Works
O&M	operations and maintenance

(continued from previous page)

The water heaters in the Rookery are only about two years old and were not replaced but were serviced. In one of the townhouses, a previous renovation had placed a toilet in the main floor laundry room. Because it was the only bathroom on the main floor, Prestige added a wall to separate it from the laundry hookups.

The renovations were completed in

November, and the Rookery was made available as Family housing.

The Rookery refurbishing is part of Fort Leavenworth’s and FHC’s efforts to restore historic homes on post. There are 66 homes on a list to be renovated over nine years for \$3 million. The Rookery units were Nos. 22 and 23 on that list.

FHC has constructed 263 new homes on post since its formation in 2006 as a

partnership between Michaels Military Housing and the Army. Those new homes are all on previously undeveloped land on Fort Leavenworth.

POC is Becky Steed, media relations officer, Fort Leavenworth Public Affairs, 913-684-1723, Rebecca.steed@us.army.mil.

Melissa Bower is a Fort Leavenworth Lamp staff writer.





(continued from previous page)

oping a sense of ownership of the ANA facilities by the ANA soldiers who will be stationed there.

“Everyone here needs to be a mentor,” said Army Maj. Frank Tedeschi, Operations and Maintenance Program manager.

The Off-Ramping Program will be performed through a training contract managed by AED and CSTC-A. The program entails three stages with various degrees or levels of training

The first stage involves selecting two types of candidates for training — skilled-trade workers and facility engineer managers. Those selected will be local hires from each garrison who only have to meet the ethnicity of that garrison. They will be tested for basic skills and literacy, and then they will attend a combination of on-site and off-site training.

Formal classroom training is the second stage. Skilled-trade students will be provided courses in electrical; plumbing; heating,



This base shows typical ANA base new construction.

ventilation and air conditioning; carpentry; painting; masonry; locksmithing; heavy equipment operation; generator operation and maintenance; and language.

The facility engineer managers will be offered courses in DPW management, budgeting and programming; office administration; logistics; warehouse management; purchasing; master planning and installation support report preparation; safety and fire protection; environmental protection; real property management; basic typing

skills; and the use of computer programs.

During the final stage, all students will return to their installations where they will receive on-the-job training. The skilled-trade students will be paired with selected O&M contractor craftsmen, and the facility engineer managers will be partnered with O&M contractor facility managers.

After completing this last phase of training, the students will undergo testing. Graduates will be awarded certificates.

“Graduates will be given an appropriate increase in pay, so that they won’t take their skills elsewhere,” said Tedeschi. “We need to make it financially attractive for them to stay on the base and take care of it.”

Success for the Off-Ramp efforts will require the full support of the ANA senior leadership. The facility engineer staff will need to be held responsible for overall O&M and accountable for tools, parts and materials.

“If we only build and maintain, we have not done our job,” Kan said. “We have to mentor. We have to develop Afghans.”

POC is Orrin M. Israel, deputy branch chief, O&M, AED; 540-678-1949, orrin.m.israel@usace.army.mil.

Brenda L. Beasley is a public affairs specialist, AED, U.S. Army Corps of Engineers.



This medical clinic in Kandabar, Afghanistan, was built by AED for the ANA.



Building Information Modeling to benefit entire facility life cycle

by Beth Brucker

A recent study by the Stanford University Center for Integrated Facilities Engineering showed that, based on 32 major projects using Building Information Modeling, some of the major benefits include:

- up to 40 percent elimination of unbudgeted change orders;
- cost estimation accuracy within 3 percent;
- up to 80 percent reduction in time to generate a cost estimate;
- savings of up to 10 percent of the contract value through clash detections; and
- up to 7 percent reduction in project time.

With the Army engaged in the largest Military Construction program since World War II — nearly \$70 billion from 2008-13 — it is easy to appreciate the savings in public funds that will be achieved using BIM.

As the Corps of Engineers continues down the path of BIM implementation via its Roadmap (see <https://caddim.usace.army.mil/BIM>), it is important to stay focused on both the real intent and the benefits that can accrue. BIM is not just a three-dimensional computer-aided design model. BIM is a process of generating and managing facility data throughout the life cycle, from planning and design, operations and maintenance, through removal and disposal. The goal is to capture information appropriate to stakeholders at each step of the life cycle, making their jobs easier and more efficient, and resulting in better quality buildings.

As Corps' districts concentrate on BIM training and development efforts, many activities are underway by the Corps, other federal agencies and industry — nationally and internationally — in developing standards for achieving this life-cycle management of BIM data. Working with the National Institute of Building Sci-

ence's BuildingSMART Alliance, the Corps is helping develop information exchange standards in the areas of construction to operations handoff, energy, quantity takeoff, spatial compliance, specifiers' properties and discipline coordination.

While these standards are evolving, designers and engineers working in the green building area can already find significant opportunities for the use of BIM. Buildings modeled with the appropriate BIM data can be analyzed for energy efficiency, performance, daylighting and use of sustainable materials. BIM could also be used to track Leadership in Energy and Environmental Design credits from design through commissioning and occupancy of the building.

The construction industry is making rapid progress in the use of BIM for construction schedule integration, logistics, sequencing, quantity takeoff, estimating and BIM-driven prefabrication. As more components of facilities can be fabricated and created in ideal factory conditions, less material waste and safer working conditions are some of the most far-reaching benefits of BIM to date.

McGraw-Hill's recent *SmartMarket Report* reported that even though architects are the major BIM users, contractors are expected to see the greatest increase in BIM usage in 2009. According to the report, 38 percent of contractors in 2009 will be heavy users of BIM, up from 23 percent in 2008.



Design and BIM work for the U.S. Army Reserve Center at Fort Meade, Md., is completed through Louisville District's Army Reserve Support Team. Graphic courtesy of Mason and Hanger Group

The *SmartMarket Report* also stated that owners expect to see only moderate increases in BIM use compared to others. This expectation appears to be due to cost concerns for creating the BIM data and maintaining the BIM data in as-built/as-is condition. It also could be that facility management, maintenance and operations applications haven't been fully integrated into the process. The Construction Operations Building Information Exchange standard has been developed to address this gap in interoperability between the design, construction, and operation's technologies.

The Corps' long-term BIM strategy is to use BIM as the process for generating and managing facility data throughout the life cycle, allowing stakeholders from any stage in the life cycle to access reliable and consistent information about Army facilities. This includes asset management, sustainment management, and condition and functional assessment of facilities for senior management analysis.

POC is Beth Brucker, 217-373-7293, Beth.A.Brucker@usace.army.mil.

Beth Brucker is a research architect at the Construction Engineering Research Laboratory in Champaign, Ill. Dana Finney, CERL Public Affairs, contributed to this article.



Acronyms and Abbreviations	
BIM	Building Information Modeling
CERL	Construction Engineering Research Laboratory



Fort McCoy builds IED-Defeat Complex to train Soldiers in real-world scenarios

by Rob Schuette

Work is on track to have an Improved Explosive Device-Defeat Training Complex completed by spring at Fort McCoy, Wis., to serve all military personnel training at the installation.

The \$933,000 training complex will have two IED lanes, each about six kilometers long, according to Terry Hoff, range officer for the Fort McCoy Directorate of Plans, Training, Mobilization and Security. The training areas will include traffic circles, divided highways, guard rails, overpasses, canals and other features.

These are all landscape or terrain features that personnel likely would encounter during overseas in-theater deployments or other contingency operations, Hoff said. Urban facades and facilities — such as search houses, typical business facilities and courtyards — also will be established on the lanes.

“The lanes will have a high-tech feel and train military personnel on the latest IED techniques to give them more realism,” Hoff said. “We installed structures, such as the guard rails, whenever possible where it provided the necessary training and also made sense to make the routes safer.”

The two lanes should provide enough capacity and throughput to meet the training needs for any units that want to conduct IED training at Fort McCoy, he said. The units using the complex will have to be large enough to provide opposing forces and observer-controller-trainer personnel.

Personnel will have access to the latest devices used to search, detect and protect troops from IED threats, such as SPARK (self-protection adaptive roller kit), which can be used with a Humvee; cyclone blowers; metal detectors; and vehicle-borne IED



Employees from Fowler and Hammer Inc., of La Crosse, Wis., begin groundwork to construct a lane of the IED-Defeat Complex at Fort McCoy. Photo by Rob Schuette

simulations, Hoff said.

The lanes can be used separately or together to serve the largest number of troops. The lanes will have standard training features that are found at other IED training lanes, but variations are allowed so the differing organizations have flexibility to construct lanes to meet their needs and material availability.

In Fort McCoy’s case, that includes having personnel participating in the Troop Projects program complete some of the work, such as creating the road and traffic circles on the first IED lane.

Hoff also worked with and sought input about the IED-Defeat Complex from personnel in the 181st Infantry Brigade. The 181st is responsible for coordinating mobilization training at Fort McCoy.


1st. Lt. Ryan Gore, 181st IED-defeat officer in charge, and his IED-defeat non-commissioned officer in charge, Sgt. 1st Class Dan Maurer, worked with Hoff to make the IED-defeat lanes as realistic as possible. Gore brought the experience of three deployments to the task, while Maurer, who has deployed five times, has also run the IED training that the 181st offers.

“We really wanted a search house included, because personnel should be prepared to do a systematic search through buildings in-theater,” Gore said. “The other items are things that would be seen in-theater, which we have seen during our deployments.”

Even though many of the personnel in units being deployed have been deployed previously, many people in Reserve-component units are new and haven’t been deployed, Gore said. It is very important for them to see realistic IED scenarios before they are deployed.

“This will be a great asset for National Guard and Army Reserve Soldiers conducting any type of training, including extended combat training, here,” Gore said. “In addition to giving personnel who haven’t been deployed a chance to see these things, it gives their officers and NCOs a great training aid to teach them about it.”

POC is Terry Hoff, 608-388-4629, terry.hoff@us.army.mil.

Rob Schuette is on the staff of The Real McCoy. This article is reprinted with permission. 

Acronyms and Abbreviations	
IED	improvised explosive device
NCO	noncommissioned officer



Fort Leavenworth saves energy, money with electric cars

by Becky Steed

Fort Leavenworth, Kan., is getting green — environmentally speaking — and saving money with energy-efficient ingenuity. Eight electric vehicles have been added to the growing fleet of efficient government transportation, bringing the garrison's total to 13.

The original five vehicles, purchased from Global Electric Motorcars for about \$10,000 each, run solely on gel cell batteries. The vehicles plug into an outlet to recharge. They stay charged for around eight hours and reach speeds up to 35 miles per hour.

"It's perfect for around here, because the top speed [on post] is 35 miles per hour," said Debbie Hazelbeck, an environmental protection specialist with the Directorate of Logistics and Public Works. The purpose of the vehicles is short distance commuting for meetings and daily government tasks.

"It's not hard on the engine," she said. "You just turn it on and go."

Compared to gasoline-dependent vehicles, the GEMs are virtually maintenance-free and cheap to run.

"A GSA [General Services Administrative] sedan costs \$233 a month and 19 cents a mile, which is \$36,348 for a year's lease for 13 vehicles plus mileage and fuel," said Debbie Palmer, chief of the Business Operations and Integration Management Division. "We own these [electric] vehicles and have no lease, mileage or fuel costs other than the minimal amount it costs to charge the vehicles."

According to an average calculation the Environmental Office performed using GEM's web site, the cost to run a gas-powered vehicle 20 miles a day at \$2 a gallon is around \$742 a year. The cost to run a GEM vehicle is less than \$40 a year for the same mileage.

"Any way that we can save funds in one area to help support the Army mission is a good business practice," Palmer said. "We also have more vehicles available to our work force so they do not use their POVs

[personally owned vehicles] to conduct government business."

While the military has been moving toward energy-efficient cars for a while, the local opportunity came from Dave Tousseau, hazardous waste manager for the Directorate of Logistics and Public Works.

"When I was with Marine Corps Logistics Base in Barstow, Calif., I was the pollution prevention manager for the Environmental Division. I had gone to a conference and seen these vehicles on display," he said.

After contacting various military bases that were using the vehicles, Tousseau received only positive feedback from all the sources. He set up a trial period at the post, and the rest is history.

Looking toward the future, officials purchased solar recharging pods so that the vehicles could be recharged using solar power instead of electrical outlets.

The Energy Policy Act of 2005 set a goal of using 3 percent of federal electricity consumption from renewable energy through 2009. The goal increases nearly 5 percent by 2013. Executive Order 13423 breaks down how the government will execute this plan. The GEMs will help Fort Leavenworth meet the federal mandates.

On a local level, Tousseau and his office have also initiated a printer cartridge reuse program. The program has saved more than \$10,000 by making available new printer cartridges that have been turned in



A Fort Leavenworth GEM is "refueled." The garrison uses GEMs for government transportation on post. Photo by Becky Steed

for recycling to the Environmental Division, he said.


He has also started a battery turn-in program for the post. Two containers, located at the entrance to the post exchange, collect alkaline batteries and rechargeable batteries respectively. People may drop them off at the Environmental Division, too.

The division also takes "e-waste" — electronic waste, such as microwave ovens, computer components, printers, fans, televisions and others — and sends it out to be recycled.

There is a Household Hazardous Waste Collection Point on post, too. Anyone may pick up useable paints, cleaners, aerosols and pesticides from the HHW Collection Point, but only post residents may drop off these materials. The HHW Collection Point also accepts used motor oil for disposal.

"These are usually the items that cannot be included in someone's pack-out when they transfer," Tousseau said.

POC is Becky Steed, 913-684-1723, rebecca.steed@us.army.mil.

Becky Steed is the media relations officer, Fort Leavenworth Public Affairs. 

Acronyms and Abbreviations

GEM	Global Electric Motorcars
HHW	Household Hazardous Waste



Fort Meade plans green design for DISA headquarters

by Alan J. McCombs

Workers cleared the land along Mapes Road and Cooper Avenue at Fort Meade, Md., last summer for the Defense Information System Agency's new home. While the scene looked like one of desolation, builders could see a green future for the site.

"The team has gone out of the way to make this a positive build," said Bill McCarthy, vice president of the Baltimore-based RTKL Associates Inc., which is the architectural and engineering firm for the project.

The new 1.1 million-square-foot DISA headquarters design incorporates multiple environmentally friendly features to lessen the facility's environmental impact. Spread beneath the facility's nearly 3,000 planned parking spots will be underground water basins designed to reduce and contain storm-water runoff. The facility's roof will be painted a light color to reflect light and reduce the amount of heat the building absorbs, hopefully lowering the cost to cool the facility.

"It's a smarter way to build," said David Ruderman, spokesman for the Army Corps of Engineers' Baltimore District, which is supervising the construction.

While construction has cleared about 2,500 trees on the 95-acre site, plans call for more than 1,700 replacement trees to be planted. Overall, about 14 acres of the land that was formerly part of the installation's golf course should be undisturbed, while roughly 28 percent of the area's mature oak and hickory climax forest will be retained, according to a summary of work produced by RTKL.

Eventual landscaping at the site should also reduce the facility's environmental footprint, said Lu Gay Lanier of the Timmons Group of Richmond, Va. Lanier is the manager for landscaping.

Plans call for virtually all of the plants

used in landscaping at DISA to be native to the region, thus allowing them to survive outdoors with minimal care or watering, she said.

"The long-term savings in water will be amazing," Lanier said.

In fact, the native species planted for the new headquarters should be far more environmentally friendly than those used for the original golf course. The old plantings required high maintenance, and the fertilizer and other items used to maintain them were a major source of phosphorous and nitrogen pollution, Lanier said.

Even the current process to construct the facility has been done with the environment in mind. The planned facility, which will house more than 4,200 employees, will be in the middle of the site and, ideally,

should eliminate the need for earthmovers to haul excessive amounts of dirt and debris off site, according to RTKL's summary. Small fences, roughly two- to four-feet in height, set up in downhill areas around the site will allow water to drain, but will prevent debris and other runoff from leaving the work area.

How much of the green improvements are reflected in the facility's price tag is unclear. However, while some initiatives come at a high cost, they should eventually save money, McCarthy said. ➤



Thousands of nonnative trees are razed to make way for the new DISA headquarters building but will be replaced by native trees. Photo by Sgt. 1st Class Dave Cardenas

DISA's new headquarters

by Rona S. Hirsch

The new 1.1 million-square-foot, multi-floor campus for the Defense Information System Agency headquarters will consolidate operations now located in multiple buildings in Arlington, Va. Plans include the construction of seven buildings, a nearly 3,000-vehicle parking lot and a fitness trail.

Total cost is about \$442 million. Site work started last summer. Relocation is scheduled to begin in October 2010.

The construction will be Fort Meade's first and largest operation in the Base Realignment and Closure process. Both DISA and the Joint Task Force for the Global Network Operations are expected to occupy the facility by September 2011.

Rona S. Hirsch is a staff writer with Fort Meade's Soundoff!



Acronyms and Abbreviations

DISA Defense Information System Agency



Bulletin describes floristic quality assessments

by Sarah Nemeth and Bruce MacAllister

Land and natural resource managers are keenly interested in the impacts that human disturbances in general, and military training in particular, have on Army installations. These types of impacts can be evaluated by conducting a floristic quality assessment.

An FQA is a quick, easy and widely accepted method to evaluate the ecological condition of a site based on its native floristic quality. Another advantage of this method is its use of an objective, quantitative index as opposed to subjective measures of quality, e.g., “high” or “low.”

The ease of use coupled with its objectivity make it a practical tool when time, funding and manpower constraints exist. The FQA method is especially desirable since land management personnel can make the simple calculations using existing data sets, such as Range and Training Land Assessment Program data.

Public Works Technical Bulletin 200-2-65, *Floristic Quality Assessments*, provides an overview of an FQA, describes the various FQA indices and how they are calculated, and identifies sources of information for “coefficients of conservatism,” called C values, used in the computations. The PWTB also provides guidance on how to



A floristic quality assessment can document the presence of nonnative and native species, such as the common St. John's Wort. Photo courtesy of U.S. Department of Agriculture

conduct an FQA, including step-by-step instructions; identifies common problems or issues that one might encounter when conducting an FQA; and presents an actual example of an FQA using data from a military installation.

The concept of species conservatism forms the basis of an FQA. Species conservatism is composed of two facets —

- the degree of tolerance to disturbance and
- the degree of fidelity, or faithfulness, to a particular habitat or environment.

The degree of habitat fidelity is the extent to which an individual species is likely found in areas relatively unchanged

from conditions believed to have existed prior to European settlement in the early 1800s. In other words, it measures the level of “naturalness” of an area.

The method uses the aggregate conservatism of all species found on a site as an indication of its ecological integrity. As such, it is important to note the difference between the concepts of conservatism and rarity. A species may be endangered, but may be found in highly disturbed areas that clearly are not of high conservative value. The converse may also be true; that is, many highly conservative species are not very rare. Thus, the identifying characteristic of a highly conservative site depends on the number of species present that reflect the characteristics found in pre-European settlement conditions.

FQAs can be used for a variety of purposes —

1. identifying natural areas,
2. facilitating comparisons among various sites for prioritization,
3. providing long-term monitoring of the natural quality of a site over time,
4. evaluating restoration efforts, and
5. for regulatory analyses, e.g., permitting decisions.

POC is Bruce MacAllister, 217-373-4439, bruce.a.macallister@usace.army.mil.

Sarah Nemeth and Bruce MacAllister are researchers at the U.S. Army Corps of Engineers' Construction Engineering Research Laboratory, Champaign, Ill.

Acronyms and Abbreviations	
FQA	floristic quality assessment
PWTB	Public Works Technical Bulletin

(continued from previous page)

“There’s no easy answer [on savings],” McCarthy said. “There’s not usually a savings of dollars on day one. Some do have first costs, but they pay themselves off.”

All of the environmental efforts should put the facility on track to the mid-level Silver rating from the U.S. Green Building Council, a nonprofit organization based in Washington, D.C. Beyond any energy savings for the facility, DISA leaders hope the finished building will provide an attractive place for employees to work,

said agency spokesman James Campbell.

“Today’s worker is increasingly more sensitive to environmental concerns,” Campbell said. “The leadership of DISA sees having an environmentally friendly facility as both a retention incentive and a recruitment incentive.”

POC is David Ruderman, 410-962-7536, david.j.ruderman@usace.army.mil.

Alan J. McCombs is a staff writer with Fort Meade’s Soundoff!



Fort Stewart restores longleaf pine, wiregrass ecosystem

by Broc Davis and Gary Hart

When the first European settlers arrived on this continent, there were about 92 million acres of longleaf pine savannas stretching south from Virginia to Florida and westward to Texas. Today, less than 3 percent — about 2 million acres — of this important ecosystem remains, making it one of the most imperiled habitat types in our nation.

Fort Stewart, Ga., has more than 150,000 acres of upland forests that were once part of this vast pine savanna. Those acres were sparsely covered by pines but with a thick ground cover consisting of grasses, forbs and short shrubs. The installation's efforts to re-establish and preserve this longleaf pine and wiregrass ecosystem have met with a success that also helps sustain its training mission.

This unique ecosystem is among the most diverse in the world, rivaling the species richness of tropical rain forests and containing rare plants and animals not found elsewhere. A drive-by glimpse of a longleaf pine forest might suggest that it is composed of only two species — longleaf pine (*Pinus palustris*) and wiregrass (*Aristida beyrichiana*), but this is not the case.

The understory, or ground cover, may contain 150 to 300 plant species per acre, including palmetto, bunch grasses, blueberries, sunflowers, pine lilies (*Lilium catesbaei*) and many more native wildflowers. This ecosystem is also home to more breeding birds than any other Southeastern forest type, about 60 percent of the amphibian and reptile species found in the Southeast, many of which are found

nowhere else, and at least 122 endangered or threatened plant species.

At Fort Stewart, the longleaf pine ecosystem is home to many federal- and state-listed threatened or endangered species, like the red-cockaded woodpecker (*Picoides borealis*), eastern indigo snake (*Drymarchon corais couperi*), frosted flatwoods salamander (*Ambystoma cingulatum*) and the Georgia-plume (*Elliottia racemosa*). Many uncommon and rare species such as the Bachman's sparrow (*Aimophila aestivalis*) and hooded pitcher-plant (*Sarracenia minor*) also thrive there.

The longleaf pine and its associated species are fire-dependent, meaning that fire plays a vital role in sustaining this ecosystem. Many of the plants, like wiregrass, require fire to stimulate flowering and seed production.

Frequent fire also removes hardwood trees, which compete for limited resources and, in the absence of fire, crowd out the less shade-tolerant pines. Fire also burns and consumes ground litter, which prepares a seedbed for longleaf pine and wiregrass seed germination.

A number of animals benefit from prescribed fire as it creates open habitats and promotes nutritious forage when plants sprout back following fire. Some of the wildlife species of concern — like the gopher tortoise (*Gopherus polyphemus*), the red-cockaded woodpecker and the frosted flatwoods salamander — are adapted to, and dependent on, fire to maintain their habitats.

In the 1990s, installation natural resource managers and military trainers made an important discovery. Red-cock-



Fort Stewart works to restore this longleaf pine and wiregrass forest. Photos courtesy of Fort Stewart Fish and Wildlife Branch

aded woodpecker habitat, maintained by frequent fires that create open forest conditions, as characterized by longleaf savannas prior to the arrival of European settlers, was an attractive training landscape. So Fort Stewart made restoring the forest to presettlement conditions its top management priority, and the result has been a win-win for trainers and wildlife.

In areas where longleaf pine and wiregrass are still present — about 110,000 acres — this can be achieved by the increased use of prescribed fire in the growing season and commercial harvest to thin out smaller pines and remove hardwoods. But in areas where longleaf or wiregrass has been eliminated by farming and other management practices — about 40,000 acres — a more intensive approach is necessary.

Wiregrass is crucial to this habitat since it provides the main fuel for prescribed fire, but wiregrass disappears from areas where the soil has been heavily cultivated or where fire has been excluded for long periods of time. To address the ecological health of an area, natural resource managers attempt first to restore native ground layer plant communities, primarily wiregrass, in current and former longleaf pine habitats. Since there are few consistent commercial sources of wiregrass seed, ➤



A worker harvests wiregrass seed at Fort Stewart.



Study to assess 30-year installation water issues

by Elisabeth Jenicke

While water is generally considered a renewable resource, growing challenges with adequate, sustainable access to high-quality water resources are resulting from population growth; surface and groundwater contamination; globally increased water demand for agricultural, industrial and personal uses; rising global and regional temperatures; and rising water demands for alternative energy production. Issues with access to fresh water supplies vary; however, they are growing in extent and duration and will contribute toward political strife and regional instability in many parts of the world.

An Army Environmental Policy Institute study seeks to inform installation and Army staff about the expected impact of water issues on installations and to recommend policy options to lessen these impacts while meeting the Army's water conservation goals. The U.S. Army Engineer Research and Development Center is conducting the study for AEPI.

Acronyms and Abbreviations

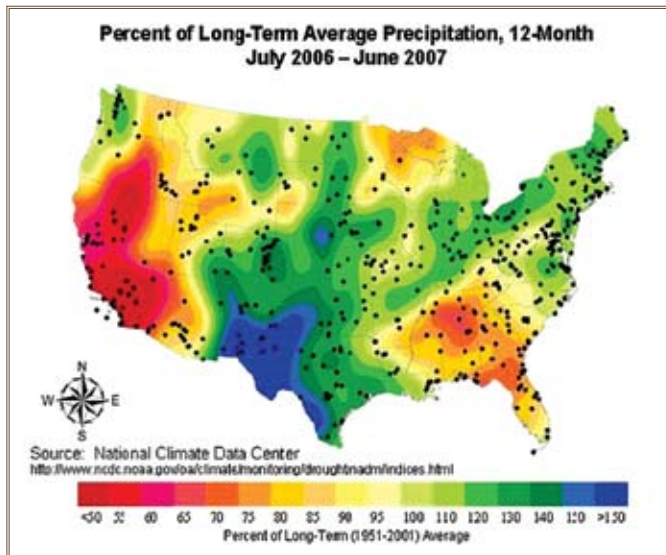
AEPI	Army Environmental Policy Institute
CERL	Construction Engineer Research Laboratory
ERDC	(U.S. Army) Engineer Research and Development Center

(continued from previous page)

they harvest the seed grown on the installation, and then sow it on their ecological restoration sites.

Wiregrass requires a burn during the growing season, April to June, to produce abundant seed. The wiregrass seed matures and is harvested during the fall, October to December, using a flail-vac seed harvester. The seed is stored in a ventilated area and then planted on prepared areas with exposed mineral soil in midwinter, from January to February.

Planting is done using a hay bale chopper/blower, and the seed is blown at a rate of 10 pounds to the acre. Wiregrass that is capable of carrying a fire that will control any hardwoods or undesirable pine



This map of watersheds shows recent precipitation (July 2006-June 2007) compared to long-term precipitation (1951-2001). Graphic courtesy of ERDC-CERL

Water issues of concern — adequate supply, increased cost of production, quality, habitat degradation and salinity — are already affecting military installations and operations in locations within the nation and across the globe. These impacts will grow in scale and severity in the future, requiring better understanding and forecasting of how limited water supplies and

species that might compete with longleaf seedlings establishes in two to three years. During fall or winter of the year following a growing season burn, longleaf pine seedlings can be planted.

Using this process, Fort Stewart restores about 150 acres a year. More than 800 acres have been restored to longleaf pine and wiregrass on the installation. Once an area is restored, fire, especially during the growing season, maintains this ecosystem.

Restoration efforts not only benefit the environment by promoting biodiversity but have also proven beneficial to military training efforts. The open pine savannas are better suited for visibility and maneuvering troops than the overgrown forests that result from lack of fire.

availability of adequate water both on- and off-post. Although individual studies have been completed as a result of localized threats to water supply, a comprehensive review of water sustainability at various Army installations in all regions has not been completed.

The AEPI study includes a series

Fort Stewart takes pride in restoring such a rare and unique ecosystem that serves as the training platform for the fine men and women that serve the country. Its presence is an indicator of the ecological health of the installation's forests.

Continuing to do its part to restore, maintain and protect this ecosystem also sustains the Fort Stewart and Hunter Army Airfield military missions. Environmental stewardship is a "win-win" for the Army.

POCs are Broc Davis, 912-767-8795, broc.c.davis@us.army.mil; and Gary Hart, 912-767-6665, gary.hart@us.army.mil.

Broc Davis and Gary Hart work in the Fish and Wildlife Branch, Environmental Division, Directorate of Public Works, Fort Stewart, Ga.



USAG Ansbach encourages energy audits to save energy, dollars

by Ron Toland

Saving energy saves valuable dollars. In addition to being good for the environment, it is the right thing to do, according to Regina Kranz, utility engineer and energy manager, Directorate of Public Works. And it is easy.

“Our environment benefits if everybody starts saving energy at the same time,” Kranz said.

The DPW has designated the reduction of energy consumption as the most significant environmental aspect for the garrison to target for improvement — for now and the future. Kranz is working to educate everyone on post to know that taking a few, simple, no-cost energy conservation measures, like an energy audit, can really pay off.

“Conducting small energy audits within our homes — like turning down the heat, turning off unneeded lights and appliances, and closing doors to unused rooms — not only positively impacts our environment, but also has positive economical impacts

too,” she said.

A home energy audit is often the first step in making homes more energy efficient, can help people assess how much energy their home uses and evaluate what measures they can implement to improve efficiency, she said.

Toward that end, Kranz offers five simple, no-cost energy conservation measures to Ansbach residents to secure a clean energy future.

Choose Energy Star – Look for the Energy Star label when shopping for new appliances; it shows the most energy-efficient product that will save money and protect the environment.

Make the switch to compact fluorescent

Acronyms and Abbreviations	
CFL	compact fluorescent lamp
DPW	Directorate of Public Works
USAG	U.S. Army Garrison

lamps – CFLs can be used to reduce energy use and power demand by more than 70 percent, compared to classic ones.

Set back thermostats – at night

Turn off– Lights and TVs, computer monitors, printers and other devices when not in use or during unoccupied periods of time, and at night when not controlled by a clock.

Slay the energy vampire – Turn off power strips or unplug electronics. Power strips can turn off several appliances with the flip of one switch. Computers, TVs, VCRs, phone chargers and other devices use energy even when turned off. Stand-by mode may use as much as 20 percent of the energy used during normal operations.

POC is Regina Kranz, DSN 467-2998, regina.kranz@us.army.mil.

Ron Toland is with U.S. Army Garrison Ansbach Public Affairs. 

(continued from previous page)

of planned assessments ranging from a national screening for regional water supply vulnerability to installation-based analysis of water-supply and -demand trends. These assessments will evaluate the vulnerability of Army installations to potential water shortages over the next 30 years. Factors that will be considered include projected military growth, regional population projections from the U.S. Census Bureau, water conservation opportunities and potential variation of regional weather patterns.

Installation assessments are underway at Fort Bragg, N.C., and Fort Bliss, Texas. The study includes an evaluation of those consumption reduction efforts made to meet the requirements of Executive Order 13423, which requires 2 percent reduction per year from 2008 to 2015, using 2007 as a baseline.

Products of the study will recommend potential Army policy actions to increase

or stabilize installation water supply and to reduce or optimize installation water demand. Options under consideration include water conservation measures, technological solutions, and operations and maintenance actions. These options will be tiered to respond to varying degrees of supply scarcity and demand for reuse of gray water.

National watershed assessments provide classes of installations based on the “health” of the associated watersheds. This data allows prioritization of regions for detailed analysis. The Sustainable Installations Regional Resource Assessment methodology, one example of a national level assessment, was applied to 2,250 Hydrologic Unit Code-8 watersheds.


This analysis considered 23 water quality and quantity indicators in determining watershed health. Regional assessments provide the specific information necessary to formulate policy measures that support a sustainable water future and attainment of the Army’s triple bottom line: mission,

environment, community.

Installation assessments will consider all supply and demand within the water region. For example, municipal users will draw water from the same supply as installations located within a watershed region. Future Army water sustainability measures will have to be coordinated with municipalities and districts that use the same watershed or aquifer.

The results of the AEPI study will improve the Army’s water use policies and coordination with stakeholders. They will also enable better planning and application of system upgrades, including best management practices for infrastructure such as water reuse technologies, conservation measures, and leak detection and repair.

POC is Elisabeth Jenicek, 217-373-7238, elisabeth.m.jenicek@usace.army.mil.

Elisabeth Jenicek is a principal investigator mechanical engineer, ERDC-CERL, Champaign, Ill. 



With a new year comes change

by Lt. Gen. Robert L. Van Antwerp

The arrival of 2009 brings many changes within the federal government and with Career Program 18, Engineers and Scientists – Resources and Construction. With an aging infrastructure and an unprecedented workload in a tumultuous economic climate, the U.S. Army Corps of Engineers is positioned to make a historic contribution to the vitality of this great nation.

President Barack Obama took the oath of office Jan. 20 to become our 44th president. A new administration brings new civilian leadership and ideas for accomplishing the mission of government. Keep excelling at your job and energize your talent to meet our goals of delivering a superior performance, setting the standard for our profession, making positive contributions to our country and around the world, and building our engineer bench — and our nation — to last.

CP-18 Proponency Office

We are finally staffing our full-time proponency office. For the first time, CP-18 will have a dedicated staff to manage all aspects of our career program and help all 14,000 Army employees who are part of it.

The CP-18 Proponency Office will be physically located at Headquarters, U.S. Army Corps of Engineers in the Directorate of Human Resources. It will operationally report to Bob Slockbower, the functional chief representative, who is based at USACE's Southwestern Division. With the wonders of virtual communications and regular in-person meetings, we anticipate a smooth, seamless working relationship all around.

The first hire was Dorothy Smith, from Headquarters, Installation Management Command. Dorothy was instrumental in the development and operations of IMCOM's professional civilian development program, including promoting Armywide training opportunities, such as senior service college attendance and the Army Senior Fellows Program.

She will be overseeing the day-to-day operations of CP-18 as well as providing guidance to careerists on training. Dorothy attended the December meeting of the CP-18 Career Program Policy Board in Washington and is more than ready for the challenges ahead. I welcome Dorothy and her Family as she joins the CP-18 Team.

Our second position is the full-time career program point of contact, who will develop both strategic and operational plans for the overall success of CP-18. We interviewed several outstanding candidates, each of whom brought energy and style to the panel. One individual simply blew the panel away, showing the initiative, drive and desire required to take career development to a higher level. I welcome Donna Crawford who joined us in January. Donna comes to us from Headquarters, Department of Army, Chief Information Officer/G-6, where she was part of the Career Program 34 proponency group.

Now you may ask, "Where is Ed Gauvreau going?" The short answer is, "Not very far." Ed is still at Headquarters USACE and is now the chief of Programs Branch in the Installation Support Community of Practice.

However, Bob has assured me that Ed will still be a vital member of the CP-18 Team with the new role of transitioning his institutional knowledge and responsibilities to the CP-18 Proponency Office. He will



Lt. Gen. Robert L. Van Antwerp
Photo by F.T. Eyre

remain a critical asset and advisor for career development and management, and will be available to lend a hand to anyone wanting advice.

Leadership Development Program

We recently closed nominations for the next class of the CP-18 LDP. There are 11 new candidates from throughout the Army, with USACE's Southwestern Division leading the way with four nominations. These highly motivated, mid-level careerists are jumping headlong into the LDP curriculum of formal classroom training, mentoring and six-month developmental assignments outside their current jobs and locations.

CP-18 employed members of last year's class to help the program move forward. Dawn Daw from Fort Huachuca worked on strategic communications, and now, Anjna O'Connor of Southwestern Division is taking that role. Anjna will be looking for input from interested careerists and managers. You can reach Anjna at 469-487-7095 or by e-mail at anjna.p.o'connor@usace.army.mil.

University Training Program

We are calling for applications for the CP-18 University Training Program for the academic year 2009-2010. This ▶

Acronyms and Abbreviations	
CP-18	Career Program 18, Engineers and Scientists – Resources and Construction
IMCOM	Installation Management Command
ISCoP	Installation Support Community of Practice
LDP	Leadership Development Program
USACE	U.S. Army Corps of Engineers



New Year's career resolutions – Taking care of No. 1

by John Krajewski

As 2009 begins and we make resolutions to be kind and nice to everyone, also remember to be a little selfish and make a New Year's resolution to spend some time looking out for yourself and your career.

Some possibilities —

- Review your career and develop a take-charge career to-do list for 2009.
- Develop a five-year career goal and companion Individual Development Plan. Follow your organization's process. Installation Management Command employees may check out <http://www.imcom.army.mil/site/hr/wfdgenidp.asp>.
- Are you familiar with the Army's new Civilian Education System and the progression of civilian courses? Courses and travel are centrally funded. Check out the Army Management Staff College site, <http://www.amsc.belvoir.army.mil>.



John Krajewski
Photo by Mary Beth Thompson

- Check out the Headquarters, IMCOM Workforce Development web site, <http://www.imcom.army.mil/site/hr/workforce.asp>, for general career information plus current training and developmental opportunities.
- Check out the new and improved Career Program 18 Engineers and Scientists Career Program web site, <https://ekopowered.usace.army.mil/cp18>, for career development information, leadership development, training and upcoming events.

- Check out the U.S. Army Corps of Engineers Learning Center, Huntsville site, <http://pdsc.usace.army.mil>, for training courses. More than 20 courses are Public Works-specific and many additional courses enhance technical qualifications.
- Check out the official Army Civilian Personnel site, <http://cpol.army.mil/index.html>, for career information, jobs listings and long term training opportunities.
- Periodically check out the official U.S. Army site, <http://www.army.mil>, to keep current with Army issues.
- Look for developmental assignments that expand your background and offer supervisory experience.
- Look for Army executive and long-term training and development opportunities — the War College, Harvard, Federal Executive Institute, others.
- Do you have a master's degree? Is it time to start? Seventy percent of all CP-18 senior level, GS-14-equivalents and above have master's degrees. Your organization may provide reimbursement for ➤

Acronyms and Abbreviations

CP-18	Career Program 18, Engineers and Scientists – Resources and Construction
IMCOM	Installation Management Command

(continued from previous page)

program provides an opportunity for careerists to pursue courses that may lead to an advanced degree in either a technical area of expertise or in management, such as a master's of business administration or public administration.

Specific details for the program will be sent to all CP-18 career program managers and posted on the CP-18 web site at <https://ekopowered.usace.army.mil/cp18>.

Web site refresh

We continue to improve the CP-18 web site, organizing the information to enhance accessibility and update basic program information. Along with the new Master Intern Training Program, we are adding professional development maps for each job series, based on a template developed by the Army Training Support Center.

Demi Syriopoulou, as part of her detail to CP-18, worked with the USACE Learning Center and the communities of practice to develop a plan to implement these user-friendly professional development maps for the 30 most populous job series within the career program over the next three years. She completed her assignment and returned to her duties in the USACE Research and Development Directorate. I thank Demi for improving our road maps for career development.

Again, we are always seeking more disciplined people and thoughts to refresh CP-18, making our career program stronger and more relevant for all careerists. If you have a passion for a particular area, please contact Bob at robert.slockbower@usace.army.mil.

Importance of being passionate

I again emphasize the attribute of pas-

sion from John Maxwell's "Talent Is Not Enough." The one constant that we kept in mind while selecting the two permanent members of the CP-18 Proponency Office, as well as in looking for volunteers to help the program, is the passion for career development. Passion drives people to excel in their chosen profession or vocation, including building the bench of future professionals and leaders within CP-18.

Continue to join me in creating a more robust career program that benefits all employees at all times in their careers. Join me in moving out and BUILDING STRONG.

Lt. Gen. Robert L. Van Antwerp is chief of engineers, commanding general of the U.S. Army Corps of Engineers and functional chief of CP-18.



Make a difference in Afghanistan

by Orrin M. Israel

Civilian employees have deployed in support of military operations throughout history. They support humanitarian relief, peace operations, conflicts and war. Civilians will continue to be needed for these types of operations in the future. The work is fast-paced, interesting, challenging and rewarding.

The U.S. Army Corps of Engineers has an ongoing mission, one unprecedented in scope, to assist in rebuilding both Iraq's and Afghanistan's infrastructures in support of the Global War on Terror. Civilian employees are vital to the success of this mission.

The Afghanistan Engineer District, established in 2004, is part of a larger engineer community in the theater that includes the U.S. Navy, Air Force and joint command, and the Afghan National Army and civilian contractors. AED comprises seven area offices, 22 resident offices and six project offices with a current staff of about 350. Manning strength has been



Orrin M. Israel
Photo by Brenda L. Beasley

approved to increase to 626 because of the workload.

AED employees manage projects and provide engineering, contracting, construction management, real estate, safety, and operations and maintenance services. For example, AED is currently constructing corps support battalion facilities, troop medical clinics, hospital additions and

training ranges for the ANA. AED is also constructing Afghan National Police facilities at 323 sites nationwide.

After the facilities are constructed and turned over to the Afghanistan government, O&M responsibilities come back to AED in the form of a \$100 million countrywide O&M contract. Currently, AED provides administration, oversight and quality assurance for maintenance and repairs to facilities at 26 locations in and around Kabul and 15 other locations. Those 15 sites are a mix of separate battalion- and brigade-size ANA installations throughout the country.

The living conditions for AED employees are quite comfortable. Most live in a single dorm-sized room with high-speed Internet access and telephones. AED employees can watch DVDs, send e-mails or surf the Internet in their spare time.

All rooms are equipped with individual heating and air-conditioning units. Dorm-sized refrigerators and microwaves are available in shared public areas, and most lavatory facilities are also shared. Nearly all locations have a well-equipped gym. ➤

Acronyms and Abbreviations

AED	Afghanistan Engineer District
ANA	Afghan National Army
O&M	operations and maintenance


(continued from previous page)

college courses.

- Have you completed your engineer-in-training and professional registrations? Completion confirms your professional credentials for Directorate of Public Works positions and is required for many Corps of Engineer positions.

Do a little for yourself in 2009.

POC is John Krajewski, 703-602-0528, John.Krajewski@hqda.army.mil.

John Krajewski is the CP-18 program coordinator, Public Works Division, Headquarters, INCOM. 



AED's Pat Cason turns over keys to an ANA official for a completed construction project in Kabul, Afghanistan. Photo by Bruce Huffman, AED Public Affairs



Master planning classes offered in 2009

by Andrea Wohlfeld Kuhn

Major improvements for 2009 Proponent Sponsored Engineer Corps Training courses on master planning are that additional classes have been added and that all classes are now open to all interested parties, including contractors, private citizens, and state, city and county employees.

Course 948

Real Property Master Planning Visualization Techniques

Feb 9-12, Huntsville, Ala.

This 32-hour course provides planners with a fundamental overview of the easy-to-use planning visualization tools SketchUp and Google Earth, to help plan military installations. Students will receive hands-on instruction on the use of the software and will produce several basic area development proposals using both SketchUp and Google Earth.

Course 075

Real Property Master Planning

May 18-22, Portland, Ore.

Extra class added! Due to increased demand, this session was added to the schedule. This course is an introduction for planners and real property specialists. It provides an overview of the planning

process, with an emphasis on general planning principles that are applicable not only to the Army but to all government agencies. Emphasis is placed on developing a real property master plan, facilitating stakeholder participation, managing a real property planning board, site planning charrettes and sustainable development concepts.

Course 326

Master Planning Applied Skills

June 22-26, Huntsville

This class provides an overview and techniques to develop real property requirements and allowances and assess stationing actions.

Course 952

Advanced Real Property Master Planning


July 27-31, Huntsville

Through an intensive, hands-on workshop, students will use a planning charrette technique to develop an area development plan for a real world planning problem at an installation. Participants are required to have a fundamental knowledge of master planning and/or real property management.



To register or view course descriptions, go to <http://pdsc.usace.army.mil>, or contact Sherry Whitaker at 256-895-7425/7421 or at sherry.m.whitaker@usace.army.mil; or Andrew Browning at 256-895-7429 or at andrew.s.browning@usace.army.mil.

POCs are Jerry Zekert, 202-761-7525, jerry.c.zekert@usace.army.mil; and Andrea Wohlfeld Kuhn, 202-761-1859, andrea.w.kuhn@usace.army.mil.

Andrea Wohlfeld Kuhn is a Master Planning Team associate, Headquarters, U.S. Army Corps of Engineers. 

Acronyms and Abbreviations

PROSPECT	Proponent Sponsored Engineer Corps Training
----------	---

(continued from previous page)

To ensure that qualified civilian employees are available in adequate numbers, the Corps recruits people with the skills to meet worldwide mission requirements. AED is looking to fill several types of positions with individuals who have Public Works backgrounds —


- Quality assurance specialists
- Construction representatives
- General engineers
- Civil engineers
- Electrical engineers
- Mechanical engineers

- Program managers
- Project management specialists
- Real estate specialists

Status candidates — current federal government employees with career or career-conditional tenure — should use the Army's Resume Builder. Follow the instructions in the Army Resume Preparation Kit at www.cpol.army.mil. Once a resume is on file, an applicant can easily self nominate for Army vacancies, including those in Afghanistan, by clicking on the self-nomination button from the job announcement. Resumes may be updated at any time.

Those of us working in Afghanistan invite all those interested to join us. There is no experience — professional or personal — that is equal to working overseas helping a nation build and learn how to maintain its infrastructure, literally from the ground up.

POCs are Orrin M. Israel, 540-678-1949, orrin.m.israel@usace.army.mil; and Charles W. Bauer, chief, O&M Branch, AED, 540-678-1830, charles.w.bauer@usace.army.mil.

Orrin M. Israel is deputy branch chief, O&M, AED. 



Army master planning training starts another exciting year

by Jerry Zekert

The Army's Master Planning program kicked off another fiscal year by hosting the Real Property Master Planning Class in Norfolk, Va., Dec. 7-12. The Real Property Master Planning Class is one of five training opportunities offered annually to the Army, Department of Defense and the consulting and civilian community on the principles and practices of installation planning.

The class provided a fundamental overview of the practices of Army real property master planning and a framework for understanding the comprehensive process of installation planning. More than 35 students participated in a varied learning environment that included lectures, hands-on group exercises, a field trip and input

from leading experts from local city planning offices and related fields.

Attendees included planners from Japan to Europe. Several participants came from the other military services and the consulting community. The diversity provided a lively learning environment.

(Editor's note: For a description of other training classes, see the article "Master planning courses offered in 2009" on page 31.)

POCs are Jerry Zekert, 202-761-7525, jerry.c.zekert@usace.army.mil; Andrea Kuhn, 202-761-1859, andrea.w.kuhn@usace.army.mil; and Andrew Browning, 256-895-7425, andrew.w.browning@usace.army.mil.



Class participants work up a planning solution during the master planning course in Norfolk in December. Photo by Jerry Zekert

Jerry Zekert is the chief, Master Planning Team, Headquarters, U.S. Army Corps of Engineers.

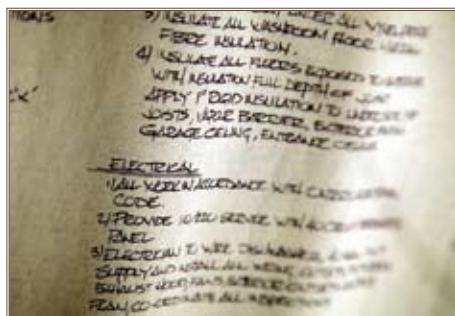


Acquisition career field transition ordered

by John W. Wehmanen and Michael Ostrom

The order has been issued! Dean G. Pops took pen in hand Nov. 21 and signed the long-awaited directive to the field. His signature officially directed that the process of reviewing and coding facilities engineering positions into the Acquisition Technology and Logistics Workforce begin in earnest. Pops is the principal deputy assistant secretary of the Army for acquisition, logistics and technology.

Compliance must be achieved by the Army within one year of the directive. Compliance occurs when the U.S. Army Acquisition Support Center has accepted the final Defense Civilian Personnel Data System download from the field, validated the coding of positions as Level 1,



2 or 3 and has entered the results into the Department of Defense Career Acquisition Personnel and Position Management System.

Once the results are in CAPPMS, affected individuals will be notified of their requirement to certify and will then have 24 months to comply. If you are a civilian employed by the government as a facilities engineering professional — regardless of whether you work for the Corps of Engineers, the Office of the Assistant Chief of Staff for Installation Management, the

Installation Management Command, the National Guard or the Army Reserve — you may very well be in a job that requires certification.

Others will discover that their next career path move finds them applying for a position that requires certification. Remember, this is a DoD program. In either case, the time is now to reflect on your future and start to become certified.

Senior professionals — those who expect to need or want certification at Level 3 — note that DoD has already held a highly successful pilot offering of FE 301, the course needed for Level 3. Regular offerings of this course have begun as well. Get yourself ready by going to <http://www.dau.mil> and registering for the first two courses, ACQ 101 and FE 201, as soon as you can. These first two are offered online, and they are required before you can attend the final, on-campus course. ➤

Acronyms and Abbreviations

CAPPMS	Career Acquisition Personnel and Position Management System
DoD	Department of Defense



Planning Great Communities Army symposium scheduled

by Jerry Zekert and Andrea Wohlfeld Kuhn

In conjunction with the Federal Planning Division of the American Planning Association's National Training Conference, the U.S. Army Corps of Engineers will once again host the Army Planning Symposium. This year's symposium is scheduled for April 21-22 at the Minneapolis Marriott City Center. The theme of the symposium is "Planning Great Communities."

The symposium provides an excellent opportunity for the Army's Master Planning Community of Practice to exchange information on successful practices and gain knowledge of current planning trends. In addition, other federal agencies, including the Air Force, Navy and NASA will conduct their respective symposia at the same time, thereby creating networking opportunities for an exchange of federal planning information.

There is no registration fee for the Army symposium. Topics will include —

- discussions of the update to AR 210-20, *Real Property Master Planning for Army Installations*;
- form-based coding and other new planning techniques the Army is advocating;
- sustainable planning; and
- best planning practices.

Since the agenda is still open, nominations for topics and presentations are welcome. Contact the POCs listed below if you wish to make a presentation.

Attendees are **strongly** encouraged to register for the Federal Planning Division's

National Training Conference, which immediately follows the Army Symposium on April 22, and offers sessions on topics ranging from sustainability to inter-governmental coordination, land-use compatibility and technical topics.

Last year's sessions included technical workshops on preparation for the American Institute of Certified Planners exam and Leadership in Energy and Environmental Design – Neighborhood Development proposed standards. It is expected that similar sessions will be offered this year.

Attendees are encouraged to register early and secure lodging as soon as possible. Although there are no fees to attend the Army Symposium, the National Training Conference registration fees start at \$200 and vary depending on when attendees sign up. The deadline for early registration is March 20, and the regular registration deadline is April 10.

Lodging goes quickly, so making reservations early is a wise move. Last year, more than 500 people attended the entire conference, and another great turnout is expected this year.

To register for the Army Planning Symposium, contact either Jerry Zekert or Andrea Kuhn at the POC information



Planners participate in a collaborative planning exercise at the 2008 symposium. Photo by Jerry Zekert

below. For more information on the Federal Planning Division and to register for the National Training Conference and secure lodging, go to www.federalplanning.org.

POCs are Jerry Zekert, 202-761-7525, jerry.c.zekert@usace.army.mil; and Andrea W. Kuhn, 202-761-1859, andrea.w.kuhn@usace.army.mil.

Jerry Zekert is the chief and Andrea Kuhn is an associate, Master Planning Team, Headquarters, U.S. Army Corps of Engineers.

(continued from previous page)

Pending updated guidance from agency chiefs and commanders, you can find more information in the July/August 2006 and July/August 2007 issues of *Public Works Digest*, available online at <http://www.imcom.army.mil/site/pw/digest.asp>. Or research the career field transition at the source, the Acquisition Support Center web site <http://asc.army.mil>.

POCs are John W. Wehmanen, 703-602-2084, john.wehmanen@hqda.army.mil; and Michael Ostrom, 703-602-3443, Michael.Ostrom@hqda.army.mil.

John W. Wehmanen and Michael Ostrom work in the Facilities Policy Division, Office of the Assistant Chief of Staff for Installation Management.

Call for **ARTICLES**

The March/April 2009 issue of the Public Works Digest will feature

Housing and Lodging

Deadline is Feb. 13

Submit articles to mary.b.thompson@usace.army.mil 202-761-0022



Ward guides Public Works Transformation

by Mary Beth Thompson

Big changes are coming for Installation Management Command Public Works, and Jeff Ward is where he likes to be — in the thick of it. Ward is overseeing the transformation as Public Works reconstitutes itself and prepares for the headquarters move to San Antonio, Texas.

“I really do like being in the know — being involved with such a wide variety of things that are going on in the Public Works Division,” he said. “I really enjoy that.”

Ward is dual-hatted as the deputy Public Works chief and the Engineering Branch chief. He came to this double position in early November from the Office of the Assistant Chief of Staff for Installation Management.

Ward earned his bachelor's degree in architectural engineering, with concentrations in structural engineering and environmental systems within buildings, from the University of Texas at Austin. His master's degree in civil engineering, with concentrations in structural engineering and engineering mechanics, is from Southern Methodist University.

He started his federal career as a structural designer with the Corps of Engineers' Galveston District.

“I designed flood-control features in the bayous of Houston and on the Gulf Inter-coastal Waterway along the coast of Texas,” Ward said. “And then I did the exact same thing with Jacksonville District for Florida and Puerto Rico.” He co-designed the cornerstone feature of the Everglades Restoration.

Ward then decided to pursue a job in construction management. He went to work in the Corps' Europe District offices in Heidelberg, Germany, working on



Jeff Ward
Photo by Mary Beth Thompson

all types of construction and renovation projects in Heidelberg, Mannheim and Darmstadt for the U.S. military. Ward also served temporarily as a project manager in Weisbaden.

He transferred to IMCOM Europe Region as a Family Housing program manager. He worked on renovation projects and the Army's first project to construct townhouses to replace “stairwells” in Europe. “Stairwells” is the common term used to describe the U.S. military's Family housing apartment buildings in Europe. Ward said he is eager to see the constructed townhouses, including 22 extremely energy-efficient homes that are a pilot for the Army within the project.

While living in Germany, Ward and his family pursued his favorite pastime — traveling. He especially enjoyed touring Venice, the Amalfi coast, the southwestern coast of Spain and southern Bavaria.

“Those are my favorite places,” he said. “I miss them, too.”

His next move was to OACSIM in Crystal City, Va., near the Pentagon. At OACSIM, Ward was a member of the Utilities and Energy Branch. He was in charge of utilities privatization and the *U.S. Army Energy and Water Campaign Plan for Installations*.

Ward's experience spanning 13 years with the Corps as a designer, a construction manager and a program manager taught him how the Corps is interrelated

with IMCOM restoration and construction projects. Working with IMCOM Europe helped him understand how the IMCOM regions work — how they interact with garrisons and the Corps. He saw the same types of projects from both the Corps and IMCOM viewpoints.

His work at Headquarters, Department of the Army at OACSIM rounded out his experience.

“I've hit multiple levels of design and construction for the Army,” Ward said.

Working for IMCOM, OACSIM and the Corps broadened his scope and has, perhaps, given him a unique perspective.

“I've seen some of the frustrations that regions experience dealing with HQDA,” Ward said. One of the things he wants to do is improve communications between headquarters and the field.

“We don't always get that part right, but it doesn't mean we're not trying,” he said. “What they [those working in the field] are doing affects Soldiers' lives and their Families, and, if they weren't there, it would not be getting done.”

In addition to his transformation responsibilities, he is in charge of business operations for Headquarters, IMCOM Public Works. He oversees the Public Works responsibilities within the various Army management systems, such as the Integrated Facilities System and the IMCOM Project Prioritization System.

The Public Works Common Levels of Services are another of his responsibilities, as well as assistance with oversight of the funding that flows through the division. Ward is also in charge when the chief, Don LaRocque, is away.

Overseeing the transformation consumes, and will continue to consume, a great deal of his time. “Transformation” refers to the change from a 16-person office in Washington to a 123-person office in San Antonio. It involves building a staff and keeping command and control functioning as people move into their new ➤

Acronyms and Abbreviations	
HQDA	Headquarters, Department of the Army
IMCOM	Installation Management Command
OACSIM	Office of the Assistant Chief of Staff for Installation Management



Hulbert tackles Army's mold problems

by Mary Beth Thompson

Being dubbed "Mr. Mold" may sound like a negative, but it's actually a positive. Benjamin Hulbert, the Army's mold man in chief, was given the nickname by his co-workers, because alleviating the barracks' mold situation is one of his responsibilities, and he is making progress.

Hulbert took on his position with Headquarters, Installation Management Command's Public Works Division in September. He is a member of the headquarters staff but works virtually from Rock Island Arsenal, Ill.

Hulbert was born and raised in Nebraska. He earned his bachelor's degree in mechanical engineering from the University of Nebraska, which he attended on a full swimming scholarship.

"All my kids were runners, though," Hulbert said. His children's interest in running explains his involvement in youth track. He runs a program, called the Mississippi Valley Track Club, for children ages 8 to 18 from April through July each year.

"I've been working with youth track for about 20 years," Hulbert said. "Right now, we're averaging about 120 kids in the program each summer."



Benjamin Hulbert
Photo by IMCOM-West

"We took 22 kids to Detroit to the AAU [Amateur Athletic Union] nationals last year and medaled eight times. They did extremely well," he said with a note of pride in his young athletes.

It may be only a few hundred miles from Lincoln to Rock Island, but Hulbert took a somewhat longer route from one to the other, including a stint overseas. He started his working career close to home, though, as a highway designer for the state of Nebraska.

"It was fun," Hulbert said. "I was in the urban design section, so we designed roads for urban areas in Nebraska, such as Omaha, Lincoln, cities like that."

He moved to Fort Leavenworth, Kan., to become a Training and Doctrine Command mechanical engineering intern.

Hulbert spent two years there before taking the position of chief of the Hospital Support Branch at Fort Knox, Ky. After two years at Fort Knox, he transferred again. This time, he headed further east to work for the Test and Evaluation Command at Aberdeen Proving Ground, Md.

It was in Maryland that he began pursuing his primary hobby in earnest — building computers. Hulbert believes in learning something new every day, and building computers helps him to do that.

"I just finished a new computer the other day," he said. "I turn it on, and it's up and running in 45 seconds."

His next move took him across an ocean.

"Then, I went to work for the Corps of Engineers in Saudi Arabia," Hulbert said. He later returned to the Test and Evaluation Command and in 1995, moved to Rock Island Arsenal with the Army Materiel Command's Installation Services Activity. He's been at Rock Island ever since.

"When IMA [Installation Management Agency, the precursor of IMCOM] formed, we became part of the Northwest Region," he said. "I was chief of the Operations and Maintenance Branch, Public Works, IMCOM-West." ➤

Acronyms and Abbreviations

IMCOM	Installation Management Command
-------	---------------------------------

(continued from previous page)

roles and locations.

The ongoing missions are not going away while the agency transforms, Ward said. In fact, they will increase.

"Functions are changing. Organizational set-up is changing. There's also going to be a larger push to get enterprise programs going where possible to gain economies of scale," he said.

"We're planning the initial move this summer — up to 27 people right now," he said. "How do we keep the headquarters functioning? How do we keep the regions

functioning when people are moving and trading hats and starting to physically move? All the while, the mission will grow.

"It's going to be hard work for the next two to three years," he said.

The goal is to have the 123 employees in place by the end of fiscal year 2011. The Public Works Division has already increased to about 20 people. The decision to increase to 123 is telling about the breadth of the work being performed by the division.

"We need this in order to perform our duties the way they should be done," he

said. "Right now, we put out the fires. Hopefully, by 2011 or '12, the dust will have settled, people will be comfortable in their new positions, and we will be operating much smoother."

In the meantime, Ward will continue to work to pull it all together.

"I'm excited to be here," he said with a smile. "It's fast paced. It's furious, but I do enjoy what I'm doing. I look forward to when we are a recomposed organization. I look forward to being transformed."

Mary Beth Thompson is the managing editor, *Public Works Digest*.



(continued from previous page)

Hulbert's career has taken him to work at various headquarters levels for about 28 years. He was a supervisor in three of his positions. He understands how to get things done and has a unique take on who — or what — his customer is.

"Maybe I'm a little different than most people, but I don't look at my customer as being the Soldier," he said. "My customer is the whole installation facilities infrastructure that needs to be there to adequately support both the Soldier and the mission. I've gained that perspective, and it keeps me focused on what I need to do."

He enjoys that his job allows him to interact with different people at different installations. He also likes the challenge of getting things done with less money than is needed.

"Sometimes, far less," he said. "There are always more requirements than there is money." But he relishes the opportunity working for IMCOM gives him to concentrate on making facilities better.

"It's good to see things get accomplished," he said

IMCOM manages Army installations around the world, something that had never been done before 2002, Hulbert pointed out. Only two groups — the Navy

and the Army — have this unique responsibility.

"I see IMCOM in the light of doing a lot more for the facilities across the Army than was ever done before," he said.

Right now, Hulbert is working on Army efforts to get rid of the mold problem in barracks. Over time, as the Army has gotten more energy efficient, it began to seal its buildings more effectively. While that is the right thing to do, the practice has increased the mold problem.

Although mold is everywhere and cannot be totally eradicated, it can be controlled, he said.

"That's the goal of the program — to improve the barracks conditions and generally eliminate the problem," he said. "Mold inside buildings should be considered unacceptable."

Hulbert credited the Construction Engineer Research Laboratory and others with doing amazing research in that arena.


"We're beginning to understand what causes it, and how to control it and to make better living conditions in all the barracks," he said. "We have somewhere in the range of a half billion dollars to spend on barracks this year, and I'm working on that right now — determining where that should go."

The emphasis this year is to fix as many of one particular category of barracks — built in the 1970s and called "Volar-type" barracks — as possible. Those structures have significant mold challenges, and the solution for them is expensive. The projects will seal the building envelope and provide dedicated outside conditioned air to the structure, controlling the moisture inside.


"Controlling moisture inside the building is the key to controlling mold," he said.

Hulbert is also working on an IMCOM strategic initiative to look for efficiencies in municipal services. These services include refuse removal and disposal, and custodial services. He is seeking standardized contract specifications that can be used IMCOM-wide to supply these services more efficiently and save money.

"To me, my most important responsibility is to do a good job for my customer; my customer is the installation and the installation mission," he said. "We're here to make sure that they have the facilities and the capability to use those facilities to accomplish the mission of that installation."

Mary Beth Thompson is the managing editor, *Public Works Digest*. 

Marin is director of Installation Services

Kathleen Marin replaced Barbara Sisson as the director of Installation Services in the Office of the Assistant Chief of Staff for Installation Management. Marin had previously been assigned to Headquarters, Installation Management Command, first as the chief of Capabilities and Initiatives in the Plans Division, then as the director of Plans. The March/April *Public Works Digest* will carry a personality feature on Marin. U.S. Army photo 



Look us up on the **WEB**

For an electronic copy of the

Public Works Digest,

go to:

<http://www.imcom.army.mil/sites/pw/digest.asp>



Wilson returns to USACE Installation Support

by Mary Beth Thompson

She was born and bred in the nation's capital and now works at the U.S. Army Corps of Engineers headquarters in Washington, D.C. On the surface, it may look as though Tracy Porter Wilson has spent her entire life as a Washingtonian, but she has worked in several far more exotic locales than even well-traveled Army employees can usually boast of.

Zimbabwe, Georgia, Nicaragua, Jamaica and Ghana are just a handful of the remarkable places she visited as the design manager for the Department of State's Standard Embassy Design program. From 2005 to 2006, Wilson oversaw development of project sites from beginning to end.

"That's where I got to see the world," she said. "It's an experience I'll always treasure. I worked with a lot of excellent teams."

Wilson pursued her education closer to home, graduating from the University of Maryland at College Park, just outside Washington, with a bachelor's degree in architecture. She graduated from the Army Management Staff College's Sustainment Based Leader Management Program and the Army Staff College's Organization and Leadership for Executives Program. She is currently working on a master's in public administration, with an emphasis on facilities management, from Strayer University.

After college, Wilson became an architecture and engineering consultant for an environmental and urban design firm in Bethesda, Md., for about three years. In 1991, she began her federal career as a master planner and architect/project manager for the Army at Walter Reed Army Medical Center.

"From there, I became a section head supervisor as chief of the Planning and Environmental Division," she said. When that division was later split into two divi-



Tracy Porter Wilson
Photo by Mary Beth Thompson

sions, she became the chief of the Real Property Master Planning Branch within the Directorate of Public Works.

After 10 years on the ground in Public Works, Wilson moved to Headquarters, USACE. In the Installation Support Branch, she helped rewrite Army Regulation 210-20. She also taught master planning and related courses with the USACE and Office of the Assistant Chief of Staff for Installation Management master planning proponents. She worked on the Critical Infrastructure Program and did a detail with OACSIM.

"For 120 days, I worked on a standardization program for installation design standards," she said of that experience.

In 2004, Wilson moved over to Headquarters, USACE Logistics as the Major Command staff engineer, which included updating engineering policies for facilities management and space management for USACE assets. After a year there, she took the Department of State position.

Wilson traveled around the world overseeing construction of U.S. embassies for more than a year. Then, she went to work for the Department of Agriculture at its Beltsville Agricultural Research Center in Beltsville, Md., where she stayed for two years.

"I was the director of facilities, which is akin to the Army's DPW," she said. "I was responsible for the shop operations, utilities, engineering and construction, real property, planning — just like an Army DPW."

The Beltsville campus covers about 6,500 acres and has more than 500 facilities along with the associated infrastructure, which also included the 447 acres of the U.S. National Arboretum in Washington, D.C., and satellite sites in Maine and Tennessee. In addition, Wilson managed 135 staff. She also served as the energy manager and the asset manager.

"I've done a lot of different things, but it all comes back to public works and facilities management," she said. "I enjoy the dynamic processes that exist within Public Works, as well as the challenges that translate into opportunities, and I look forward to more of these experiences."

Wilson voiced a specific motivation for her career choices. The reason goes back to advice she received from two mentors. Kristine Allaman, who retired last year, and Pat Rivers are both successful women who achieved Senior Executive Service status with USACE.

"When I first came on board here, [they] kept encouraging staff to expand their depth and breadth of experience," Wilson said. "Once you get solid experience in one functional area, then the goal is to see how one area touches another functional area, so that you can broaden your depth of knowledge and experience to help the customer.

"That's what I've done," she said. "I've held various positions at various experience levels within Public Works, and the quality of the type of work I've had to perform has gone into helping me, so that I can look at Public Works with a holistic perspective."

Reaching out to the Public Works community is part of her new responsibilities with USACE as a program manager in the Installation Support Community of Practice. She came on board in October and wants to help USACE to be more proactive and responsive to DPWs' needs.

"I'm hoping that we can forecast better what their needs are before they actually come to our door, so that we can have ➤

Acronyms and Abbreviations

DPW	Directorate of Public Works
OACSIM	Office of the Assistant Chief of Staff for Installation Management
USACE	U.S. Army Corps of Engineers



Nerger is IMCOM's executive director

John B. Nerger has served as the executive director of the U.S. Army Installation Management Command since July 2008. Nerger directs the multi-disciplinary management of facilities, programs, services and infrastructure for 110 Army installations worldwide. As “city manager,” he oversees a \$13 billion annual budget, 116,000 employees, 15,000 million acres and 934 million square feet of facilities worth \$212 billion.

Before coming to IMCOM, Nerger was the deputy chief of staff, Personnel and Logistics, U.S. Army Training and Doctrine Command at Fort Monroe, Va. Starting at TRADOC in October 2004, he oversaw the organization's 40,000 Soldiers and 16,000 civilians at 16 locations.

In July 2000, Nerger was selected for the Senior Executive Service as he took the position of director of Facilities, Housing and Environment on the Army Staff. There, he was responsible for a \$3 billion global capital investment program for the Army.



John B. Nerger
Photo courtesy of IMCOM

Nerger worked in the Office Assistant Chief of Staff for Installation Management in Washington, D.C. starting in 1990. He served successively as director of Facilities and Housing, deputy chief for Base Realignment and deputy director of the Army Basing Study Group during the 1990s. From 1988 to 1990, he was a planner in the Office of the Assistant Chief of Engineers at Headquarters, Department of the Army.

During his career, Nerger also served as an analyst in the Office of the Chief of Staff of the Army, the chief of Financial Management for the Joint Chiefs of Staff,

an analyst in the Office of the Assistant Chief of Engineers, and a management assistant in the Office of the Chief of Naval Operations in Arlington, Va. Prior to his government career, Nerger was a volunteer with Volunteers in Service to America's Legal Services Corporation of Iowa.

He earned his bachelor's degree in engineering from Northwestern University in Evanston, Ill., and a master's degree in public administration from the University of Virginia in Charlottesville, Va. He also attended the U.S. Army War College and the Federal Executive Institute.

Nerger is a member of the Senior Executives Association, the Association of the United States Army, the Army Engineer Association and the Professional Housing Management Association. He has received many awards and honors, including Meritorious Civilian Service Awards, Commanders' Awards for Civilian Service, a Silver De Fleury and a Federal Energy and Water Management Award.

From the IMCOM web site. 

Acronyms and Abbreviations

IMCOM	Installation Management Command
OACSIM	Office of the Assistant Chief of Staff for Installation Management

(continued from previous page)

certain tools in place, so that when they come we are prepared to be responsive,” Wilson said.

She intends to visit installations and attend DPW conferences to meet people and get a sense of what's lacking in the current environment. She also plans to be a team player with the OACSIM and the Installation Management Command, because she views USACE as a partner in the Army's Public Works triad.

“I like the fact that here in USACE, leadership gives you the opportunity to take a leadership role — to take the initiative to mold your program in a way you think it will work effectively, not only for USACE but also for our customers,” she said.

Wilson will also champion the Public Works training program offered by the USACE Learning Center. In addition, she'll be working special projects. For example, she is currently supporting Training and Doctrine Command with the Training Resources Arbitration Panel for relocatable buildings. She is also reviewing a staff action for USACE Logistics that involves ways to reduce reliance on fossil fuels to see how it would affect USACE Fleet Management.


Away from the job, Wilson is an avid movie fan and described herself as a Bond fanatic. That's James Bond, aka 007, of “Goldfinger” and “Die Another Day” fame. Those are her favorite classic and current Bond films respectively.

When she's ready for outdoor activity,

she hops on her scooter.

“I consider myself a scooter chick,” Wilson said. “I own a Suzuki Burgman 650 scooter. I ride with my husband, who owns a Harley.” The couple takes excursions together to places like Virginia Beach, Va., and Philadelphia.

She is not out seeing the world these days. No more temporary duty trips to Africa, Eastern Europe or the Caribbean for Wilson. Just a few leisurely outings with her husband — and some travel to Army installations and conferences to learn how to improve the relationship between USACE and DPWs.

Mary Beth Thompson is the managing editor, Public Works Digest. 



Army housing pros collect awards

Deborah Reynolds, chief of Army Housing, received the Professional Housing Management Association *Founder's Award*, which recognizes an individual for exceptional service both to the military housing profession and to PHMA. Reynolds was honored for her exceptional work ethic, for her tireless commitment to getting the job done and for her passionate dedication to taking care of Soldiers and their Families.

The *Founder's Award*, PHMA's highest, was presented Jan. 19 in San Diego at the association's Professional Development Seminar XXI.

The U.S. Army also presented its service awards for housing management during the week-long seminar. Award winners included —

Army Outstanding Senior Housing Manager

Jeffrey Michels, chief, Housing, Installation Management Command, West Region

The *Senior Housing Manager* award recognizes senior management staff members, irrespective of organizational level, who have responsibility for directing, managing or overseeing major housing or housing support organizations.

Army Outstanding Mid-Level Housing Manager

Bettina Danzer, chief, Housing Services Office, Grafenwoehr, Germany

The *Mid-Level Housing Manager* award is presented to middle management staff members, irrespective of organizational level, who may be team leaders, branch heads, community managers or assistant chiefs.

Army Outstanding Housing/Billeting Employee

Shannon Marsteller, outreach coordinator, Fort Detrick/Walter Reed Army Medical Center, Balfour Beatty Communities; Fort Detrick, Md./Walter Reed Army Medical Community, Washington, D.C.



Deborah Reynolds, recipient of PHMA's prestigious Founder's Award, addresses the 600-plus attendees at the association's Professional Development Seminar in January. Photo by Mary Beth Thompson

The *Housing/Billeting Employee* award is presented to a member of the organization below the supervisory or middle management level, who is engaged in directing or managing housing support and oversight functions.

Army Outstanding Housing Installation Team – Traditional Location

U.S. Army Garrison, Grafenwoehr Housing Office, U.S. Army Garrison, Grafenwoehr, Germany.

This award recognizes an installation team, defined as having multiple federal groups and may also include subcontractors, who demonstrate their collective achievements in providing an outstanding living environment for military members whether in Family housing, bachelor housing or transient housing.

Army Outstanding Housing Installation Team – Privatized Location

Two awards —

Fort Sam Houston Family Housing Team, comprising Lincoln Military Housing and Directorate of Public Works' Residential Communities Initiatives, Fort Sam Houston, Texas.

Army Outstanding Housing Installation Team – Privatized Location

Fort Stewart and Hunter Army Airfield Military Housing Team, comprising Balfour Beatty Communities and Residential Communities Initiative, Fort Stewart and Hunter Army Airfield, Ga.

This award is presented to an installation team having both federal and contractor or partner groups who demonstrate their collective achievements in providing an outstanding living environment for military members and their Families, whether in housing referral, Family housing, bachelor housing or transient housing.

Compiled from PHMA published material and web site.

Showcase your ARTICLES

Would you like to see your installation featured in the Public Works Digest?

If you have an interesting story to tell

submit it via e-mail to the editor at: mary.b.thompson@usace.army.mil 202-761-0022

and you may be in our next issue.

Acronyms and Abbreviations

PHMA	Professional Housing Management Association
------	---

U.S. Army Installation Management Command
2511 Jefferson Davis Highway
Arlington, VA 22202-3926
www.imcom.army.mil

U.S. ARMY INSTALLATION MANAGEMENT COMMAND

IMIGOM

