



US Army Corps  
of Engineers®  
San Francisco District

SPN

# Surveyor

May/June 2009

Vol. 1, Issue 2

## Keeping Watch

*USACE-SPN gears up  
in support of national  
dam and levee  
safety campaign*

— Page 15 —

*U.S. Army Corps of Engineers — San Francisco District is set to begin a prolonged dam and levee inspection program in the coming months as part of a national campaign to inventory all flood prevention structures in the United States. Warm Springs Dam, a 3,000-foot wide earthen dam at Lake Sonoma, Calif., is just one of over 80 such sites in California.*

Brandon Beach

# COMMANDER'S CORNER

## Corps offers numerous ways to 'invest in yourself'

By Lt. Col. Laurence M. Farrell  
San Francisco District Commander

As an Army officer, I have had the opportunity to work with officials at other federal agencies, state and local governments, and the private sector. I've studied their organizations and how they support their people. In my 18 years of Army experience, I have found few organizations that give its people as many individual-development opportunities as we do in the Corps.

In our district, we offer you five types of development opportunities.

### **Individual Development Plan**

First, each of us with the San Francisco District has an Individual Development Plan (IDP). The IDP is your road map to reach your professional goals. For example, an IDP might include Corps, Army-wide, Department of Defense or university courses, as well as corporate seminars. Your classes, including travel expenses, are typically paid in full by the Corps for approved training. What's more, the Corps can pay for people to pursue graduate degrees and professional certification.

### **Leadership Development Program**

Second, we offer the multi-tier Leadership Development Program (LDP). For those interested and who qualify, LDP offers one-year curricula at progressively higher levels, all designed to give you an in-depth orientation to our district and the Corps.



### **Mentorship Program**

Third, we have our mentoring program. The program matches new or junior team members with senior district professionals in a one-to-one working partnership. Whether you choose to mentor or be mentored, this experience will give you the opportunity to develop your skills, stimulate personal growth, increase your knowledge of the Corps culture and learn the requirements needed to advance. Mentors can enhance their people-development skills and get a chance to give back to the organization, as well as to themselves.

### **Deployment Options**

Fourth, we offer deployment opportunities. I have spoken in-depth at the Command Briefs and Town Halls about the life-changing experience of serving in Iraq or Afghanistan.

In addition, we offer recurring opportunities, depending on weather and forces of nature, to deploy within the United States to provide disaster relief. Some of your colleagues have already served with distinction as they helped thousands of hurricane, tornado and flood victims from Texas to Florida.

### **Staying Fit**

Finally, we offer individual development opportunities in physical fitness. As with Middle East deployment, I have spoken often about my own commitment to fitness and the multitude of benefits you will get from even moderate, but regular, workouts.

Our district has fitness centers at Lake Mendocino, Lake Sonoma, the Bay Model, and here at District headquarters. We also have a fitness trainer, certified by the International Sports Sciences Association, who will tailor a fitness program to meet your individual fitness needs. Call Carol Coleman, the district's wellness/fitness coordinator, at 415-503-6675 to learn more.

Individual development opportunities are part of what you earn by doing your important work at the Corps. These opportunities are not only a way for the Corps to invest in your future but a way for you to invest in yourself.



### **District Commander**

Lt. Col. Laurence M. Farrell

### **Chief, Public Affairs**

J.D. Hardesty  
[j.d.hardesty@usace.army.mil](mailto:j.d.hardesty@usace.army.mil)

### **Staff Contributors**

Joe Barison  
[joe.barison@usace.army.mil](mailto:joe.barison@usace.army.mil)

Brandon Beach  
[brandon.a.beach@usace.army.mil](mailto:brandon.a.beach@usace.army.mil)

## SPN Surveyor

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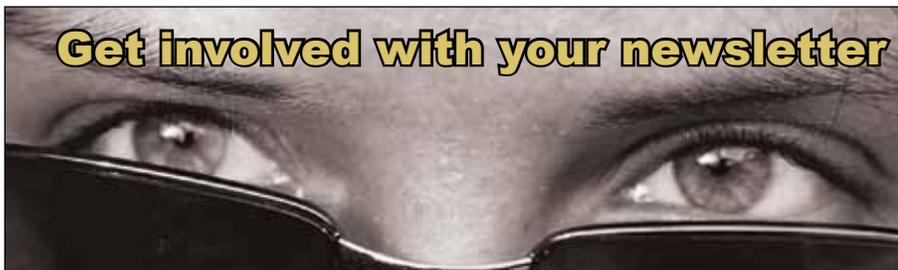
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Surveyor will be a great place to keep everyone informed about activities across the District footprint. To keep fellow employees "In the Know," send your notices, posters, photos and Powerpoint slides of activities in your area to Public Affairs. They will be compiled and included in the next edition of the newsletter. E-mail items to [Brandon.A.Beach@usace.army.mil](mailto:Brandon.A.Beach@usace.army.mil) or [Joe.Barison@usace.army.mil](mailto:Joe.Barison@usace.army.mil).

## SPD Regional Mentoring Program

*Planting the seeds for growth and career development  
(The program is open to all SPN employees)*



### Getting Started

- Obtain an application from a district coordinator, complete and return it.
- Applications are then forwarded to a supervisor for approval.
- Upon approval, mentors may choose to be listed as an available mentor on the regional mentoring Web site or work with a coordinator directly to find a match.
- Mentees may search through available mentors, work with a coordinator or ask someone directly to mentor them.

### Join the Team

*For more information on this program, e-mail SPN district coordinators Daria Mazey at [daria.s.mazey@usace.army.mil](mailto:daria.s.mazey@usace.army.mil) or Jonathan Guerrero at [jonathan.e.guerrero@usace.army.mil](mailto:jonathan.e.guerrero@usace.army.mil).*

# San Francisco VA

## Corps project set to strengthen center's earthquake

By Joe Barison

District Public Affairs Office

Wounded warriors returning from overseas contingencies operations turn to the San Francisco Veterans Affairs Medical Center (VAMC) to heal and get better.

As Larry Janes, capital asset manager for the U.S. Department of Veterans Affairs' Sierra Pacific Network, explained, Congress passed its 2007 emergency supplemental bill of \$3.5 billion for the care of America's returning military warriors. Janes said he knew the congressional bill would mean extra funding for VA to provide the best possible care for America's sons and daughters seeking medical attention.

"Larry Janes is a visionary," said Jim Miller, a senior San Francisco District project manager. "Larry worked with [SF District's] David Yee to set up an individual support agreement between our district... and San Francisco VAMC even before Corps headquarters and VA started on the national agreement — and got the local support agreement signed early, in March 2008." The agreement quickly led to the district's new San Francisco VA Program, which, initially, consists of three projects.

"VA recognized that they had too much work coming in too fast for the medical center's in-house engineering staff," said Miller, who succeeded Yee as project manager when the latter took an assignment in Germany.

One of the three projects is the Campus-wide Electrical Correction — "the electrical upgrade" for short — and is the most

complex of the initial projects. The electrical upgrade aims at no less than completely reworking the approximately 29-acre campus' electrical system, bringing it from its longstanding 4.18 kilovolts (KV) to nearly 12 KV for compatibility with PG&E, the local public utility company.

Steve Malich, P.E., a SF VAMC electrical engineer, described the important benefits. "The new system will have increased reliability and...will keep the lights on longer. It will better handle any equipment failure."

The electrical upgrade will include 30 of the medical center's 37 buildings, requiring replacing transformers as well as installing an extensive network of new underground connections.

Each building's electrical grid must be turned off during the mechanical work, and since this is an active medical center, there must be a backup, exterior electrical source to ensure zero interruption to patient care — including major surgery and life-support machines.

The irony, of course, is that VA medical center buildings will be placed on "life support" while their electrical "surgery" is performed.

"Keeping the hospital up and running is the hardest part," said Miller. "We will need to build a temporary transformer station for each building...take out the old equipment...put in the new equipment."

Emmanuel Lee, a registered architect who's taken over the VA-projects reins while Miller is detailed to the Southwest Pacific Division, described the challenge. "Everything must remain operational...



outages must be limited to a few minutes." And Lee sees an additional consideration in that "this is very different [from usual district projects] because you've got the human factor; with horizontal construction, you don't deal with the users who need to move to other facilities temporarily."

A second project, Seismic 5 & 7, focuses on earthquake safety. The Corps will demolish and replace VAMC Building 5,



Keeping the hospital up and running is the hardest part. We will need to build a temporary transformer station for each building.

**Jim Miller**  
*Project Manager*

# Medical Center

*posture, upgrade campus-wide electrical network*



Everything must be operational. Outages must be limited to a few minutes.

**Emmanuel Lee, R.A.**  
**Project Engineer**

ervation Office (SHPO) because the structure's exterior has historically important detailing.

The Building 7 seismic upgrade will also require SHPO coordination as it, too,

these buildings constitute a hospital hotel — or “hoptel,” as VA staff call it — in which patients and their families who have traveled a great distance may lodge overnight for health care. Hoptel buildings 9 and 10 require seismic upgrades, which, again, will require SHPO involvement due to their historical facades.

“Building 22” is the name of the yet-to-be-built, third hoptel structure, which will connect to the other hoptel buildings. Building 22 will have the hoptel’s first elevator, allowing wheelchair access to all three buildings’ second story.

Corps and VA engineers have their own views about the value of this new partnership. As Lee sees it, “The most valuable thing we’re doing is providing VA the ability to service the health needs of veterans for the next 30 years.”

Miller stated, “We want to be VA’s door to the Corps.”

John Pechman, a SF VAMC mechanical engineer serving as liaison between the medical center and the Corps, believes “the Corps will be helping us serve veterans by providing a safe environment to protect them from earthquakes, as well as keeping the historical significance of the site.”

On the overall working relationship, Janes expressed his appreciation for the Corps. “I give kudos for the professionalism and dedication of the San Francisco and Sacramento Districts (which will perform work at Sacramento, Fresno and Reno VAMCs). We’re leading the way for the country on working together. I think an open line of communication is key to making this process work.”



Brandon Beach

[Above] A former U.S. military barracks in the 1930s, this “hoptel” building, part of the San Francisco VA Medical Center campus, is currently being used for short-term patient lodging. Part of a 2007 emergency supplemental bill passed by Congress, U.S. Army Corps of Engineers — San Francisco District will begin several projects in the coming months to upgrade the campus-wide electrical network as well as improve the earthquake safety of several VA buildings.

which was built in 1934 for radiological services. However, while the Corps often waits for an environmental impact study before doing water-related projects, this time Corps engineers must await guidance from the California State Historical Pres-

is an historically significant structure, complicated by the addition of a cafeteria.

The third project, Seismic 9, 10, 13 & 22, is the more complex earthquake-safety challenge. Buildings 9 and 10 were military officers’ quarters in the 1930s. Today,

# *Pillar Point/Moss Landing POCA Powers Projects*

**By J.D. Hardesty**  
*Chief, Public Affairs Office*

**W**ith three of the South Pacific Division's districts teaming assets and resources together, two Performance Oriented Construction Activity (POCA)-partnered projects within the San Francisco District came to fruition. POCA is the type of procurement process that conjoined the two projects, Pillar Point and Moss Landing, with construction dollars. POCA contracts are a contracting tool used to minimize overhead expenditures and compress delivery schedules.

Pillar Point, formed with two federally-constructed breakwaters in Half Moon Bay, had been pounded by winter storms in 2001 and 2003 that damaged its breakwaters, increasing shoaling and damaging the harbor and endangering boats navigating within its breakwaters.

Moss Landing in Monterey Bay needed jetty and breakwater repair.

According to Neil Hedgecock, project manager, "Moss Landing's southern jetty was deteriorating rapidly with repair costs increasing with each storm season."

That is when Los Angeles District's Chuck Mesa, who provided engineering design function for the two projects, proposed a POCA contract to the basic contract in place to help bring construction dollars to both projects. Individual task orders were negotiated between the government and the contractor, saving substantial time and money.

James Garror, with the San Francisco District's Contracting Division, agrees. "There wasn't sufficient time left in the fourth quarter of fiscal year 2008 to solicit the Pillar Point project through the bid/open process, so partnering together resulted in a contract being awarded to repair both projects."

These two projects, each requiring less than \$1 million, were jointly funded with a POCA contract - well less than the POCA contract's \$3.5 million threshold.

With the Los Angeles District providing design and geotechnical support, the Sacramento Division providing contracting support and the San Francisco District providing project and construction management, the three districts teamed resources to bring the projects to fruition.

Cross-district cooperation between Sacramento, Los Angeles and San Francisco districts paid quick dividends for both the San Mateo and Moss Landing Harbor districts and serve as a future business model.

**Moss Landing Breakwater construction  
photo.**

File Photo



**INSET Photos: Pillar Point Jetty and Breakwater photos show how the waves can damage the structures.**

- File Photos

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# EMPLOYEE BRIEFS

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## Many new faces join SPN team at start of '09



**Brandon Beach**  
*Public Affairs Specialist*  
Public Affairs Office



**Sheldon Bluestein**  
*Real Estate Specialist*  
Engineering Branch



**MSG Wayne Brandt**  
*Security Officer/District*  
Noncommissioned Officer-in-Charge  
Operations & Readiness Division



**LTC Don Davis**  
*Project Engineer*  
Construction Branch



**Stuart Fermahin**  
*Construction Representative*  
Construction Branch



**Bethany Hackjos**  
*Student Trainee*  
Engineering Branch



**Brian Hubel**  
*Civil Engineer*  
Engineering Branch



**Christopher Moore**  
*Civil Engineer*  
Engineering Branch



**Daren Shappet**  
*Civil Engineer*  
Engineering Branch



**SFC Lam Tran**  
*Operations Noncommissioned*  
*Officer-in-Charge*  
Operations & Readiness Division

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## *San Francisco District* **Accolades**

Val Gutierrez and Victor Reynoso were selected to represent the San Francisco District in national competition for Construction Manager of Excellence and "Hard Hat" of the Year respectively.



**Construction Manager of Excellence**  
**Val Gutierrez**  
*Construction Branch*



**'Hard Hat' of the Year**  
**Victor Reynoso**  
*Hamilton Project Office*

# 2008 San Francisco District Honorary Awards



Brandon Beach

[Left to right] Lt. Col. Laurence M. Farrell presents the 2008 San Francisco District Honorary Awards to Jere Harper, Irene Lee, Jeff Ide, Carmen Cheung and Jay Kinberger. Not pictured is Olivia Grate, the district's Employee of the Year.

## Employee of the Year



Brandon Beach

**Olivia Grate**  
District Workforce  
Management Administrator

## Team of the Year



File photo

### Oakland/Hamilton Project

Congratulations to our 2008 individual awardees:

#### Olivia Grate

District Employee of the Year

#### Jeff Ide

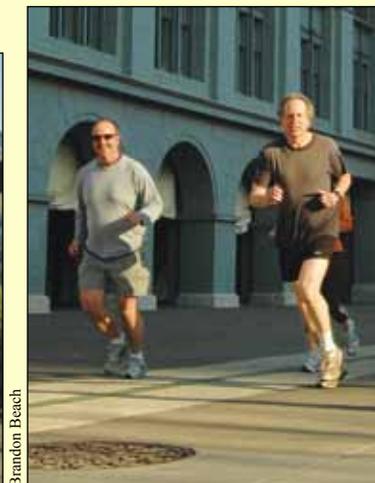
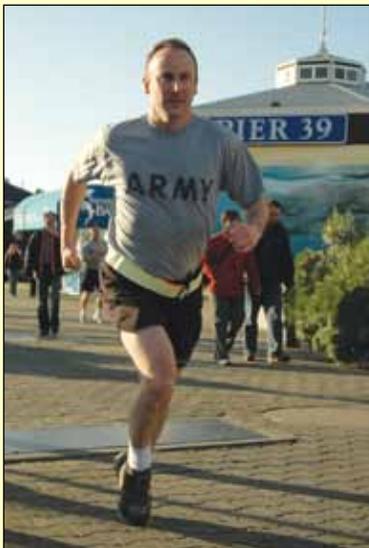
District Engineer of the Year

#### Jay Kinberger

Commander's Leadership Award

#### Carmen Cheung

District New Employee of the Year



Brandon Beach

[Left] Lt. Col. Don Davis makes the turn at Pier 39 on his way back to Embarcadero. [Above] Joe Barison, right, and Derrick Dunlap set off on a three-mile loop from the Ferry Building last month. District Fun Runs are held bimonthly and vary between three and five miles.

## A run around the block

By **Brandon Beach**  
District Public Affairs Office

### Next fun run events

May 5 & June 2, 6 a.m.

May 21 & June 16, 4 p.m.

It's starting to catch speed at the district. With the weather, for the most part, feeling California, SPN employees, both civilian and military, are lacing up their jogging shoes.

The district fun runs are held biweekly and alternate

each week beginning at 6 a.m. for the early risers and 4 p.m. Routes vary from three to five miles, starting at the lobby of the Bank of America Computer Center.

# Riding with **THE BACKCOUNTRY HORSEMEN**



Lt. Col. Laurence M. Farrell presents a Certificate of Appreciation to Dan Horn and members of the Backcountry Horsemen.



Members of the Backcountry Horsemen work on a new equestrian camp at Lake Sonoma, Calif.

*U.S. Army Corps of Engineers-San Francisco District Commander Lt. Col. Laurence M. Farrell presented a Certificate of Appreciation to the Backcountry Horsemen of California-North Bay Unit for their Lake Sonoma volunteer work Feb. 7 for a lifetime of commitment volunteering time and money to make the park better.*

*"Time is not free, it is a sacrifice and your sacrifice has made a difference to everyone who comes to the park," Lt. Col. Farrell told the group while they took a break from constructing a roof over a newly-built restroom.*

*Twenty-five people from the 110-member organization have invested more than 3,500 hours and a total of nearly \$90,000 equivalent in money, timber, bricks and mortar and sweat renovating an equestrian group campground, constructing new trails, stabilizing and widening the over 47 miles of existing trails, building picnic shelters, installing a vault restroom, picnic tables, spring boxes and water troughs at designated staging areas, and replacing hitching posts with high-lead posts.*

*The certificate was accepted on behalf of the organization by Dan Horn, Mike Mascarena, Donna Meier, Beth Mascarena, Barry Aldridge, Del King, JoDean Nicolette, Jeff Wright, Denise Gilseth, James Kelley and Cooper Wright.*

# A.R. Smith

Former EOD specialist is district's eyes & ears

Story by Brandon Beach  
District Public Affairs Office

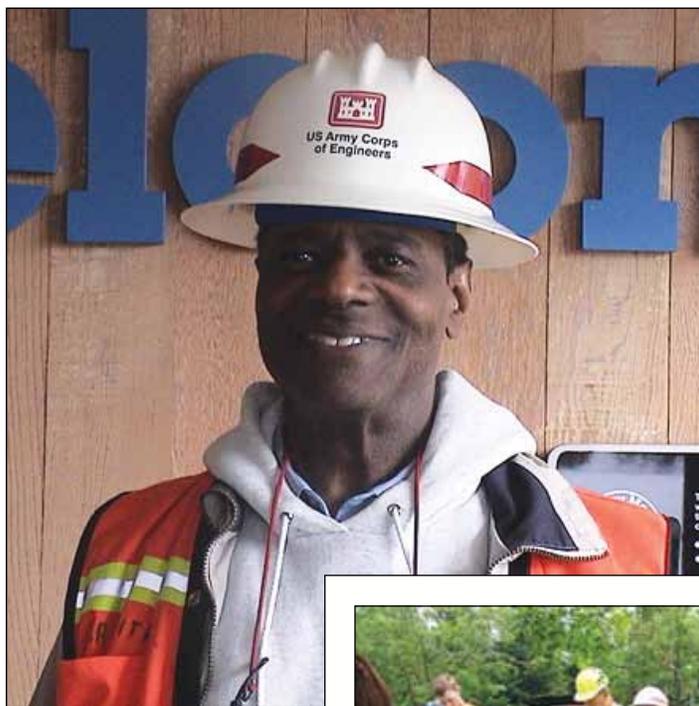
A.R. Smith has had a colorful career to say the least. He's been a drill sergeant, military recruiter, town sheriff in New Mexico, and currently, is the chief safety officer for the U.S. Army Corps of Engineers San Francisco District.

But it was in bomb disposal that Smith spent most of his career. It's certainly not a job for the weak of heart. "Nerves of steel" is how Smith best describes a typical bomb disabler. He should know. He spent 21 years with the Army as an Explosive Ordnance Disposal specialist. That was back in 1964 when he enlisted at the age of 18. Today, he's the district's lead watchman.

"I'm the eyes and ears on all our sites," he said. "I wear about six or seven hats in the district."

Most of his hats he wears at the Bay Model Visitor Center in Sausalito, Calif. That's where his office is located, next to the district's Emergency Operations Center and Construction Branch. Making sure sites are free of hazards is his number one priority. It means frequent visits to all of the Corps' major projects. It also means many pages of safety audits and risk assessment reports.

The other hours of his day are spent as the district's dive team coordinator, which, for the most part, is a group focused on underwater debris removal that Smith ranks as one of the "highest-risk jobs" he oversees.



SPN staff photo

*[Above] A.R. Smith has been with the U.S. Army Corps of Engineers since 1996. He joined the San Francisco District as the chief safety officer in 2006 after serving ten years in Sacramento.*

*[Right] San Francisco District Chief Safety Officer A.R. Smith meets with contractors at the San Ramon Project site.*

He is also the district's building emergency coordinator. Should San Francisco ever experience the "Big One," meaning the area's next major earthquake, plans are in place to get district employees out safely and quickly from their perch in the Bank of America Computer Center on Market Street, where the district occupies three of the



SPN staff photo

building's top 22 floors.

Nobody could be better equipped for the wide range of responsibilities wrapped up in the district's chief safety job as Smith.

He first joined the Corps in 1996. Two years prior, Fort Ord, a U.S. Army training facility in Monterey, Calif., had closed its doors. Clearing the post was

the responsibility of the Corps. Overseeing the cleanup fell on Smith, who was hired as an explosives safety specialist. The project was led by the Corps' Sacramento District. Ten years spent at Sacramento, Smith then jumped across the bay in 2006 to head the San Francisco District's safety program.

It's familiar territory for Smith, who has carried a simple "Safety first and always" message for many years. It's a saying that helped him survive two tours in Vietnam as an EOD specialist and more than 10 years as a member of the elite presidential bomb squad, where he served under the Richard Nixon, Lyndon Johnson and Ronald Reagan administrations.

The job required him to learn the complexities of countless bomb arrangements. Whether a bomb was dropped from an airplane, fired from a weapon or placed in the ground, Smith had to know it. He wasn't alone though. Bomb squads worked together.

"We had to work by safety rules to stay alive," said Smith, who noted that Army EOD specialists spend up to nine months in school. "The training was long and intense."

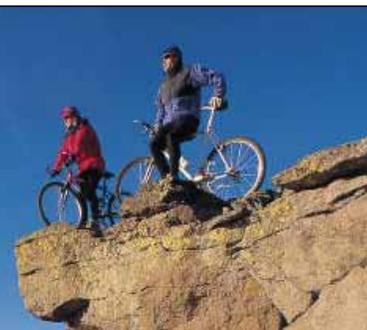
Smith ended his military career in 1985 earning the rank of master sergeant after 21 years in one of the Army's most high-risk occupational specialties. The San Francisco District is proud to have him as its "eyes and ears."

## Composite Risk Management Civilian Basic Course

*It's not just an Army requirement.*

Logon to <https://crc.learn.army.mil/webapps/portal/frameset.jsp>

For more information, e-mail A.R. Smith at [arthur.r.smith2@usace.army.mil](mailto:arthur.r.smith2@usace.army.mil).



# ON THE SURFACE



# WITH GEOSCIENCES

**Story & photos by Brandon Beach**  
*District Public Affairs Office*

**G**eologists have a snooty word for soil. They call it overburden. It's the stuff on top of the real made-for-science stuff, which to a geologist is called bedrock, the solid material below the surface.

For geotechnical engineers, like Marc Goodhue of the U.S. Army Corps of Engineers – San Francisco District, soils, such as sand, clay, gravel or mud, are anything but a blip on the scientific horizon. To him, soils are the basic building block to many of the Corps' diverse civil works projects from its levees at the Hamilton Wetlands in Novato, Calif., to its dam at Lake Sonoma, Calif.

Continued next page

*[Pictured] A cross section of the Hamilton Restoration Project site near Novato, Calif., shows large extracted pieces of a former military runway that was part of the now-closed Hamilton Air Force Base. Geotechnical engineers are working toward building levees and other flood control structures in order to restore the area to its previous wetland environment.*

Continued from previous page

“Geologically, they’re [geologists] more interested in the bigger picture,” said Goodhue, district chief of the Geosciences Section. “Soil kind of blocks that, which is where the term ‘overburden’ comes from. It’s kind of funny, because it sort of marginalizes an entire profession of geotechnical engineering.”

Despite the fact that there really is no spat between geologists and geotechnical engineers, San Francisco District is just fine with a little overburden. In fact, within the past year, the district has doubled the size of its Geosciences department, which teams up geotechnical engineers with Geographic Information Systems specialists, from five to its current 10-employee roster, with more on the way.

Before the Corps’ builds any type of flood prevention structure, be it a dam, levee, dike or embankment, a geotechnical investigation takes place. The process starts by drilling down at the proposed site and extracting a soil sample. The makeup of the soil, or its engineering properties, determines the design of the structure. Geotechnical engineers balance soil and design in a kind of organic way.

“It’s not only understanding geology, but how geology relates to building things,” said Goodhue.

During the design phase, geotechnical engineers work closely with their civil engineering counterparts. Civil Design might draw a levee with a certain slope height. Geotech determines if the soil can support the slope requirement, a phase called geotechnical analysis.

“It’s a sort of back and forth with civil design,” said Goodhue. “We might say that a certain slope is stable. They might say that it’s too shallow; it won’t fit. We go back and try to steepen it.”

Some soils just aren’t strong enough. Young bay mud, the type of soil found at Hamilton Wetlands, is a perfect example.

“It’s low strength, and it induces a lot of settlement when you build on it,” said Goodhue. “It’s also the only locally available source of material to build maintenance levees on site.”

Building up a levee to certain design specifications, using a material like young bay mud, which is predominantly found in the San Francisco Bay area, requires the right mix of moisture — which increases the mud’s stickiness — and time. It’s a case of working with what you have on site.

Along the way, GIS specialists, also part of the Geosciences team, employ a number of geographic information tools to analyze data and create, among other things, spatial maps.



*Nicole Davidson, right, a park ranger at Lake Sonoma Recreational Area, took members of the San Francisco District Geosciences Section, including Marc Goodhue, below, on a tour last month of the Warm Springs Dam at Lake Sonoma, Calif., as part of the district’s ongoing seismic safety review.*



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*On Geotechnical Engineering:*

**It’s not only understanding geology, but how geology relates to building things.**

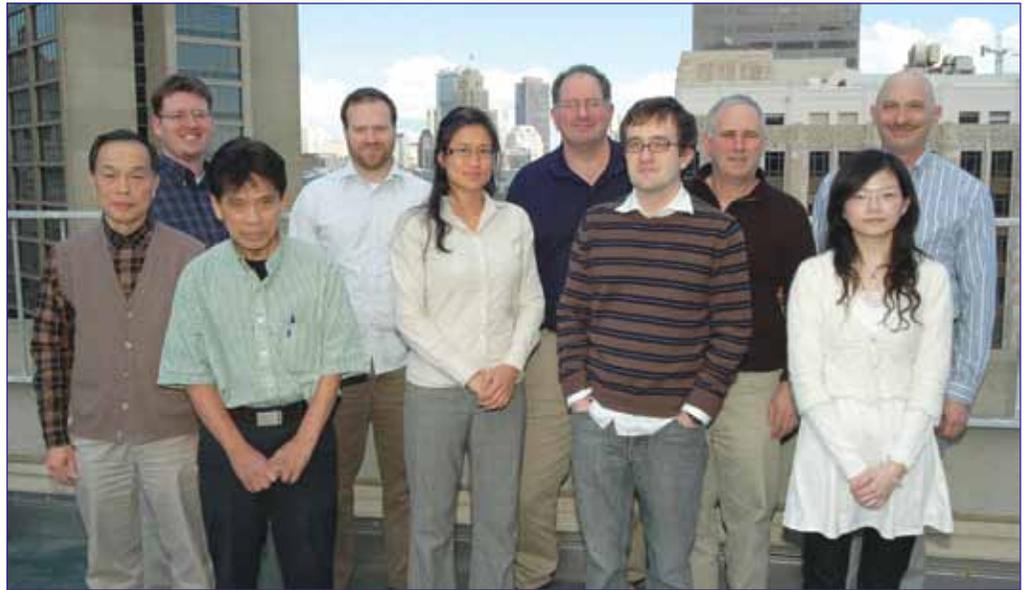
**Marc Goodhue  
Chief, Geosciences Section**

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“It’s a way to sharpen the design,” said Goodhue. “The idea is to pull data from a number of different sources into one database. It can be a real patchwork of geotechnical data.”

Putting the geological pieces together falls on Goodhue and his team, which looks at soil not so much as overburden, but a function of design, in other words — the real stuff.

*Members of the Geosciences Section are (from left to right) Peter Ho, Brian Hubel, Auv Seng, Marc Goodhue, Carmen Cheung, Sheldon Bluestein, Peter Krembs, Paul Schimelfenyg, Sharon Wong and Dan Specht.*



## Corps takes look at nation’s dams, levees

*SPN gears up for expanded inspection program in support of national campaign*

**By Brandon Beach**

*District Public Affairs Office*

When a levee breaks, it gets repaired. When more than one levee breaks, it’s time to fix the system. So is the case with the recent launch of the National Inventory of Levees.

Following levee failures in the Gulf Coast in 2005 and last year in parts of the Midwest, the National Committee on Levee Safety, formed after Hurricane Katrina, has pushed to adopt a comprehensive database that catalogues all of the nation’s flood control structures. The mission of the U.S. Army Corps of Engineers will be to inspect many of them.

“Eventually, it will contain information on every levee in the country - federal and non-federal,” said Paul Schimelfenyg, program manager of the U.S. Army Corps of Engineers-San Francisco District’s Dam and Levee Safety Program. “We will know the condition of all of our levees and see, if as a country, we are improving.”

Already, this type of comprehensive inventory is in place in reference to the nation’s 79,000 dams, two of which fall under the district’s area of

responsibility: Warm Springs Dam at Lake Sonoma, Calif., and Coyote Valley Dam at Lake Mendocino, Calif.

Here in the Bay Area and parts of northern Calif., the district oversees 80 levees, which, as Jake Jacobson, chief of the the district’s Engineering & Technical Services Division, estimates, stretches nearly 200 miles, making it the second largest levee program in the Corps’ South Pacific Division, behind the Sacramento District.

It’s not that routine inspections hadn’t taken place in the past, explained Schimelfenyg; it’s that the standards to determine if a levee is a) acceptable, b) minimally acceptable or c) not acceptable, just got tougher.

“You may go out there and find something that was previously acceptable is now unacceptable,” he said. The intent is to get out-dated levees, many of which were built following the Flood Control Act of 1965, up to today’s national standard.

Schimelfenyg leads many of of the district’s annual maintenance inspections, along with Kenneth Thompson of the Water Resources Branch, with teams consisting, for the most part, of a geoscientist, water resources specialist, civil en-



Brandon Beach

*Marc Goodhue and Brian Hubel survey conditions at Warm Springs Dam at Lake Sonoma, Calif., last month as part of a seismic safety review.*

gineer and an environmental expert. A number of criteria is evaluated such as a levee’s earth embankment, flood walls, conduits and pumping stations.

Most recently, the district completed inspections on both of its dams as well as all of its federally-constructed levees within its program, which total 25. That information has been sent to the National Committee on Levee Safety for inclusion in the national inventory. The other 55 levees are non-federally constructed. Both types of levees, though, are operated by private sponsors

within the district’s levee program, explained Jacobson.

The district meets with all its sponsors once a year annually during a one-day levee owners workshop. This year’s workshop, to be held May 21, will gather experts to discuss recent changes to the levee inspection program, said Duke Roberts, chief of the district’s Operations and Readiness Branch.

With so much talk about the poor conditions of the nation’s levees, the district is making sure all of its levee owners make the grade.



Master Sgt. Mark W. Rodgers



www.aed.usace.army.mil

[Above left] A worker trims boards for the construction of a primary health care facility at Al Zahrawi in Iraq.

[Above right] The Afghan-Tajikistan Bridge was a major project completed by the USACE Afghanistan Engineer District in 2007. The bridge connects Afghanistan with Tajikistan.



www.aed.usace.army.mil



Debra Niimi-Robertson

[Bottom right] Construction workers pump concrete into the foundation of new barracks being built at Bagram Air Field in Afghanistan. [Bottom left] The Kabul Military Training Facility is one of the many projects under the oversight of USACE Afghanistan Engineer District.

## Supporting Overseas Contingency Operations

# District employees answer call to serve abroad

**By Brandon Beach**  
District Public Affairs Office

**R**obin Liffmann sets her alarm for 4:45 a.m. every morning. By six, she's in the gym. She's not training for a 26-mile marathon, but one of another kind. Behind all her motivation is a decision Liffmann made many months ago to deploy to Afghanistan with the U.S. Army Corps of Engineers in support

of the Overseas Contingency Operations.

"I've always enjoyed working out. I just upped it a notch," said Liffmann, an environmental manager with the Corps' San Francisco District. "I want to make sure I'm physically fit. I don't want that ever to be a drawback."

Though much of her time could be spent behind a desk working on any number of the Corps' diverse civil works projects in Afghanistan, from

constructing roads to installing irrigation systems, Liffmann isn't taking her preparations lightly. Being fit to deploy doesn't always translate into arm curls.

"I belong to the World Affairs Council. I go to their talks. I read *The Economist*," she said. "I'm very big on reading multiple newspapers."

Not that staying on top of foreign affairs is new to her. Before joining the Corps in 2007,

Liffmann, who holds a doctorate degree in environmental science, policy and management, was a full-time lecturer at San Francisco State University. She left the job for something a bit less academic.

"You really want to go out and put what you know to the ground," she said.

Many like her are signing up for just that type of experience.

Since 2002, when the Corps began sending members of its

civilian workforce to Iraq and Afghanistan, more than 50 San Francisco District employees have answered the call.

### **Making a tough decision**

Before any step is made, the process must begin with family, said Duke Roberts, chief of Operations & Readiness Branch.

“I understand individuals want to support this mission,” he explained, “but they really need to sit down and discuss how their family feels about it.”

Deployments, at a minimum, last six months, sometimes longer. Being away from home for half a year or more can be difficult for both sides. If a person’s family does not back the idea 100 percent, deploying could be a mistake. The responsibilities downrange can pose stressful enough.

The next issue to be considered is service. As Roberts explains, “What are you going to provide? You have to have some idea of exactly what kind of mission you want to perform when you go over there.”

A good place to start researching is with the Corps’ Transatlantic Program Center (TAC) web site at [www.tac.usace.army.mil](http://www.tac.usace.army.mil).

The two major deployment areas are to the Afghanistan Engineer District, or AED, and the Gulf Region Division, or GRD, in Baghdad, Iraq. Both organizations maintain Web sites with up-to-date project information found respectively at [www.aed.usace.army.mil](http://www.aed.usace.army.mil) and [www.grd.usace.army.mil](http://www.grd.usace.army.mil).

### **Getting started**

With some idea of how a person might contribute, the next step is to contact Sandra Eudy, the South Pacific Division’s deployment coordination administrator. She may

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The Chief of Engineers has said supporting the Overseas Contingency Operations is our top mission. He wants people who are motivated, that are positive and want to serve their country.

**Duke Roberts**  
**Chief, Operations & Readiness Branch**

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be reached by e-mail at [sandra.j.eudy@usace.army.mil](mailto:sandra.j.eudy@usace.army.mil) or phone at 415-503-6618.

She will ask that an applicant fill out a deployment questionnaire to be sent back to her along with a resume. Eudy then looks for the right fit, matching up a person’s skill set with a specific project.

Once a tasker is identified, a person can start the initial pre-deployment process, referred to as Theater Specific Individual Training Requirement, or TSIRT. A checklist of to-do items may be found at [www.tac.usace.army.mil/deploymentcenter/civilian.asp](http://www.tac.usace.army.mil/deploymentcenter/civilian.asp). Applicants are required to obtain a security clearance, passport — both of which must be requested 48 hours after an assignment is given — and a government credit card. By far the lengthiest portions of the checklist are the medical tests and immunizations, which total nine.

Any items that are not done prior to deploying may be completed at TAC, where individuals, once a travel itinerary is completed, go through training, up to a week.

### **Still interested?**

Benefits include, among other things, invaluable experience, career growth incentives and financial perks including hazard pay, which can mean a significant increase in salary. But most people don’t put themselves in harm’s way, explained Roberts, just for a larger paycheck. With so much at stake, it comes down to commitment.

“The Chief of Engineers [Lt. Gen. Robert L. Van Antwerp] has said supporting the Overseas Contingency Operations is our top mission,” said Roberts. “He wants people who are motivated, that are positive and want to serve their country.”



**Ready to join?**  
*Take a look at these Web sites to help get you on your way.*

<b>Transatlantic Program Center</b>
<a href="http://www.tac.usace.army.mil">www.tac.usace.army.mil</a>
<b>Deployment Checklist</b>
<a href="http://www.tac.usace.army.mil/deploymentcenter.civilian.asp">www.tac.usace.army.mil/deploymentcenter.civilian.asp</a>
<b>USACE Afghanistan Engineer District</b>
<a href="http://www.aed.usace.army.mil">www.aed.usace.army.mil</a>
<b>USACE Gulf Region Division</b>
<a href="http://www.grd.usace.army.mil">www.grd.usace.army.mil</a>

photo courtesy of [www.aed.usace.army.mil](http://www.aed.usace.army.mil)

# District provides disaster-response opportunities

By Joe Barison

District Public Affairs Office

You're a brand-new San Francisco District employee going through processing on your first day at work. In one of your briefings, you're told that the district responds to emergencies throughout the United States — both nature-made (e.g. hurricanes, tornadoes and floods) and man-made (e.g. terrorist attacks).

In an alternate scenario, you've been working in the San Francisco District for some time, and you've seen teammates drop what they're doing to pack up and travel across the country to help people after a hurricane, earthquake or flood.

You want to help, too. You want to rush to the disaster site as part of the rescue force. You want to be part of the nation's emergency response that saves lives and restores people's homes.

But first you must prepare.

According to Derrick Dunlap, deputy, Operations & Readiness Division, "When a disaster strikes, we always have employees who step up and say they'd like to go." But unless the preparation process is already completed, the district must regretfully deny those last-minute requests. "You must be positioned [in advance] for these taskers. Like surfing, you must be ready for that wave to come in."



Courtesy

Joe McCormick, master of the derrick boat *Raccoon*, supervises the Corps' "blue" roofing mission during Hurricane Ike emergency response in the fall of 2008. The blue roofing material is placed on damaged houses to protect them from further damage. Inset: McCormick in front of Hurricane Ike debris.

## How to Prepare for Disaster Deployment

*Step 1:* In the district computer's M: drive, open the "Deployment" folder.

*Step 2:* Open the "Englink PreDeploy Ck1st PDF." This covers personal data, government travel card, medical requirements and miscellaneous items. Follow the checklist, and complete every step.

*Step 3:* Open the "SOP PDF." This is San Francisco District Office Memorandum

No. 690-47, which lists district officials' responsibilities for pre-deployment activities. These are your "go-to" people for any questions or concerns. Key people listed include: Chief of Readiness Duke Roberts (415-289-3080); Safety Officer A.R. Smith (415-289-3031); Security Manager MSG Wayne Brandt (415-503-6704); and Logistics Officer Mike Pornnang (415-503-6970).

## Teams and Taskers

District employees have several ways to volunteer.

1) San Francisco District has Water and Ice Commodity Teams that respond to national emergencies.

2) District employees such as structural engineers, construction or those possessing required skill sets may volunteer to fill positions on a National Response Team.

3) Individuals may be selected to fill individual "taskers" requesting workers with specific professional specialties. All

teams are formed in advance of the emergency.

The Corps has several National Response Teams which focus on specific areas, such as providing disaster victims with commodities, debris removal, electric power and shelter.

National teams manage districts' participation and coordinate the Corps' effort with the Federal Emergency Management Agency and other agencies, state and local governments.

District volunteers who deploy on individual taskers include specialty engineers, certain professional skills and contract representatives.

The entire pre-deployment process is evolving, and it would be impractical to list every preparation detail here. But the steps outlined in this article and the contact information provided will put you on track to be ready to answer the disaster-response call. Your district stands behind you to help get you where you want to go.

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## Where to get started

*Go to the M: drive*

*Click on "Deployment" folder*

*Open "Englink Ck1st" PDF*

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# CHALLENGE

# ENGINEERING

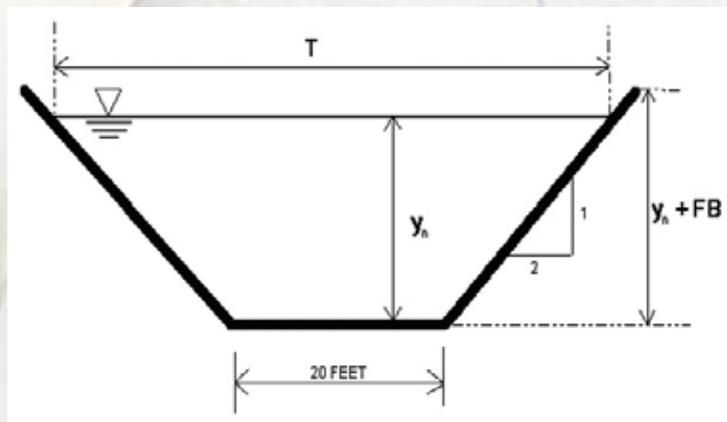
It's time to show off your engineering skills. Take on the engineering challenge in this month's SPN Surveyor. The first to solve this mathematical puzzler will receive a district commander's coin, with the results being published in the July/August issue. So go ahead, calculate away!

Submit your answers via e-mail to Jake Jacobson at [John.H.Jacobson@usace.army.mil](mailto:John.H.Jacobson@usace.army.mil)

## THE PROBLEM

Design a trapezoidal ditch to carry water away from a work site. The slope of the ditch,  $S$ , will be 0.0016 with side slopes of 1:2 (1 vertical to 2 horizontal).

The bottom width will be 20 feet. The ditch will be excavated earth winding and sluggish with no vegetation and designed to carry a discharge,  $Q$ , of 400 cfs.



## THE REQUIREMENTS

- Determine the normal depth of flow ( $y_n$ ).
- If freeboard requirements are 25 percent of the design depth, how deep should you construct the ditch?
- Determine the critical depth of flow ( $y_c$ ).
- Determine the flow regime in the channel (subcritical, super critical, or critical flow).
- Calculate the Froude Number.



NOTE: This month's Engineering Problem was submitted by Lt. Col. Laurence M. Farrell. To submit an Engineering Problem for publication consideration, please send both problem and answer to [John.H.Jacobson@usace.army.mil](mailto:John.H.Jacobson@usace.army.mil)

# WOMEN'S HISTORY MONTH

## South Pacific Division commander keynotes Women's History luncheon



By **Brandon Beach**  
*District Public Affairs Office*

U.S. Army Corps of Engineers South Pacific Division Commander Col. Janice L. Dombi was this year's guest speaker at the Women's History Month luncheon March 18.

Col. Dombi, who became the first woman to lead a USACE division when she took command in January of this year, spoke to more than 40 division and district employees in attendance on the topic, "Presenting Yourself for Success." During her talk, Col. Dombi discussed ways to improve interviewing skills, achieve upward mobility at the workplace and improve one's chances for promotion.

*[Left] Col. Janice L. Dombi answers questions during a Women's History Month luncheon March 18.*

## About the Women's History Project

The National Women's History Project, founded in 1980, is an educational nonprofit organization.

The NWHP is known nationally as the only clearinghouse providing information and training in multicultural women's history for educators, community organizations, and parents — for anyone wanting to expand their understanding of women contributions to U. S. history.

*For more on this organization, visit NWHP online at [www.nwhp.org](http://www.nwhp.org).*

## Proclamation addresses environmental advances by women

By **Barack Obama**  
*U.S. President*

With passion and courage, women have taught us that when we band together to advocate for our highest ideals, we can advance our common well-being and strengthen the fabric of our Nation. Each year during Women's History Month, we remember and celebrate women from all

school. She graduated from the Massachusetts Institute of Technology in 1873 and went on to become a prominent chemist. In 1887, she conducted a survey of water quality in Massachusetts. This study, the first of its kind in America, led to the Nation's first state water-quality standards.

Women have also taken the lead throughout our history in preserving our natural environment. In 1900, Maria Sanford led the Minnesota Federation of Women's Groups in their efforts to protect forestland near the Mississippi River, which eventually became the Chippewa National Forest, the first Congressionally-mandated national forest. Marjory Stoneman Douglas dedicated her life to protecting and restoring the Florida Everglades. Her book, "The Everglades: Rivers of Grass," published in 1947, led to the preservation of the Everglades as a National Park. She was awarded the Presidential Medal of Freedom in 1993.

Rachel Carson brought even greater attention to the environment by exposing the dangers of certain pesticides to the environment and to human health. Her landmark 1962 book, "Silent Spring," was fiercely criticized for its unconventional perspective. As early as 1963, however, President Kennedy acknowledged its importance and appointed a panel to investigate the book's findings. "Silent Spring" has emerged as

a seminal work in environmental studies. Carson was awarded the Presidential Medal of Freedom posthumously in 1980.

Grace Thorpe, another leading environmental advocate, also connected environmental protection with human well-being by emphasizing the vulnerability of certain populations to environmental hazards. In 1992, she launched a successful campaign to organize Native Americans to oppose the storage of nuclear waste on their reservations, which she said contradicted Native American principles of stewardship of the earth. She also proposed that America invest in alternative energy sources such as hydroelectricity, solar power and wind power.

These women helped protect our environment and our people while challenging the status quo and breaking social barriers. Their achievements inspired generations of American women and men not only to save our planet, but also to overcome obstacles and pursue their interests and talents. They join a long and proud history of American women leaders, and this month we honor the contributions of all women to our Nation.

*This and other presidential proclamations may be found online at [www.whitehouse.gov](http://www.whitehouse.gov).*

*This year's theme ...*

## Women Taking the Lead to Save our Planet

walks of life who have shaped this great Nation. This year, in accordance with the theme, "Women Taking the Lead to Save our Planet," we pay particular tribute to the efforts of women in preserving and protecting the environment for present and future generations.

Ellen Swallow Richards is known to have been the first woman in the United States to be accepted at a scientific