



The Los Angeles District, working with Santa Barbara County, fought floods and plugged a breach in a levee bank of the Santa Maria River in anticipation of future flood flows. (Photo by Mona Lee Goss, Los Angeles District.)

Corps provides front line defense against El Niño

By Frank Rezac
South Pacific Division

For most people, El Niño is something they see on the Weather Channel or evening news. But El Niño is a major fact of life for more than 130 members of the U.S. Army Corps of Engineers who are responding to severe flooding in California.

As of press time, the Corps, under the authority of Public Law 84-99, has committed 126 civilians, nine military members, and more than \$17 million to flood damage reduction efforts. So far, they have repaired two breached levees and 12 damaged levees. Work continues on 16 damaged levees and a river debris basin.

The president signed a federal disaster declaration on Feb. 9 for 31 California counties. Since then, the Corps has responded to one Federal Emergency Management Agency (FEMA) request to staff the Emergency Support Function (ESF)-3 at the FEMA Regional Operation Center at Mather Air Force Base, Calif.

Vice President Al Gore, accompanied by Maj. Gen. Russell Fuhrman, Director of Civil Works, and FEMA Director Jamie Lee Witt, visited Northern California on Feb. 18. Brig. Gen. J. Richard Capka, South Pacific Division Commander, met Gore at his arrival.

"The Vice President was well aware of what this region experienced in 1997," said Capka. "He joined the people of Meridian in the flood fight as the waters threatened their community."

Last year, a weather event called the Pineapple Express produced record runoffs from Mt. Shasta in Northern California to Fresno in the south. Levees

overtopped or stressed to the maximum by flows higher than they were designed for caused evacuations of Sacramento area communities. The flood-fights and follow-on efforts to restore minimal and pre-event levels of protection took the next 11 months and \$120 million. El Niño arrived just two months after the Corps completed the levee reconstruction effort.

"An outgrowth of our El Niño preparations was the development of Regional General Permits by our California Corps districts," said Capka. "Having those permits in place was vitally important as it allowed the cities and counties to perform maintenance and repair activities in a timely manner. With the widespread rains caused by El Niño, the properly maintained stream and river channels contributed in significant measure to the minimal damages experienced from El Niño's first shot at us."

El Niño arrived with a vengeance in late January, bringing heavy rains across California. The historic runoffs of 1997 were absent, but rainfall readings 150 to 175 percent above normal could be found throughout the state by the end of the first week in February. By Feb. 9, California had experienced its third wettest February in history, and more rain arrived Valentine's Day. More than four months remain in the rain year.

Sacramento District fought damages in the Hamilton City, Colusa, and West Sacramento area along the Sacramento River. San Francisco District was heavily engaged in flood fights along the Pajaro River near Monterey. Further south, Los Angeles District was engaged in flood fights along the Santa

Continued on back page

Ballard awarded top honor

The Chief of Engineers says he became an engineer because he "wanted to be a problem solver." Recently the Career Communications Group (CCG) and the Council of Deans of Historically Black Colleges and Universities recognized his dedication and hard work by selecting Lt. Gen. Joe N. Ballard as the Black Engineer of the Year.

Ballard received the award at the 12th Annual Black Engineer of the Year Awards Conference Feb. 26-28 in Baltimore, Md. The conference recognizes the successes of African-Americans in technology. Awards are given in 13 categories, but Black Engineer of the Year is *not* one of the categories. According to Garland Thompson, Editorial Director for CCG's magazines, it is a *discretionary* award -- who receives it is up to the judging panel.

"The judging panel is about 20 people from industry and academia," said Thompson. "They divide up to judge the categories, then come back to full session for a round-table discussion of the top people entered. A subcommittee considers who deserves the discretionary awards."

There are four discretionary awards -- the Deans' Award, Lifetime Achievement Award, the President's Award, and Black Engineer of the Year. Ballard's alma mater, Southern University in Baton Rouge, La., wanted to enter him in the Professional Achievement in Government category, according to Col. Otis Williams, Chief of Staff. A headquarters team assembled the package and submitted it to CCG.

According to Thompson, the judges' deliberations are secret and their records are sealed, but he could report that out of more than 200 entries, "the subcommittee unanimously agreed that Ballard was by far the best recipient of the Black Engineer of the Year Award."

Ballard gives much of the credit for his success to his strong family background. He was the oldest of six children, three boys and three girls. All have done well with their lives, according to Ballard. His father was a share-cropper (later a factory worker, then a Baptist minister), and his mother was a housewife. (A share-cropper is a farmer who works on another man's farm for a share of the crops.)



Lt. Gen. Joe N. Ballard has been named the Black Engineer of the Year.

Continued on page 3



Vision commentary

Editor's note: This is one in a series of commentaries relating to cultural aspects of the Corps Vision.

Each is the opinion of the writer. Please write a letter to the editor if you feel strongly about a commentary's message.

Dr. G. Edward Dickey recently retired as Chief of Planning Division in the Directorate of Civil Works in headquarters. During his federal career, Dickey held a variety of civil works positions, including Acting Assistant Secretary of the Army (Civil Works). This commentary is based on Dickey's remarks during his retirement luncheon.

Planning must be systematic

Having devoted so much of my career to planning new water project investments, I have strong feelings about the present challenges faced by the planning community in the U.S. Army Corps of Engineers. The civil works planning staff, alone among the federal natural resource management staffs, continues to have the capability to address big water resource issues in a systematic and disciplined way.

I have always been amazed by the limited appreciation, beyond the planning community, of water development and project selection. The primary basis for water project investments has been and will continue to be to increase the productivity of our nation's economy, that is, to increase our national income. No nation can misuse its water resources and hope to become a modern, productive economy with a healthy and pleasant environment.

Continuing water resources infrastructure investment is essential to the successful functioning and growth of our economy. It is also true that these investments have important consequences for the character of the natural environment. To obtain maximum social benefits there must be consideration of the trade-offs among competing values during the planning process. Poor planning has important consequences. Unproductive investments detract from

national economic welfare and needlessly disrupt valuable ecological processes.

The Corps of Engineers, unlike most other federal programs, has the responsibility for tailoring its projects to the specific physical, economic, and environmental context in which these projects will perform. To guide that investment decision-making process, a formal planning framework, "The Principles and Guidelines" (P&G), was first promulgated in 1973. That was the year I came to civil works and, consequently, I have had the pleasure of shaping and reshaping this remarkable planning framework on three occasions during my career.

The essential element that P&G brings to planning is the requirement to address the issues of project scope and scale. The requirement to address the mix and magnitude of services to be provided is what differentiates the water resources investment program from other programs which are guided by absolute standards or by what is technologically feasible.

During the decades I have been associated with the formulation and selection of new water projects, I have seen that important gains have been made in defining more carefully the Corps' investment program. Systems analysis for inland navigation, risk analysis, and systematic formulation of ecosystem restoration projects, as well as more careful attention to optimization generally, have substantially improved the productivity of new project investments. Many of you have played important roles in developing and implementing these new techniques which have kept the Corps in the forefront of the planning arts.

But in recent years, powerful forces have been at work disrupting the trend toward productivity growth in water resources development. Federal subsidies for some projects with poor performance prospects are being increased, thus making them more likely to be built. New planning models based on collaboration and consensus-building, uninformed by analysis, are being advanced in the case of complex projects with

extensive impacts. Finally, a naive commitment to customer satisfaction (with the project sponsor as the only customer) is further tipping the scales away from systemic plan formulation and sound project planning.

And, within the Corps, planning expertise has been lost, and planning organizations have been buried within organizational hierarchies.

Many of us are aware that as workloads have decreased, and the amount of work contracted out has increased; there has been a contraction in many district planning staffs resulting in a loss of both depth and breadth of expertise. In some cases, smaller organizations have led to consolidation of planning with other organization units. The result has been that in some districts, planners have little visibility or voice in district decision-making. Moreover, disciplines have become so thinly staffed that there is often little opportunity for routine professional interchange and thus personal growth and advancement. In all too many districts, the interdisciplinary planning team consists

of bright, young, well-educated, and enthusiastic men and women who are asked to perform effectively and efficiently without the benefit of experience or the counsel of senior professionals.

The solution to the loss of expertise and visibility is consolidation of planning resources across districts rather than across functions within districts. Because such geographical consolidations are certainly not without political perils, they can be accomplished only with planning and time. However, it is essential that the process of geographic consolidation of planning expertise be initiated as soon as possible. This is the one substantive recommendation I have today. Those within the Corps need to work diligently toward this objective, and those outside the organization need to support geographical consolidation in the public arena.

Dr. G. Edward Dickey
HQUSACE

"Planning expertise has been lost, and planning organizations have been buried within organizational hierarchies."

step in fostering systems thinking.

Also, the point about aligning to expect and reward systems thinking is on target. I'm beginning to think that we also have to clarify our terms better because terms may downsize our thinking. Perhaps we need to think and talk about the differences between project and program management. There are conceptual differences in levels of analysis here. We tend to think of project management as designing and building to project completion, when it may be more. Project Management may be about managing the full life cycle of a project from conception to stewardship or hand-off. Effective program management requires a big picture view, a long-term orientation, and the abilities to make trade-offs and to deal with complexity (e.g., in decision criteria) and ambiguity. These are conceptual and strategic tasks. Do we select and train for them? If we fail to clarify our terms or lump program management with project management, we will miss the different kinds of management responsibilities involved in both.

The shift in conceptual gears required to move from a *project* perspective to a *project management* perspective to a *program management* perspective requires an increasing systems view. This is akin to

the conceptual differences in managing data vs. managing information vs. managing knowledge vs. managing wisdom. Managing knowledge is a lot harder than managing data. Managing wisdom adds an ethical dimension. Each shift upward adds complexity and implies greater responsibility for understanding and managing the whole. Making the conceptual shift is not easy, but it can be facilitated by reshaping expectations, success criteria, and rewards. It can also be facilitated by expecting strategic (vs. operational) discussions about pertinent issues. For example, what if our CMR measures reflected strategic outcomes rather than operational measures? Perhaps CMR measures should address indicators of effective program management vs. project status. If so, CMRs should entertain discussions about projects only as they exemplify or fail to indicate progress toward our strategic goals. The difference is conceptual. This difference may have implications for P/PM effectiveness.

Anyway, thanks for provoking my thinking. We need more columns like this.

Donna Ayres
HQUSACE



Response to PM commentary

I really enjoyed reading Stephen Browning's commentary. He is right on in highlighting the problems of adopting a project management perspective. The issue is cultural, political, and conceptual.

I believe that a systems perspective is needed for effective program and project management. Taking an integrative/holistic perspective may be difficult for some who have been reinforced as problem solvers to take things apart and to deal with the pieces. Today's problems increasingly require not a reductionistic view but a systems perspective to see how things fit together and how changes in one part affect other parts. The new PM Reg. is a beginning



\$3.4 billion budgeted for civil works



The FY99 budget for civil works proposes a transition from annual-incremental funding of all project construction requirements to full funding.

President Clinton's budget transmitted to Congress on Feb. 2 includes a \$3.4 billion U.S. Army Corps of Engineers program. The program will require appropriations of \$3.2 billion, with the remainder from non-federal contributions and trust fund receipts.

Funding in this request will be used to continue the sound development of the nation's water resources, the efficient operation, maintenance and management of the nation's navigation, flood damage reduction, and multiple-purpose projects, the equitable regulation of wetlands, and the restoration of important environmental resources, such as the South Florida Ecosystem.

Dr. John H. Zirschky, Acting Assistant Secretary of the Army (Civil Works), said the budget "is consistent with the need to balance the federal budget and the government-wide initiative to provide full funding for federal investments in fixed assets. The spend-out of prior years appropriations in excess of the President's request for civil works requires constraints on FY99 funding to keep overall spending within the balanced budget. The limited new funds available for civil works have been applied to give priority to preserving existing infrastructure and restoration of environmental values."

The budget again proposes a transition from annual-incremental funding of all project construction requirements to full funding of those requirements. This will improve the ability of the Corps and local project sponsors to manage and complete projects by making funds available on a predictable schedule. In addition to the \$3.2 billion request for the FY99 program, advance appropriations of \$531 million are requested for FY00 and 03 to finance projects that are scheduled to be completed by the end of FY03. Funding for programs and for continuing projects scheduled for completion later than FY03 will be requested in annual budgets, as in the past.

"This budget also reaffirms our commitment to the preservation and enhancement of the environment," Zirschky said. "It includes \$25 million for the Challenge 21 Riverine Eco-

system Restoration and Flood Hazard Mitigation initiative which is part of the President's Environmental Resources Fund for America. The initiative will plan and implement projects that restore riverine ecosystems while mitigating flood hazards."

The new investment program requires federal funding in the amount of \$28.5 million and includes nine reconnaissance studies, three new construction projects, four new major rehabilitation projects, one deficiency correction project, and one dam safety assurance project. The reconnaissance studies, each funded at \$100,000, are Kern River Valley (Lake Isabella), Calif.; Long Island, Marsh and Johns Creeks, Ga.; Ala Wal Canal, Oahu, Hawaii; Coastal Massachusetts Ecosystem Restoration, Mass.; Bayou Pierre, Miss.; Cimarron River and Tributaries, New Mexico, Oklahoma, Colorado, and Kansas; Columbus Metropolitan Area, Ohio; Lower Columbia River, Oregon and Washington; and Mississippi River, Alexander County,

Ill., and Scott County, Mo.

The construction projects are Grand Prairie, Ark.; Big Sioux River, Sioux Falls, S.D.; and Assateague Island, Md. The rehabilitation projects are Walter F. George Powerhouse and Dam, Alabama and Georgia; Lock and Dam 24 part 2, Mississippi River, Illinois and Missouri; Patoka Lake, Ind.; and London Locks and Dam, Kanawha River, W.Va. The deficiency correction project is the Chain of Rocks Canal, Mississippi River, Ill.; and Skiatook Lake, Okla. is the dam safety assurance project.

The total cost of this new investment program is about \$531 million, of which about \$121 million would be paid by non-federal sponsors.

The budget includes \$47 million for ongoing and new activities under the Continuing Authorities Program. Also provided is \$117 million to continue the Columbia River Fish Mitigation program in the Pacific Northwest. In addition, operation and maintenance of hydropower facilities in the Pacific

Northwest would be financed by transferring about \$106 million from Bonneville Power Administration revenues.

The budget accounts are:

General Investigations -- \$150 million (funds studies, design, coordination, data collection and research and development).

Construction General -- \$784 million (funds project construction and major rehabilitation).

Operation and Maintenance, General -- \$1.603 billion (funds the running and upkeep of existing projects which include hydropower facilities, locks and dams, recreation areas, and navigable waterways).

Regulatory Program -- \$117 million (funds the Corps permit program for dredge and fill material in the waters of the U.S. This is partially offset by \$7.0 million from permit fees which is dependent upon enactment of proposed legislation).

Flood Control, Mississippi River and Tributaries -- \$280 million (funds for the study, design, construction, operation, and maintenance for water resources projects in the alluvial valley of the Mississippi River).

General Expenses -- \$148 million (funds for the executive direction and management of Corps headquarters and major subordinate commands).

Formerly Utilized Sites Remedial Action Program (FUSRAP) -- \$140 million (funds for the management of the program that was transferred to the Corps from the Department of Energy by the Energy and Water Appropriations Act of 1998).

"I'm especially pleased with the Corps' FUSRAP program," said Lt. Gen. Joe N. Ballard, Chief of Engineers. "This is an area in which the Corps is very proud to be involved. We're aggressively working at contaminated sites around the nation to clean them up quickly and cost-effectively."

Select Programs Management at the Civil Works Directorate World Wide Web site <http://www.usace.army.mil/inet/functions/cw> for details of the FY99 civil works budget.

Ballard chosen Black Engineer of the Year

Continued from front page

"I think the type parents we have is very important," Ballard said. "My father was a strong man. He worked hard, brought home a paycheck, and no one questioned his authority. My mother was there every day for us."

Ballard says many of his relatives lived nearby, so there was also a close extended family.

"The best part was that my grandfather lived across the street," Ballard said. "From an early age he instilled in me the desire for an education. In fact, the nickname he used for me was 'President' because he said I could become President of the United States."

"My grandfather used to say, 'You're

too lazy to work; you need to go to college," said Ballard. "He did live long enough to see me enroll in college, and I know he was very proud. At the time, I was the first male in the family to go to college."

Ballard says he was also influenced by other relatives, especially an uncle who had been in the Navy.

"I'd go over the Uncle Charlie's house and he would tell me stories about the world," said Ballard. "He had traveled all over to the Far East. From Uncle Charlie's stories I got my wanderlust. I would sit and dream about all those places he told me about. I had a burning desire to leave Louisiana and go see the world."

As he grew up, a widening group of

people influenced Ballard, especially Jesse Anderson, who had been an electronics repairman in the Navy.

"Mr. Anderson was one of the few black businessmen in town," said Ballard. "He owned an electronics shop and he could fix anything. When I was in the eighth grade, I started hanging out at Mr. Anderson's shop, doing odd jobs and learning to fix things. I found I really enjoyed working with electronics, and I was good at it. I worked with Mr. Anderson from the eighth grade all the way through high school. At the time, the only kind of engineer I knew about were the engineers who ran the trains. But Mr. Anderson told me about the field of engineering and that's when I decided I wanted to go

to school to be an electrical engineer. It is because of Mr. Anderson that I became an engineer. He also got me involved in Scouting. There I learned about discipline and teamwork."

According to Ballard, "engineering is a profession of problem-solvers. The art of developing solutions to real-world problems is what makes engineering so tremendously satisfying. Whether you are constructing a skyscraper in New York City, a tank firing range in Germany, or a flood control system along the Mississippi, engineers can always look back at their work and see a physical solution to a problem."

(Lisa Pittelkow and Bernard Tate of headquarters wrote this article.)

Upgrades improve cavalry operations

Article and Photo
By Torrie McAllister
Europe District

Winter maintenance holds special perils for many soldiers in the U.S. Army Europe who still maintain their sophisticated, multimillion dollar equipment in tents, World War I horse stables, and hangars built for Nazi aircraft during World War II.

But not this year for the 1st Armored Division's First Squadron, 1st Cavalry (1-1 Cav) in Buedingen, Germany, thanks to the 10th Area Support Group (ASG) and Europe District. For the first time, avionics mechanics are repairing their helicopters in a newly-renovated hanger, not out in the cold, damp weather.

The \$1.36 million facility upgrade included the hangar, runway repairs, and security lighting. Mechanics say that new electronic lift equipment, petroleum/oil/lubrication (POL) separators, and adequate heat and lighting help them minimize downtime for the 1-1 Cav's 16 new OH-58D Kiowa Warrior helicopters. The Warrior, with its heat-sensitive mast-mounted thermal imaging system, identifies targets for the Hellfire missiles carried by Apache attack helicopters.

For years the 1-1 Cav aviation troops have maintained choppers in a clamshell tent because the Buedingen airfield hangar was condemned.

"For anyone who has ever had to pull maintenance in a clamshell, the change is dramatic, especially in winter," said Sgt. Mark Shirley. "Snow and ice collect on a clamshell's roof. You turn on Herman Nelson hot air blowers so you can work and everything starts to melt. Water drips in through tiny cracks and holes. Everything freezes overnight. The next morning the tent floor is a skating rink and crews start



Pfc. Alfredo Cespedes and Spec. Weston Irwin test a Kiowa Warrior's thermal imaging system during maintenance. The 1-1 Cavalry's \$1.36 million facility upgrade included hangar and runway repairs, and security lighting.

their day out thawing things. Once moisture gets into the equipment there's lots of downtime while things dry out and we make sure everything is safe and operational. Just having good overhead lighting improves operational effectiveness. We're used to working 16 hours a day and winter days are short in Germany."

The need to keep moisture at bay was decisive in funding the hangar renovation. When the 1-1 Cav learned they would be getting high-tech Warrior helicopters, they knew they had to protect the high-performance electronics. The new thermal imaging system, \$1.2 million apiece, had to be maintained in a dry environment. In stormy weather, the Warrior is best protected when stored inside. The newly renovated hangar is capable of housing all 16 aircraft while maintenance and aircraft washes go on.

The renovation included installing electronic heavy lifting equipment, making it easier to safely pull rotors, special optics, and engines. A new POL separator and sewer and drain system help mechanics keep hydraulic fluid and other contaminants out of the soil and ground water.

The 104th ASG and Europe District had just 11 months to modernize the old hangar when they learned the new equipment was on the way. "It was in terrible condition," 104th ASG Engineering Plans and Services (EP&S) Chief Sean MacDonald said. "The utility systems had failed. The roof leaked. The bay doors had holes, and there was no arms room."

"People from Department of Army looked at it and said we couldn't fix it in time for the 1st Armored Division to field the new helicopters," MacDonald said. "Without the hangar they couldn't get the equipment. Europe District agreed to work with us to complete the project while the aviation troops were training on the new equipment at Fort Hood for 11 months. The unit was very helpful in identifying their requirements up front and not making changes."

After that, it was engineer teamwork that kept the project on schedule. Europe District project manager Dana Luedtke and project engineers George Van Cook and Peter Emmel collaborated closely with McDonald and the 104th ASG EP&S Engineers and Staatsbauamt Friedberg to ensure the hangar was completed on time.

Europe District modernizes troop apartments

By Torrie McAllister
Europe District

The 6th Area Support Group unveiled U.S. Army Europe's (USAREUR) first 18 apartments modernized under the Whole Neighborhood Revitalization (WNR) program in January. Europe District is managing the project. The unveiling marks the successful kickoff of USAREUR's Capital Investment Strategy to modernize its family housing inventory to WNR standards, according to USAREUR Housing Chief George McKimmie. Similar projects are underway in the 104th ASG in Hanau and Baumholder, Germany.

"The best news is that we now have more three- and four-bedroom units for our families," said Ann O'Leary, the 6th ASG's Housing Manager, during the design and construction. O'Leary is now team leader for the Community Planning and Development Task Force. Lee Machen will oversee future renovations as the new housing manager.

The 6th ASG has an overabundance of two-bedroom apartments and a shortage of three- and four-bedroom units, which most military families need. WNR allowed USAREUR to convert two-bedroom units into larger apartments while totally moderniz-

ing the buildings, utilities, streets, sidewalks, playgrounds, and other neighborhood amenities. WNR is a holistic approach to upgrading family housing to Army standards.

"The flexibility to reconfigure buildings is a boon to military communities like Stuttgart, which has at least 250 two-bedroom units that can be reconfigured to create three- and four-bedroom apartments up to the maximum authorized square footage," Machen said. "That's important because we have many military families living on the economy because they can't get large enough apartments."

"USAREUR and the Department of the Army's long-term goal is to offer families one-bedroom per child, and we have lots of families with two and three children," he said. "Privacy is always a challenge even in our larger units, especially since our apartments are 100 to 450 square feet smaller than the maximum authorized."

"Construction on the first two buildings was completed in December," said Europe District Project Engineer Doug Blaisdell.

The Corps' project manager was Thomas Poole and the German construction firm was STBA II Stuttgart. The construction contractor was Firm

Wolff and Mueller GmbH & Co. KG.

The \$2.43 million project is among the first five German Payment in Kind (PIK) funded projects to revitalize family housing to the WNR standard. These projects are averaging \$116,000 per unit.

Nine more buildings are currently under design or construction in the Kefurt and Craig Village housing areas. These projects are being funded with PIK or MILCON money.

WNR in the 6th ASG also includes two buildings at Panzer Kaserne and three buildings at Robinson Barracks. In addition to increasing the number of three- and four-bedroom apartments, it adds a second bath with laundry facilities so families won't have to share stairwell washers and dryers in the basement. Buildings are insulated. Kitchens and baths are modernized. Upgrades to the building infrastructure, stairwells and fire safety are included.

Stuttgart also has eleven buildings undergoing less extensive renovation under a major maintenance and repair program.

"These are just the first of what we hope will be many improvements to family housing in the 6th ASG," Machen said. "We have a lot more projects underway."

JED professionals join in concert

Article and Photo
By Maureen Woodward
Japan Engineer District

"It makes me feel good."
"It's my love and my passion. I just can't live without it."
"I love music."
"I'm sure I cannot live without a piano in my life."

These are the words of four pianists (Noriko Matsuba, Chiaki Noguchi, Noriko Michimoto and Takako Ishikawa) who work for Japan Engineer District (JED). Matsuba provides Contracting Division with clerical support. The others work in JED's Engineering and Construction Division. Noguchi is an environmental engineer, Michimoto a program analyst, and Ishikawa an engineer technician.

Their love of music brought them together, and all four said they enjoy practicing with each other. People who heard them in recent "four hands" concerts affirm that love manifests itself in their playing. (Four hands is when two pianists play the same instrument simultaneously.)

"When I heard them play, I was moved by the beauty of the music," said one Camp Zama music lover. "The 'Nutcracker' rendition was like listening to a full orchestra. I think Tchaikovsky would have been proud that they chose his piece to play."

Each of the pianists' love of music began with piano or organ lessons at age 4 or 5, and each has been playing since.

"My sister used to take piano lessons when I was very little," said Ishikawa. "Watching her play all the time, I said 'I want to play this!' I have been taking lessons ever since."

She's always loved music, said Michimoto, who added, "My grandmother bought me a piano when I was 4."

Have any ever considered playing professionally?

Ishikawa did when she was "7 or 8."

"Not seriously," said Noguchi. "It's very difficult to make a living as a concert pianist."

Neither Michimoto or Matsuba seriously contemplated a professional career, "but it would be nice if I could play that well," Matsuba added.

Playing four hands is a challenge, they agreed. The players must develop a special rapport with one another. According to Michimoto, "You need to harmonize so it appears as if only one person is playing."

"The two people need to play in rhythm and in sync," said Ishikawa. "It's dynamic."

"My partner and I need to feel the music the same way," Noguchi said. However, playing four hands is not too difficult and rather enjoyable, according to Matsuba.

Chopin is Michimoto's and Noguchi's favorite composer. "He really knew what the piano can do as a musical instrument and how to let the players show off their skills and express their feelings," said Noguchi.

Japanese composer Taki Rentaro, is Matsuba's favorite. "I really love to play his music. It is simple but very beautiful. He died very young, about 22, but his music has a maturity rarely found in one so young."

Ishikawa likes Bach, Brahms and Schuman. "Their pieces are not so brilliant, but they move me and my soul," she said.



Harmony is vital to Takako Ishikawa, left, and Noriko Michimoto, who play here in a "four hands" concert. Four hands requires rapport and harmony between the two musicians, who play simultaneously. Noriko Matsuba and Chiaki Noguchi also performed in the concert.

Corps-wide team assesses earthquake risk

By Linda James
Huntsville Engineering and Support
Center

The Army's Seismic Risk Mitigation Program (SRMP) is a prime example of teamwork at its best. The program, a result of executive order 12941, requires federal agencies to assess the seismic safety of their buildings and prepare a cost estimate for mitigating unacceptable seismic risks. Final data will be used to reinforce buildings that would have a high risk level during an earthquake.

SRMP has drawn on expertise from across the U.S. Army Corps of Engineers and has required close coordination with headquarters, the Center for Public Works (CPW), and the Army Assistant Chief of Staff for Installation Management (ACSIM).

The overall program management and quality assurance is in the hands of the Seismic Technical Center of Expertise (STCX) at the Northwest Division, Portland, Ore. The Construction Engineering Research Laboratory (CERL) in

Champaign, Ill., manages the building inventory and will prepare the final report. Program oversight is the responsibility of headquarters, CPW, and ACSIM. However, the STCX turned to the Corps' Engineering and Support Center in Huntsville, Ala., for contract preparation and coordination. According to Doug Wilson, project manager, the Huntsville Center was a natural choice because of its early involvement developing seismic criteria and design guidance through the Criteria Document Update Program.

According to Wilson, the process to select a contractor to perform the seismic screening and evaluation of thousands of Army buildings was a team effort.

"Six months before the contract acquisition, we met with all the services to develop a detailed scope of work," said Wilson. "The fact that it would cross so many different federal organizations made it critical that we work closely together in the early states of contract development."

URS-Greiner of San Francisco is the architect-engineer (A-E) contractor. For the past 18 months it has been in the field screening and evaluating Army buildings. Although only a representative sample of

the Army's 140,000 buildings at strategically selected installations must be screened, the scope of the job is still immense. But, according to Wilson, work has progressed exceptionally well with about 75 percent of the screening and evaluation completed.

The A-E contract, awarded in July 1996, covered the initial year with two one-year options, and has a \$6 million-a-year cap with a limit of \$750,000 per task order. Last year, Wilson said, about \$5 million was committed on the contract. When the A-E contractor finishes in 1998, all available data will be processed by STCX, CERL, and headquarters before furnishing the results to the Federal Emergency Management Agency (FEMA) who, by law, must report back to Congress by 2000.

"The SRMP will generate several reports," said Wilson. "A final report to FEMA will include a database of buildings specifically studied as well as those buildings which are addressed by extrapolation." The other reports will be for each installation studied and will include information on geologic hazards, as well as screening and evaluation documentation.

Savannah builds up Army airfield capabilities

Article by Verdelle Lambert
Photos by Jonas Jordan
Savannah District

Hunter Army Airfield is a small installation on 5,400 acres in Georgia. It is a sub-installation, part of the Fort Stewart/Hunter Army Airfield complex, but it plays a big role in the nation's military defense. At 11,375 feet, Hunter has the longest runway in the Army. It can accommodate any aircraft in the Air Force, including the C-5A Galaxy and C-17 Globemaster.

"We have the capability to get assets airborne far quicker than anyone else because of our ability to stage," said Lt. Col. Carey W. Brown, Director of Public Works for the Fort Stewart/Hunter AAF complex. This capability is critical to Hunter's role as a power projection platform (a location where forces can easily deploy by sea or air), allowing it to provide rapid armored-force projection to an area of operation. This means Hunter is able to deploy not only its own and Fort Stewart's troops, but also any other military unit anywhere in the world with minimal notice.

Hunter has a troop strength of about 4,200 soldiers. The major divisional units at Hunter are the 3d Infantry Division Aviation Brigade and the 603d Support Battalion (Aviation). Major nondivisional units are the 260th Quartermaster Battalion and the 559th Quartermaster Battalion. Major tenant units include the 1st Battalion, 75th Ranger Regiment; 3rd Battalion, 160th Special Operations Aviation Regiment, 224th Military Intelligence Battalion, plus various aviation support elements.

Fort Stewart, about 41 miles southwest of Savannah, has a troop population of more than 15,800

soldiers. Savannah District supports both installations. Its design program for Hunter

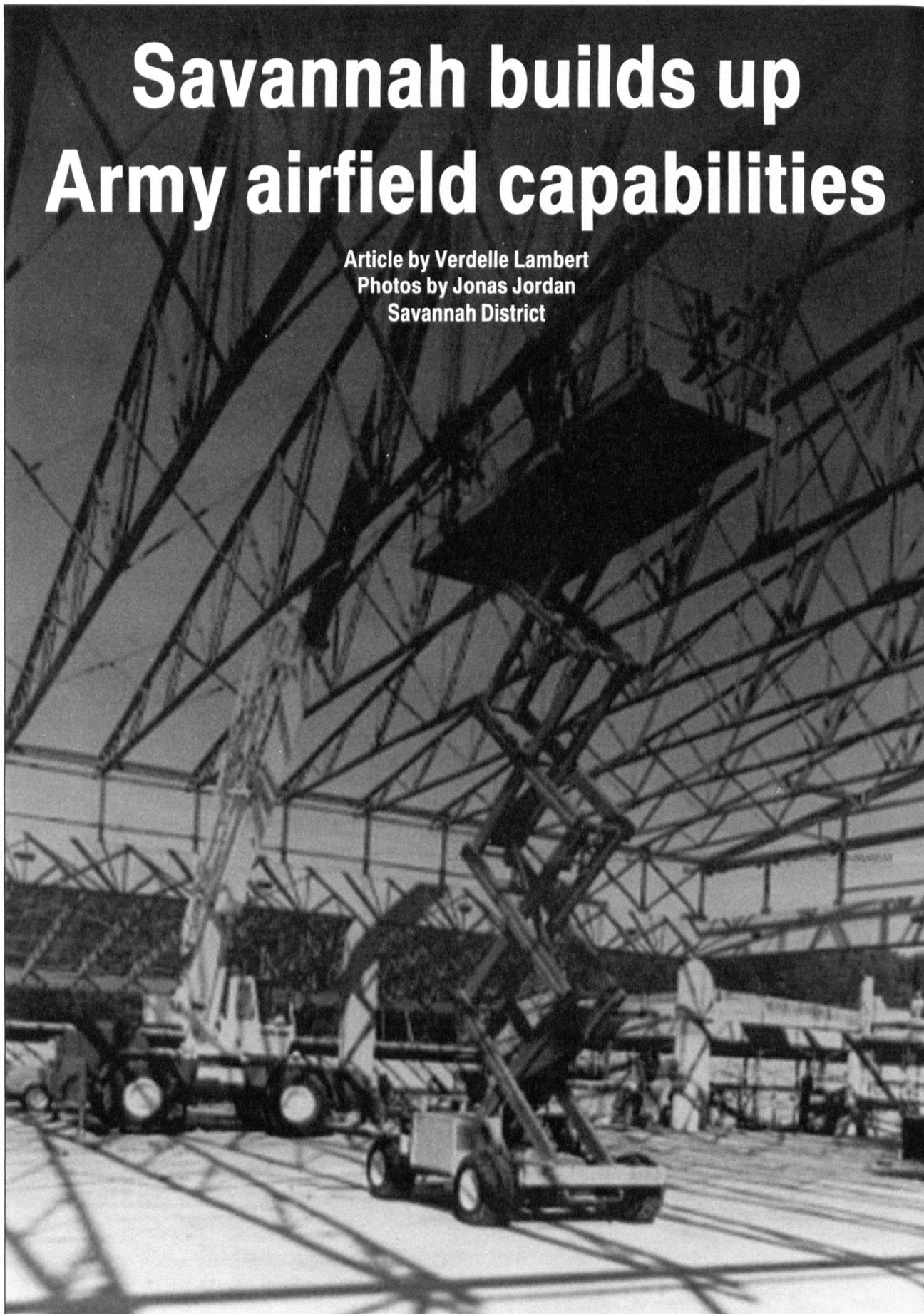
"Fort Stewart and Hunter Army Airfield, in my opinion, have been neglected for a long time because of reduced funding."

currently totals more than \$24 million (including barracks replacement); construction, \$8 million; and environmental cleanup, a little more than \$1 million.

Major Corps projects at Hunter AAF

Brown lists new barracks, the Departure and Arrival Control Group (DAACG) operations facility, and a new tower as major projects for Hunter. (The DPW office will design and manage construction of the tower.)

"Fort Stewart and Hunter Army Airfield, in my opinion, have been



Hunter Army Airfield's new Arrival and Departure Control Facility is scheduled to be finished next July. It will contain areas for showers, cot storage and sleeping, as well as food preparation.

neglected for a long time because of reduced funding," said Brown. "We don't have sufficient permanent facilities or even semi-permanent facilities to meet our needs. We're still dealing with a lot of temporary facilities built in World War II that have well outlived their projected usefulness."

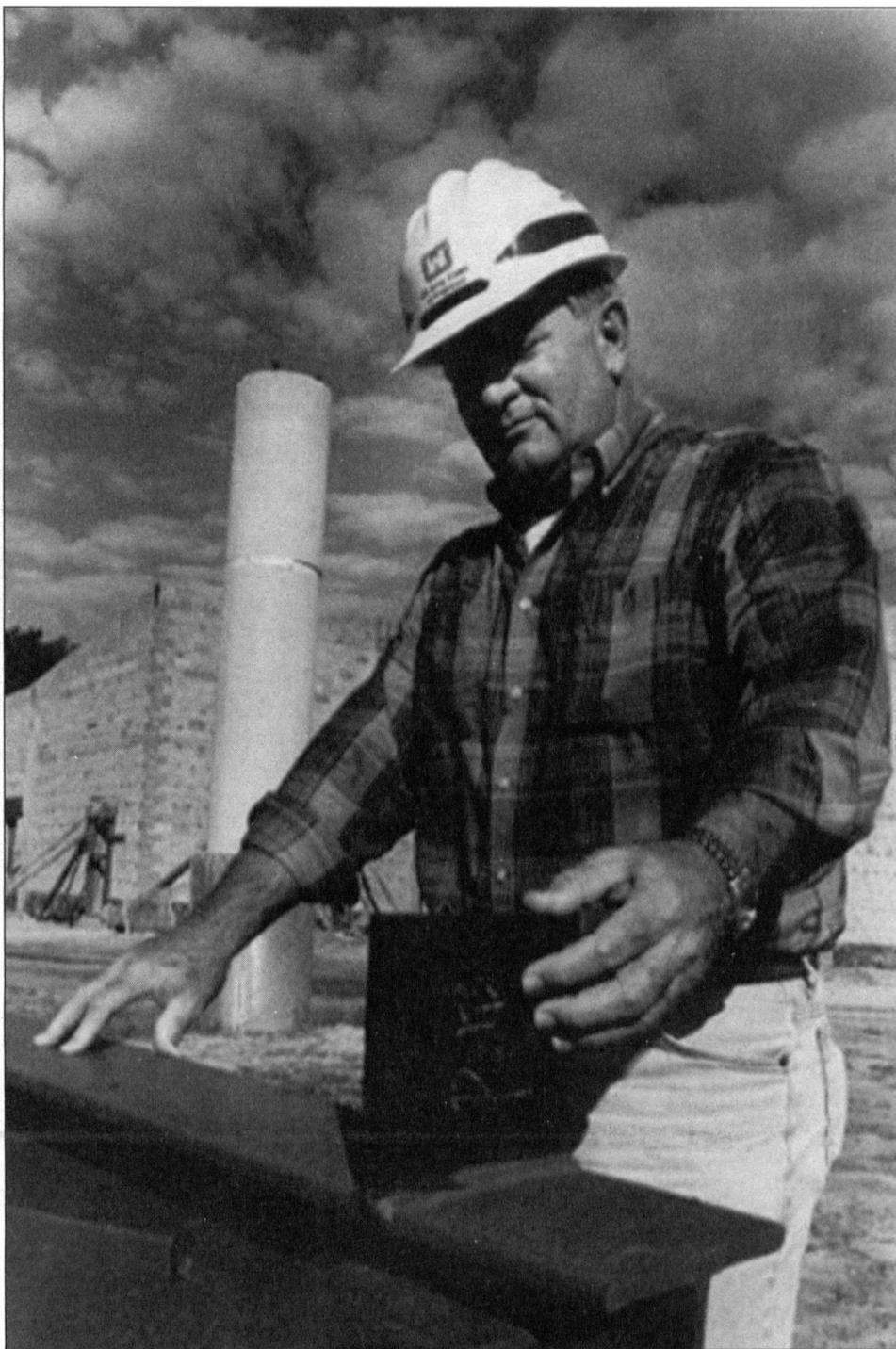
Barracks. New barracks for Hunter was one of 145 projects Congress added to the Pentagon's military construction proposal and one of 107 that survived President Clinton's line item veto in October. According to Brown, the \$11.5 million authorized for barracks construction is a drop in the bucket compared to the \$54 million needed. "The \$11.5 million will give us space for probably 180-190 soldiers out of a requirement of 860 spaces that we need in new construction," Brown said. "It

does not address our need for revitalization of the three pinwheel barracks. That equates to about \$57 million for total revitalization." (The pinwheels are not standard Army barracks; they were built when Hunter was an Air Force base.)

Brown said the \$11.5 million has a high probability of being handled by the Corps. "I don't have the manpower here within the DPW to take on major projects like that," he said.

DAACG. "The DAACG operations facility is something Hunter and Stewart have needed for many years," said Project Manager Frederick Gotthardt, who manages Savannah District's one-man office at Hunter. "Right now soldiers deploy out of an old World War II hangar."

The new \$8 million DAACG operations facility has three sections -- a terminal, an operations



Fred Gotthardt, project manager (above), works out of Savannah District's one-man office at Hunter AAF. Here he inspects structural steel used for the Departure and Arrival Control Group. Below, Marine Reservists discuss business in front of the newly renovated Marine Corps Reserve Center, which was gutted in order to replace restrooms, walls and shower facilities.



area, and a combined pallet storage and cargo processing area.

"The new facility will be quite an improvement," said Gotthardt. "It will be 72,000 square feet -- large enough to accommodate 4,600 soldiers. The troops will be able to shower, sleep, and eat there." The terminal will be equipped with shower facilities, cot storage and sleeping areas (should the troops need to stay for an extended period), and a food preparation area.

"We're about 32 percent complete at this point in time," said Gotthardt, noting that construction will be finished by next July. ACC Construction Company of Augusta, Ga., is the contractor, and VRL Architects of Jacksonville, Fla., designed the facility.

Environmental cleanup. One of the hazardous, toxic and radioactive waste (HTRW) sites identified by the DPW for cleanup is the fire training pit, where jet fuel was ignited to start fires that the post fire department then extinguished in training exercises.

"Our HTRW Section did soil borings in the area around the site to pinpoint the extent of the contamination," said Gotthardt. "They sent the samples off to the lab for analysis and have provided the analytical data to the contractor (Omega Environmental). The work calls for removing above-ground tanks, simulators, and concrete. A good portion of the

"The new facility will be 72,000 square feet -- large enough to accommodate 4,600 soldiers."

area will be excavated -- the contaminated soil hauled off, clean soil brought in, and the area backfilled and grassed."

The project began in November and will probably take three to four months to complete at a cost of \$800,000.

TAC shop. One of the projects the district completed about a year ago was the \$7 million

Consolidated Tactical Equipment Shop for the aviation brigade. "We maintain more than 500 pieces of equipment -- anything that

has a wheel," said Chief Warrant Officer Angel Morales, brigade maintenance officer. "I'd say that the new shop is saving us about 48 hours per vehicle versus the old shop."

Marine Corps Reserve Center.

Several months ago the district renovated Hunter's old commissary building for the Marine Corps Reserve Center.

"We did considerable demolition inside the building, added partition walls, bathroom and shower facilities and totally renovated the interior of the building," Gotthardt said.

"I was very satisfied with the work that Harbor Construction Co. did, and Fred Gotthardt was outstanding as the project manager," said Capt. Dan Matthews, inspector-instructor. "He was hard on them when he needed to be and worked with them and got a lot of things done that I think a lot of people wouldn't have been able to do. This building is very large and adequate to our needs."

The future

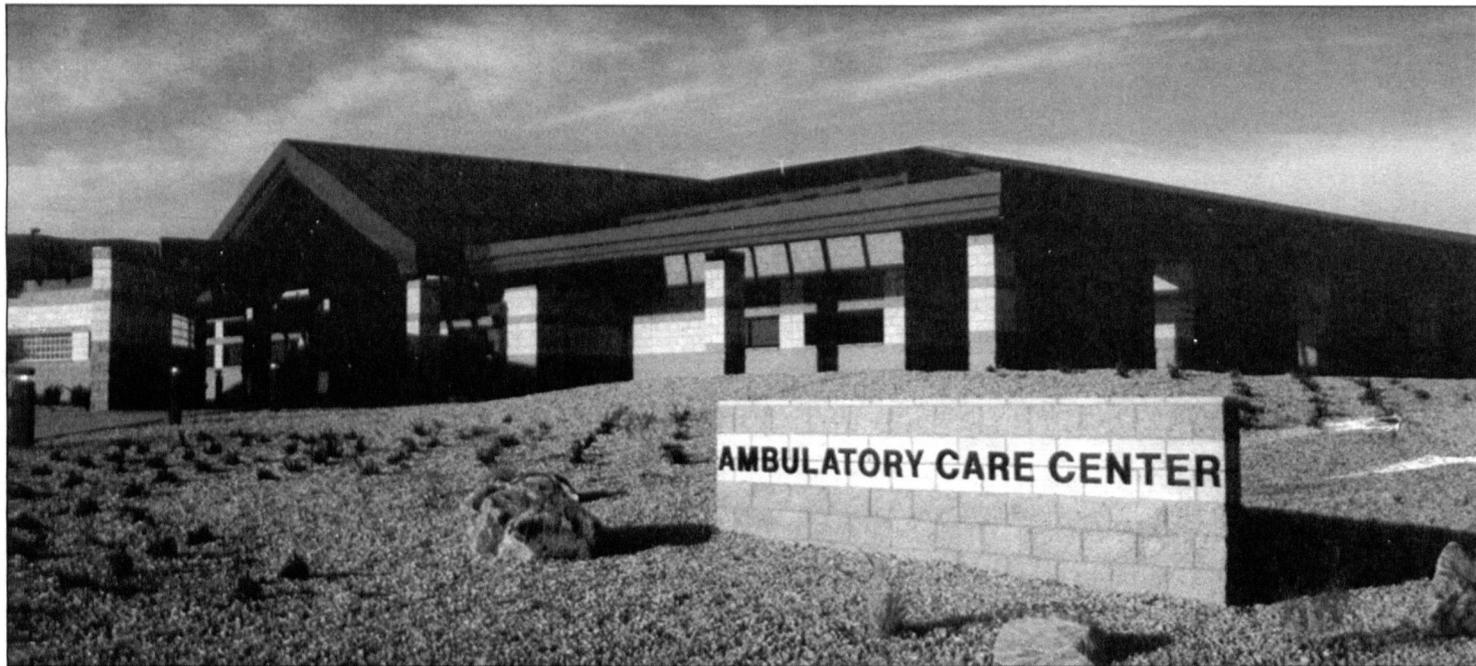
"Sometime in the latter part of 1998 we're scheduled to build a medical/dental facility at Hunter to replace the old facility," said Gotthardt. "We also have a project coming up for a Special Operations Forces company administration building for Special Operations Command. Their primary station area is Fort Bragg, but they have a small detachment here at Hunter."

By the year 2000 Brown expects to see the new barracks take shape, the DAACG site finished, the tower completed or in construction, and a commercial contractor handling maintenance and repair of all new family housing at Hunter, including building about 44 four-bedroom units.

"I'd venture to say, as money becomes tighter in our civilian budget, we'll be forced more and more to go outside and seek help from the Corps to help solve some of our problems," said Brown. "We'll probably tie into any existing repair contracts or, even more, into their A-E contracts or their in-house capability to do design for us. So I see the Corps becoming quite an active member of the DPW and, who knows, some years down the road there may be more than a liaison person from Savannah District sitting in the DPW office."

New facilities ease desert duties

Article and Photo
By Herb Nesmith
Los Angeles District



The new outpatient clinic at Fort Irwin is ready to serve soldiers and their dependents.

1997 was a good year for Fort Irwin, Calif., home of the Army's National Training Center (NTC). It was also a good year for Los Angeles District's resident office at the Mojave Desert installation. And it was a good year for two commanders at Fort Irwin. They each got a new facility, courtesy of the U.S. Army Corps of Engineers.

Col. James Beson commands Fort Irwin's U. S. Army Medical Department Activity, and Lt. Col. Maura Naughton is the Deputy Chief of Staff for Logistics. They often tell each other about their new buildings and equipment. They even talk about them at night, during dinner...at home. In private life Col. Beson and Lt. Col. Naughton are Mr. and Mrs. Beson.

She commands the Material Management Center and its new maintenance facility, which keeps thousands of vehicles ready for NTC's demanding, near-continuous field training exercises. He has a brand new Ambulatory Care Clinic, which is important to the quality of life of soldiers and their families.

"He fixes people and I fix equipment," Naughton said.

The NTC, located between Los Angeles and Las Vegas, is about the size of Rhode Island. Its mission, ever since Gen. George S. Patton used the area in the 1930s, is "tough, realistic combined arms training at battalion task force level using live-fire training and opposing forces in realistic scenarios." In addition to better-trained soldiers, the results are a data source for improving Army training, doctrine, and systems. The NTC also supports families, authorized civilians, and military retirees at the base and in the area. The two new facilities will help the NTC accomplish both types of missions.

Both projects came in with top-quality construction, under budget and ahead of schedule. The secret of their success? "Partnering," said Rex Pickett of Los Angeles District's Fort Irwin Resident Office. Pickett was project engineer for both jobs. The Corps, contractors, and customers met in pre-construction conferences for each project before the first shovelful of earth was turned. The meetings were held off-site. The neutral ground removed participants from day-to-day distractions

and helped them establish relationships.

And check the oil

The new maintenance facility, an 78,000-square-foot building, had been funded for \$15.5 million with a completion date of Oct. 19, 1997. It was completed on Sept. 5 at less than \$10.5 million, a savings of \$5 million.

"I'm really happy with it," Pickett said. "It turned out great. And for the size of the project, the number of changes was relatively small." There were 21 change orders on the job. "We were able to solve a lot of problems in the field. It goes back to a good partnering relationship. Phyllis Holley, our construction representative, worked well with Harold Comman, job superintendent for the contractor, Straub Construction," Pickett said.

"It went very evenly," Holley said. "It was an easy contract to work because the contractor was pro-partnering. The attitude was one of wanting to do superior workmanship."

The facility, a civilian contract operation, stores and maintains enough wheeled vehicles for two brigades -- simulating a unit arriving overseas and picking up pre-positioned equipment, or receiving equipment from a ship. The vehicles are turned in by units after their 28-day training cycles, and the mechanics make sure they are ready to go out with the next unit arriving.

As needed, vehicles receive an oil change, lube job, and wheel-bearing repacks. "You could call us Jiffy Lube," said Bob Webb, maintenance manager for the contractor. The level of maintenance is the same as that done by a driver or unit motor pool, as prescribed by technical manuals for the vehicle being serviced. But while the facility does work normally performed in a unit motor pool, it is much bigger. It has to be, to service 83 types of vehicles.

Before the new building was built, mechanics worked in an outdated, inadequate facility. It had only 12 vehicle bays and some work had to be done outside. "Dropping a turbine in the dirt is not the best thing for it," said Nate Rigby of Material Management

Center Operations.

The new facility has plenty of room indoors, plus air conditioning and heat, highly desirable in an area that has blazing summer sun, cold desert nights, and occasional snowy winters.

Its work bays are actually double bays, big enough to handle more than one vehicle at a time. They measure 36x64 feet, so some vehicles can be parked side-by-side and head-to-head.

The facility maintains about 5,000 vehicles, including trailers. In each rotational cycle, about 1,500 vehicles will be issued to incoming units. The actual number varies according to the type of organization.

"The NTC puts more mileage per month on vehicles than any other Army post -- about 500 miles for wheeled and 300 for tracked vehicles," Rigby said. "Other posts don't have enough room and don't have the constant training that goes on here."

Take two aspirin

Beson is equally pleased with the new Ambulatory Care Clinic. "We're really enjoying it," he said. "We've heard nothing but great comments from patients."

The 30,000-square-foot clinic was also under budget and ahead of schedule. Expected to be completed Jan. 27, 1998 for \$6.9 million, it came in Nov. 30, 1997 for less than \$6.2 million.

This project was another example of partnering. Beson said he was in close contact with the contractors and talked with them at least twice a week, sometimes every day. The result of the coordination between the Corps, the customer, and the contractor was a brand-new outpatient clinic to serve soldiers and their families.

The medical clinic handles internal medicine, pediatrics and well baby, family practice, primary care, flight surgeon, optometry, physical exam (with hearing test), pharmacy, community mental health, social work services and family advocacy, as well as Tricare (referrals to civilian medical care when a particular service is overloaded or not available at the clinic).

A staff of 70 operates the new facility. Sgt. 1st Class Charles Parker of the Managed Care Division said, "I like

it. Since its design our mission has increased in some areas, but it's a very usable building. There's plenty of room."

Parker likes the rooms themselves. While the ceilings are nine feet high, the 14-foot walls continue upward past them to the roof. "This provides good insulation against sound in each room, and good security for the pharmacy."

The mental health service, while physically part of the clinic, is somewhat separate. "This is the best environment for mental health I've worked in during my 15 years in the Army," said Maj. Jim Durand, chief of the Department of Mental Health. He specifically noted the separate entry for confidentiality, and the department is near the duty stations of medical personnel.

"The clinic went pretty well," Pickett said. "There were a lot of user-requested changes, but 1st Lt. Denis Petersen has some training in both the engineering and medical fields. He was very good at translating the requirements from medical to engineering terminology."

Pickett also thought highly of the contractor. "The Cox Construction field staff was excellent. Mike Patten was their quality control specialist, and he and their other superintendents were really good. Their home office was also helpful. Even the company president, Nigel Carey, came out on the job site."

The three-way meetings between the Corps, contractor, and user proved again that partnering can be profitable for all parties concerned. Echoing Pickett's comment, "The contractor had an excellent staff in the field," Callan said. "They stayed on top of things every minute, and they made sure all changes were incorporated into the as-built design."

Mark Russell, Programs and Project Management Division, was the project manager at district headquarters. He became the manager after one project had begun construction and the other was about to start. He agreed with the Fort Irwin Resident Office that things had gone smoothly on both projects. "When projects require very little management, you know the jobs are being done right," he said.

Water safety goes swimmingly at Wappapello

By Ken Kruchowski
St. Louis District

The staff of Wappapello Lake, on the St. Francis River in southeast Missouri, has developed an effective and growing water safety program by building a safety team with other agencies and local businesses in the surrounding area. This team approach has enhanced the district's ability to carry the water safety message to the public. Currently, the lake staff has 35 partners helping them educate the public on water safety.

A main thrust of their program is to shape thinking about safety from an early age by targeting children with their safety message. Reaching children and planting seeds concerning water safety is a vital ingredient to accident prevention. To that end, the staff at Wappapello Lake developed a character called Ranger Willie B. Safe.

"What makes Willie so useful is his universal appeal and humanistic approach to safety," said park ranger Andrew Jefferson. "Willie isn't just one ranger; he's *all* rangers. Children in the area have come to equate Corps rangers with Willie B. Safe and safety on or near the water. It's a concept that works."

A water safety activity coloring book has been printed, including Ranger Willie B. Safe and his friends to help teach water safety. Project Office administration assistant Donna Adams wrote a song (Ranger Willie B. Safe) with water safety tips that children from the area can't stop singing. The activity book and song are available from the Corps' Water Safety Products catalog.

The district's partners in the Wappapello Lake area have helped improve safety on the lake's waters. Lucy Lee Healthcare System, a local hospital in Poplar Bluff, Mo., provided a rescue boat staffed by emergency medical technicians for 36 weekends during the past two recreation seasons. They provided 1,631 hours of service during that time. This hospital has also promised \$1,000 to help share the cost of printing the Ranger Willie B. Safe activity book.

Local businesses have partnered with the district to keep water safety before the public. The Poplar Bluff Steak 'N' Shake restaurant held a Safety Awareness Day, which included a live remote radio broadcast. They also gave away life-jackets as prizes. Ozark Boarder Electric Cooperative includes water safety public service announcements in their



Wappapello Lake's annual "Waterfest" provides a golden opportunity to teach children the importance of water safety. (Photo courtesy of St. Louis District.)

monthly newsletter that serves more than 32,000 homes and businesses.

First Community Bank (at five locations), Wendy's restaurant, and Southern Truck & Trailer placed water safety messages on their electronic message boards. Local schools and other area businesses display Corps water safety posters.

Water safety messages have been printed on local ice bags, bank money envelopes, rulers, and even plastic litterbags for vehicles. Public service announcements on water safety were published in Poplar Bluff's *Daily American Republic* newspaper and aired by area television and radio stations.

The Wappapello Lake staff has also partnered with Troop E of the Missouri State Highway Patrol to pro-

duce radio public service announcements and even a billboard on a major highway with the message "seat belts and life jackets save lives." This partnership may lead to more efforts with the Highway Patrol through a Memorandum of Agreement between the agencies. According to park ranger Angela Smith, proposals include a joint safety program for schools, and a new annual special event, called Safety Day, which will be held in partnership with local fire departments, chambers of commerce, the Missouri Department of Conservation, and any other agency or organization interested in promoting child safety.

According to Mike McClendon, project manager, "Our hope is that it will become second nature for individuals to put on a life jacket or wear a seat belt."

Reservists wade boldly into flood relief efforts

Article and Photo
By Byron Race
Buffalo District



Chief Warrant Officer Joe Brown discusses sandbagging and other flood protection measures with property owner Jean Alexander.

cal communities to identify and rank potential flood sites in all eight counties bordering Lake Erie. With U.S. Coast Guard watercraft and helicopter support, they conducted surveys for

more than 50 flood-prone areas.

The reconnaissance data was compiled to estimate the numbers of threatened residential, commercial, and public properties, along with potential re-

quirements for flood-fighting materials.

The district prepared a contract solicitation to procure 1.5 million sandbags and 1,000 rolls of plastic sheeting to be used for temporary revetments. The reservists assisted with delivery, coordination, and accountability procedures while government-furnished materials were delivered to local communities.

They conducted small group training sessions on installing effective temporary sandbag barriers to help property owners lessen damage. They also provided technical assistance at several public forums.

As members of the REservists in Support of Disaster Relief Operations (RESURO) program, these Corps officers possess both military experience and a variety of civilian-acquired skills. All have worked in disaster response missions including Hurricane Andrew, the Midwest Floods, the Northridge Earthquake, and Hurricane Marilyn.

"Lots of these folks seem happy to see us here when the water gets up to their doorsteps," said Maj. Glen Bassett, a reservist from Colorado Springs, Colo. Bassett and four other reserve officers from the U.S. Army Corps of Engineers served with Buffalo District recently to lessen potential flood damage on Lake Erie.

With lake levels rising, Ohio Governor George V. Voinovich requested federal assistance under the authority of Public Law 84-99. This authority allows the Corps to procure flood-fighting materials and provide technical assistance as the potential for flood conditions develops.

The reservists served as liaison with the Ohio Departments of Emergency Management and Natural Resources, county emergency managers, and lo-

Volunteers leave legacy for Boy Scouts

By Joyce Tsai
New Orleans District

Many men in the U.S. Army Corps of Engineers volunteer with the Boy Scouts. For them, Scouting is not a dim memory of youth, but a lifetime commitment to pass what they gained to the next generation of young men.

New Orleans District has four of these lifetime scouts.

Art Belala joined the Boy Scouts when he was 11. "Back then we did everything by foot -- camping trips, pow-wows, field trips. Not like today when you can catch a bus. That was more than 40 years ago."

Times may have changed, but for Belala Scouting remains a life commitment. "I'd like to give others the opportunities I had. Scouting gave me some great learning experiences. It opened a lot of doors."

As a young man, Belala became an Eagle Scout, the highest rank in scouting. Joining the Navy interrupted his Scouting, but he returned to it in 1984 when he met Skip Jacobs who led his son's troop. Jacobs convinced Belala to become an adult leader.

Belala is the photographer for Troop 221. He also serves on the Boy Scout Council as the Assistant Commissioner for Exploring, advising Explorer Posts on their programs.

Jacobs has been in Scouting for 23 years. He returned as an adult when his son joined in 1983. "My mission is to give them a wholesome environment and teach them it's okay to fail and learn from their mistakes," he said. "It's a good program for youth. It keeps a lot of kids off the street and teaches them life lessons and goals."

Jacobs' troop also handles the formal ceremony to retire American flags when they are no longer usable. "It teaches patriotism," Jacobs said. "I tell them what the colors represent -- blue for loyalty, red for the blood shed for our country, and white for purity."

Jacobs said that Scouting also

teaches pride. "I tell them, 'Look up at the moon. The only people who have been there were Eagle Scouts. When you're an Eagle Scout, you're in pretty serious company.'"

Tom Waguespack has been Advancement Chairman for his troop since 1992. He keeps records for all rank advancements, merit badges, and other awards the boys earn. He also prepares these awards to be received for their "Court of Honor" twice a year.

"We're big on leadership," Waguespack said. "We prepare them to be leaders and not sit back and watch others do it. They get chances to practice leadership by preparing the pro-

grams for our meetings, teaching scouting skills, planning camping trips, and so on. Because of what they do for advancement in Scouting, they feel more comfortable leading. You see them organizing service projects and coordinating work and volunteers. At first, some shy away or feel they can't do it, but they grow and build their confidence. This is the point where they start to do more for themselves and others."

Don Hebert joined when his oldest son, Dwayne, decided to. Watching his son, Hebert saw the benefits of Scouting. "I had a trouble-free son with a high GPA," said Hebert. "Scouting opened doors for him, taught him leadership and responsibility at a young age."

"Scouting teaches kids to think positive," said Hebert. "We try to teach them that it's not your color, or whether you're rich or poor, that matters, but the effort to overcome differences toward a common cause."

For the past 15 years, Hebert has worked through the Catholic church as an adult leader for the Muskogee District's Troop 185. "It opens doors and teaches young men to set goals and meet them. It teaches values and responsibility. Scouting helps them build a second set of survival skills, both outdoors and in the community."



Tom Waguespack takes a group of Scouts down a raging river. (Photo courtesy of New Orleans District.)

Woman stitches family history into quilt

Article by Penelope Schmitt
Center for Public Works
Photo by F.T. Eyre
Headquarters

Look twice. That five-year-old gazing out of the picture-studded quilt does wear the same smile as the woman who stitched it. Marilyn Hunter of the Office of History has recorded her family's saga in fabric.

Hunter is a member of Quilters Unlimited and has been stitching quilts in many shapes, sizes, and patterns for several years. When it came to creating a special gift for her father's 85th birthday, the idea of combining her talents as the Office of History's editor and her needlework seemed just right.

Scanning, cropping, and reproducing photos in every way imaginable is just part of a day's work in the Office of History. "We often have the joy of sifting through a lifetime collection of photos and memorabilia belonging to a distinguished member of the U.S. Army Corps of Engineers," Hunter said. "I've learned how historians work with artists to scan, enlarge computer images, make photos of letters, maps, and even small objects. It's all part of putting together our publications and keeping archives of historic material."

Sure enough, the memory quilt she pieced for her father, Dr. J. W. Gauger, features a lively collection of documents, photos, significant pieces of material, and fabrics in prints that map and record the generations of her family's life.



In this quilt made for her dad's 85th birthday, Marilyn Hunter covers six generations of her family.

Centered on a family portrait including Hunter's great-grandparents, the quilt traces the history of her Iowa family from the early farmstead days, through her father's schoolboy photos, three generations of family university graduations, wedding pictures, all the way to great-grandchildren, including Hunter's grandson Cameron in a Superman costume.

"It's important to keep your sense of humor," Hunter advised. Whimsi-

cal elements and family humor abound in sly corners of the quilt. A row of bow ties, made from some veteran haberdashery in her dad's wardrobe, marches across the lower left corner. Gauger's fondness for comic images of cows shows up more than once. And the adult Hunter is featured in her Halloween costume against a background of blue spiderwebs. "This way, the quilt will be fun for everyone who sees it, especially the grandchildren

and my nieces," Hunter said.

The quilt also features a number of family documents. Gauger was an intern away from home in Louisville, Ky., when Hunter was born. The quilt includes the Western Union telegram he sent to her mother on learning the news of his daughter's arrival.

A picture of her brother in a determinedly defensive football pose sports the caption "I might have seen more of America when I was a child, if I hadn't had to spend so much time protecting my half of the back seat from incursions by my sister."

"My parents toured the country with us on vacations," Hunter said. "That's why my brother's picture is mounted on fabric that looks like a road map. And yes, he *did* have to protect his half of the back seat from me!"

How did Hunter turn all these paper memorabilia into material for a quilt? "There are a number of companies now that can scan your photos onto fabric, producing a permanent image without doing any harm to your heirloom photos. I called on my brothers and others to contribute pictures and other documents, talked my dad out of some old ties, and combined the images with fabrics."

The result proved a big hit at a family reunion and birthday party for Gauger held in Tucson. "I'd have been happy for Daddy to throw it on the back of the sofa, but I think it may wind up hanging on the wall," Hunter said.

Around the Corps

SES news

Pat Rivers has been approved for appointment to the position of Chief of Environmental Restoration Division at headquarters. Her previous job was Assistant Deputy Under Secretary of Defense for Cleanup with the Office of the Deputy Under Secretary of Defense for Environmental Security. Reporting date is to be determined.

Dr. Barbara Sotirin has been approved for appointment to the position of Director of the Cold Regions Research and Engineering Laboratory. Her previous job was a staff specialist with the Office of the Under Secretary of Defense (Acquisition & Technology), Naval Warfare Office. Sotirin reported on March 2.

Stephen Coakley has been selected for the position of Director of Resource Management in headquarters. Coakley is currently the Chief of the Military Personnel Division, Office of the Assistant Secretary of the Army (Financial Management & Comptroller). He reported to his new position on Feb. 17.

Ohio prison permit

A long, difficult process ended when Buffalo District issued a permit to the Ohio Department of Corrections and Rehabilitation to build the first state-owned, privately-run prison in Conneaut.

An environmental impact statement found that the site is environmentally diverse and home to many wildlife species. Both Turkey Creek and Conneaut Creek flow through the property and are cold-water habitats supporting trout and steelhead salmon. The site also contains Ohio's best and largest hemlock swamp.

Advanced engineering and stormwater management techniques were negotiated before the permit was issued. The goals were to avoid Conneaut Creek becoming silted during construction, and to protect groundwater flow that feeds the hemlock swamp.

Some of the techniques planned include clay collars and anti-seep collars, placing a clay cap on the sewer line to prevent groundwater from entering, backfilling with native sand, and grouting the outside of manholes. In addition, about 4,100 feet of a tributary will be filled and the water relocated using silt senses, detention basins, and sedimentation basins to protect Conneaut Creek. (The tributary supported no fish or other wildlife.)

Wetlands mitigation will create wetlands offsite and preserve additional acreage near the prison. The state and Conneaut partnered to create, restore, and enhance about 11 acres on property owned by the Nature Conservancy. In addition, they agreed to preserve another 86 acres of wetlands, including the hemlock swamp, beside the prison. The permit also requires that an inspector knowledgeable in environmental issues be present during construction.



The *Dobrin*, new in the Corps fleet, cruises at 21 knots. (Photo by Al Dorfman, New York District.)

New books

The Office of History has released two new books. *Designing the Bayous: The Control of Water in the Atchafalaya Basin, 1800-1995* by Dr. Martin Reuss discusses local, state, and federal efforts to reconcile overlapping, conflicting purposes in developing the Atchafalaya Basin of Louisiana. It also explores the effects of the Flood Control Act of 1928, the planning and construction of the Old River Control Structures, and the Corps' evolving approach to

water resources planning and policy, emphasizing the new relationships and challenges in the environmental era.

Defending America's Coasts, 1775-1950, a bibliography jointly prepared by the Office of History and the Formerly Used Defense Sites team of Environmental Division, is about the Corps' role in protecting the coast. The bibliography covers the beginnings of coastal defense from the Revolutionary War through World War II until missiles ended the need for massive fortifications.

Both books are free to all Corps employees. Write: U.S. Army Corps of Engineers Publications Depot 2803 52nd Avenue Hyattsville, Md. 20781-1102 Or fax 301-394-0084

For *Defending America's Coasts*, order EP 870-1-57. For *Designing the Bayous*, order EP 870-1-53.

Barracks groundbreaking

The \$31 million Whole Barracks Renewal Complex at Fort Riley, Kan., began recently with a groundbreaking ceremony. The new one-plus-one barracks will house more than 500 soldiers of the 1st Brigade and will replace 1950s-era, gang-style barracks. The one-plus-one concept allows separate bedrooms for each soldier with a shared bathroom and kitchenette between two soldiers.

Congress has authorized \$51 million during three fiscal years to build two massive barracks complexes in Fort Riley. The project consists of five three-story brick barracks, two soldier community buildings complete with kitchen, lounge, activity rooms, washers and dryers, mail room, vending area, and personal storage cubes for each soldier; four company operations facilities with administrative and storage space, as well as parking, landscaping, and utilities for each structure.

M.A. Mortenson will build most of the complex in 2.5 years, with other components taking 4.5 to complete. The Corps' Fort Riley Area Office will administer the contract.

New boat

The *Dobrin* has joined New York District's fleet of boats, arriving at her new berth at Caven Point, N.J., on Jan. 15. Commanded by Michael Marcello, the 54-ton boat will be used to perform hydrographic surveys of all navigation channels and inlets under the district's control, and all borrow sites and dumping areas. In addition, it will perform before-and-after dredging surveys of federal channels in New York Harbor and its tributaries.

Dobrin is 64 feet long and 19 feet wide, with a draft of five feet. It can cruise at 21 knots and is equipped with bathymetric data collection equipment. It has an aluminum hull and is powered by two Detroit diesel engines. The boat's crew is one small craft operator, one deck hand, and a survey crew of two.

NED relocates

Beginning March 16, New England District (NED) headquarters will move to a new facility in Concord, Mass. The new mailing address will be:

U.S. Army Corps of Engineers
New England District
696 Virginia Road

Concord, Mass. 01742-2751

NED will also have a new area code (978) and local exchange (318-8), but all district phones will keep the last three digits of their old numbers.

HVAC training

The Corps' Professional Development Support Center and the Engineering and Support Center, Huntsville, is offering a heating, ventilation, and air conditioning (HVAC) course to Corps employees and other interested parties. The course, Basic HVAC Design, is a 36-hour, five-day overview of the practical and theoretical aspects of the design process.

The course includes heating and cooling load calculations, psychrometrics, equipment selection, ductwork sizing, hydronic sizing, sound and vibration control, and indoor air quality. The breadth of material covered in this course is wide enough for all experience levels. Instruction also includes an overview of federal contracting and design criteria.

For more information on course registration, call Janine Wright at (205) 895-7455. For technical questions, call Randy Miller at (205) 895-1705 or Tim Gordon at (202) 761-1773.

DLAMP

The Defense Leadership and Management Program (DLAMP) is a new DoD-wide leader development program. It was developed by the Office of the Secretary of Defense in response to recommendations by the Commission on Roles and Missions, which called for changes in how senior civilians are educated and developed. DLAMP's objective is to prepare a capable, diverse, mobile cadre of senior civilians with DoD-wide capability.

Each participant will complete a development program including:

- A three-month or 10-month program of professional military education with emphasis on national security decision-making.
- A minimum of 10 graduate-level courses in national security, leadership, and management issues.
- A rotational assignment of at least 12 months for career broadening.
- Service and occupational-specific development courses. For Army, this includes the civilian leader development core curriculum and applicable Army Civilian Training, Education and Development System (ACTEDS) Plans.

Each participant will be guided by a structured mentoring process. Participants will meet these requirements in a period of up to six years, generally in a temporary duty status from their home station. Previous education and experience may fulfill some DLAMP requirements.

Participation should enhance the individual's competitiveness for key leadership jobs in DoD. A number of leadership positions (GS-14, 15, and SES) throughout DoD will be designated DLAMP key positions. DLAMP participants and graduates will be given priority in filling these jobs.

All expenses (including tuition, TDY travel and transportation) are funded by DLAMP. Additionally, when participants are assigned to long-term training, DLAMP resources will pay half the cost to backfill the participant's position during the absence.

The first DLAMP class was selected last December. Forty-five Army employees, GS-14/15, were selected along with 232 employees from the other DoD components. The program will be announced again this month, then annually each spring. The program will be open to employees in grades GS 13-15.

The Corps' DLAMP point-of-contact is Barbara Brown of the Human Resources Development Division. For more information, check the PERMISS article also in Civilian Personnel OnLine. Log on to HYPERLINK <http://cpol.army.mil>, click on APERMISS@, and search on ADLAMP@.

Construction underway on demil facility

Huntsville manages DoD's largest construction project

By Linda James

Huntsville Engineering and Support Center

High in the desert of Eastern Oregon, the largest construction program in the Department of Defense has begun in earnest. The Umatilla Chemical Agent Disposal Facility, the second of three incineration facilities to be built under the life-cycle management of Huntsville Center, is about nine percent complete. According to Steve Lewis, Umatilla project manager, the \$567 million system contract project is right on schedule.

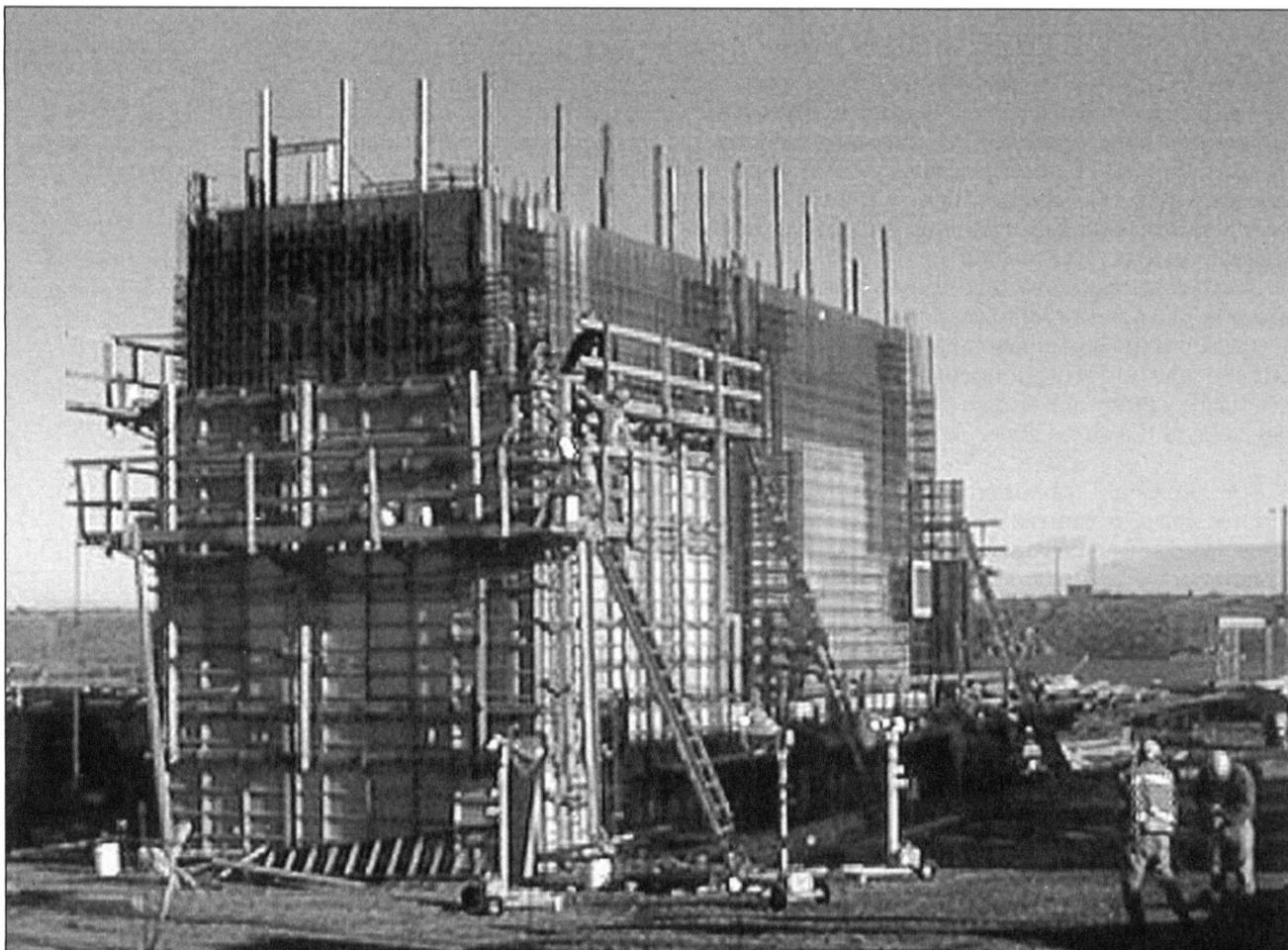
Raytheon Demilitarization Company, the prime contractor, has about 500 workers streaming to and from the site located at the 20,000-acre Umatilla Army Chemical Depot. Just last month, that number jumped when Raytheon started a second shift.

The construction site covers 33 acres, has eight separate buildings that, when complete, will house five incinerators and dispose of 220,599 weapons and 3,717 tons of deadly chemical agents.

According to Lewis, who is based in Huntsville, the project required a tremendous amount of "dedicated effort and teamwork" to bring the contract to award and for construction to start. "The people in Engineering and Contracting directorates have given this project their very best and it shows in our progress to date," said Lewis. "Long before a construction project of this magnitude actually begins, countless hours are invested by the Huntsville team members doing engineering designs and preparing contract awards."

In fact, the design for the facility began in 1992 and was completed two years later. The design architect-engineer contractor is Ralph M. Parsons Co. The systems contract, with \$265 million earmarked for construction and equipment, was advertised in 1994 and awarded in 1997 to Raytheon.

Now, according to Lewis, the success of the project is focused on the 18-member U.S. Army Corps of Engineers office at Umatilla, with support for the construction effort coming from Engineering, Contracting, and the directorates of Chemical Demilitarization Program Management and Chemical Demilitarization Construction at Huntsville Center.



The Umatilla Chemical Agency Disposal Facility, currently under construction, is an on-schedule monument to effective teamwork. (Photo courtesy of Huntsville Engineering and Support Center.)

"It's been a tremendous pleasure to work with these folks," said Lewis. "Without exception, they're top-notch professionals."

A top-notch team is needed because the sheer size of the project presents special challenges and issues almost daily. But, according to Lewis, the greatest challenge for both the Corps and the contractor is the number and scope of changes necessary to meet rigorous environmental and safety requirements. The most significant change is the addition of the Pollution Abatement System carbon filter, which is required by the Oregon Department of Environmen-

tal Quality.

"We're working closely with our customer, the Project Manager for Chemical Demilitarization at Edgewood, Md., and the contractor to incorporate changes as quickly as possible to minimize schedule and cost impacts to the project," said Lewis.

The resident office will be on-site through the end of construction (projected for completion in April 2000), with a small cell of people remaining while the facility's systems are checked out for another 22 months. Actual incineration will begin in 2002 and finish in 2005.

Corps fights El Niño

Continued from front page

Maria River and Santa Paula Creek in Santa Barbara.

As of Feb. 14, South Pacific Division had flood fights completed or underway at 33 locations. The repairs from last year's Pineapple Express, mainly in the Sacramento and San Joaquin Valleys, are holding well and the system is performing as designed.

El Niño caused other damages. Shoaling and rock movement at harbors such as Ventura, Morro Bay, and Marina Del Rey have occurred. The north and south channels at Marina Del Rey are 80 percent filled. Wave heights of 20-30 feet were common along the entire 1,000 miles of the California coastline.

Sacramento District

Levee repairs stemming from El Niño have taken the form of reinforcement, building stability berms, and temporary embankments in the Sacramento District area. "We have been highly responsive to requests for assistance from California," said Capka. "As a result of our El Niño preparations, Sacramento District is using Indefinite Delivery, Indefinite Quantity Contracts which were awarded before the storm season."

These contracts, commonly called IDIQ, include

established costs for various activities such as providing rock, dirt, and various pieces of equipment. This process allows contractors to get on site and go to work immediately. IDIQ contracts were used at four locations and the value of the work was \$1.6 million. The district also has another \$4.5 million worth of contracts underway for levee repairs in the Sacramento/San Joaquin Delta.

San Francisco District

The Pajaro River runs along the northern edge of the fertile agricultural fields immortalized by John Steinbeck. It separates Monterey and Santa Cruz counties and the communities of Watsonville and Pajaro. The federal levee system protecting the communities was built 50 years ago and was damaged by the 1989 Loma Prieta earthquake, and floods in 1995 and 1997. El Niño would also take its toll on the system.

As of Valentine's Day, San Francisco District had completed flood fights at 11 locations along the Pajaro and its tributary, Salsipuedes Creek, at a cost of about \$6.2 million. While the levees did not fail, they were eroded due primarily to the design capacity being exceeded. Work to repair the problems (which led to evacuation of the community of Pajaro) was ham-

pered by extremely wet levees and access roads. Getting to the site for the necessary repairs was not easy.

Los Angeles District

In Southern California, Los Angeles District conducted a flood fight on the Santa Maria River, 80 miles north of Santa Barbara. A 600-foot breach occurred and the district issued contracts for \$684,000 to close the breach, build four small groins, and repair damages to the land side of the levee. Repairs to Santa Paula Creek, totaling \$167,000 were also made with emergency grouting to prevent further undermining of the channel walls.

Santa Barbara County officials requested assistance on Feb. 6 in clearing a number of debris basins above the Santa Barbara airport. The basins had been cleared before the winter season. El Niño's initial brunt, however, had filled five basins to 80 percent or more of their capacity. A \$1.2 million contract was awarded and completed in mid-February.

El Niño rains are expected to extend into April. (Jason Fanselau, Sacramento District; Doug MaKitten, San Francisco District; and Fred-Otto Egeler, Los Angeles District; also contributed to this article.)