The Pacific Connection

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POD civil works program an everyday affair

by Alexander Kufel

The civil works program of POD is relatively small but of great significance to its customers scattered throughout a six-million- square-mile area of the Pacific Ocean bridging six time zones. As with similar programs in mainland divisions and districts, civil works in the Pacific fundamentally means development of water resources. It also means the ability to be resourceful in far away places.

"We try not to let factors of time zones, distance or lack of visibility interfere with our ability to solve particular problems," said Russell Takara, program manager for civil works. "Instead, we make an effort to address everyone's concerns and provide each project with imagination, professionalism and thoroughness."

In the 1970s the program expanded beyond Hawaii to include the Territories of Guam and American Samoa, and the Commonwealth of the Northern Mariana Islands. Additionally, the United States has agreements in place with the "freely associated" island nations of the Republic of the Marshall Islands, the Republic of Palau, and the Federated States of Micronesia comprised of Kosrae, Pohnpei, Chuuk and Yap, that include planning assistance, disaster relief and reimbursable work. Although not technically a part of the civil program, much of this reimbursable effort involves the expertise obtained from the water resources development program.

"Essentially, POD oversees some $20-30 million in civil works projects per year," said David Lau, civil works engineering chief. "Comparatively, military projects total between $2-3 billion per year." Although dollar figures lean heavily on the side of the military program, the civil works program is marked by projects and studies with major public visibility and diversity. Currently, 27 active civil works projects range across the full spectrum of possibilities and include project management, site surveys to determine the feasibility of requested actions, preconstruction engineering and design, emergency stream bank and shoreline protection for public facilities, flood control, environmental restoration, hurricane and storm damage repairs, and work for other agencies and organizations.

Kawainui Marsh is a natural wetland that drains an 11-square-mile area at the base of the Koolau Mountains on Oahu's windward side. At the end of 1987, 20 inches of rain fell in the 740-acre marsh within a two-day period and flooded residential areas in the town of Kailua.

"What makes the project unique is that the Corps was willing to go the extra distance to address potential long-range problems," said Jim Pennaz, a hydraulic engineer involved in the project since the design phase. The under-construction solution is a 6,300-foot-long wall, four feet high, atop the existing levee. The concrete is being textured and stained to resemble natural moss-rock, providing an esthetic appearance and discouraging graffiti artists. And, eight islands designed to be resting places for birds, primarily the Hawaiian stilt, were left in place as the area was excavated."

George Young, chief of the civil works technical analysis section, mentions another flood control project underway on the Big Island. "Right now we're approaching completion of the Alenaio Stream flood control project in Hilo," said Young. "We've built an 1,800-foot-long concrete channel, reconstructed four bridges, levees and floodwalls. When it's done, the flood protection provided by the project will be the cornerstone to revitalizing downtown Hilo."

In South Kohala, on the opposite side of the island from Hilo, enlarging the small boat harbor at Kawaihae presented unique problems. Providing berths for 90 commercial boats required extension of the 850-foot-long west breakwater with a 350-foot-long revetted mole (massive rock wall), and construction of a 290-foot-long mole connected to a 400-foot-long breakwater on the east side.

In an effort to preserve underwater coral in the area that might be lost to construction, an unusual arrangement was reached with the U.S. Fish and Wildlife Service, who in turn awarded a contract to the University of Hawaii to transplant and reseed the coral.

"It is very gratifying to see the Corps make such an effort and demonstrate leadership in this environmental matter," said Bill Lennan, POD ecologist.

"A project of this scale has never before been attempted and is going a long way toward preserving natural habitats on the leeward coast along with an expanded harbor," Lennan said. The project should be completed next year.

These are not the only civil works projects currently underway, but they are the ones that have moved beyond study and design into construction. Several major studies are currently in progress, and several major projects, such as the under-design 53-mile-long Palau Compact Road, fall into the category of "reimbursable work for others." All civil works projects and studies are marked by extensive attention paid to preserving the environment as the planning and the construction move forward.

"In this part of the 20th Century, the Corps has changed from being the developers of the nation to being the conservators of the nation," said Takara. "This may be an even greater responsibility."

Photograph by

Energy-Water funding law delays but does not cancel Restructuring

Story by www.pod.usace.army.mil

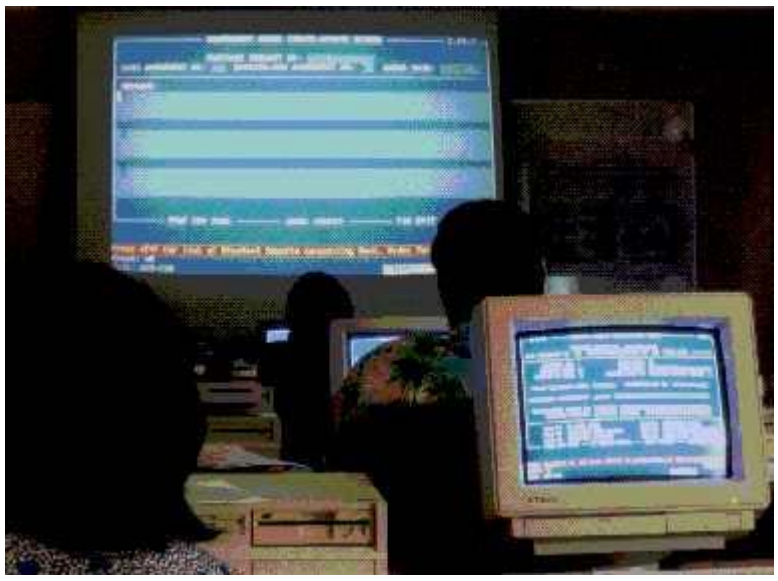
The recently passed Fiscal Year 97 Energy and Water Development Appropriations Act delays but does not cancel Restructuring. However, language in the law that delays the program until April 1 of next year is seen by Hawaii's Senator Daniel K. Inouye as providing "an opportunity to explore various options to prevent Pacific Ocean Division from being closed down."

Inouye's original amendment to the FY 97 funding bill specifically spared POD by blocking expenditures to close the division. However, the version of the bill that emerged from a combined Senate-House conference committee was less emphatic regarding Corps Restructuring and the need to retain a division office in Honolulu. The bill and now the law requires the Secretary of the Army to "develop and submit" a plan to move to no more than eight and no less than six Corps divisions, with implementation set to begin April 1, 1997. (Previously, implementation was to begin Aug. 15, 1996.) Since an existing plan that accomplishes this and closes POD and two other divisions had previously been devised but never implemented, the implication is that a new plan -- or conceivably even the same plan -- must now be sub-mitted for Congressional review. It eliminates in letter if not in spirit a conflict that would have existed had there been two energy and water appropriations acts just a year apart: one requiring the plan and mandating its im-plementation date and another prohibiting funding to implement it at all, or at least with regard to closing POD.

The FY 97 appropriations act asks again for a plan but does not mention POD or any other division by name, with regard to Restructuring. It restates a requirement that divisions be responsible for at least four districts. It requires a plan be submitted within 60 days to the Congress "notwithstanding any other provision of law."

In a press release from Inouye's office, the senior senator again reemphasized the need for POD to remain open and that it is "critical to the Asia-Pacific region." The senator's news release, which was issued after the bill cleared the committee reconciliation process but before the bill became law, was headlined: "Senate-House Conference Report Includes Inouye's Provision to Keep Army Corps of Engineers Pacific Ocean Division Open." The reworked bill that emerged from the conference committee and was later voted on by both houses of Congress was the same version that Clinton signed into law.

CEFMS: The real thing



In a final push toward implementation in January, 1997, classes on CEFMS (Corps of Engineers Financial Management System) resumed Oct. 7. There is no escaping CEFMS. Although, according to computer professionals, people shouldn't really want to escape.

"The current version represents significant improvements over the earlier ones," said Calvin Kameya, systems accountant with POD.

"CEFMS itself does represent a very large improvement over COEMIS (Corps of Engineers Management Information System)," said Craig Powell, CEFMS systems coordinator. "This is primarily in the areas of reducing the number of data processing entries and time, of providing immediate updates and status of accounts, and in maintaining managerial control."

Other professionals, too, say the basic program driving CEFMS is sound; it is simply that interface technology has changed dramatically since its inception as a DOS program. Using multiple screens has been superseded in virtually every commercially available application by windows that look like the actual form. CEFMS was developed specifically to accommodate the unique financial management requirements of the Army Corps of Engineers. Being a custom program, CEFMS has not had to keep pace with the marketplace. It isn't pretty, but it is solid and dependable.

In fact, it's scheduled for implementation by DOD.

While the interface is still under development to take advantage of Windows capabilities, it needs little other refinement. Its principal advantage remains that it does not require enormous RAM resources to be used and can be utilized on nearly any computer.

Photograph by

Cables, cables everywhere

By Alexander Kufel

Wires in increasingly larger bunches have become very visible lately through temporary holes in suspended ceilings and the appearance of new conduit channels snaking their way through halls. Messages alerting people to cable installation work taking place in POD buildings appear almost daily in people's e-mail.

This is the latest Corps effort to improve communications by upgrading the computer network infrastructure.

The cables in question are not simply strands of copper wire physically tying computer terminals, printers, file servers, and communications equipment together, but an elaborate combination of metallic cables connected to higher capacity fiber-optic cables in a pattern comparable to feeder roads, on-ramps and freeways, complete with best routes, traffic signals and laws.

Following initial inconveniences associated with installing cables in each of six buildings to some 580 nodes, or connecting points, the system will employ transfer rates of electronic data 10-15 times faster than the 10 megabytes per second rate currently possible by employing ATM (asynchronous transfer mode) switches to form a 'backbone' for data transfer between buildings. At the same time, effective communications will be facilitated by utilizing the existing older and slower servers in combinations of sharing and switching resources to keep data moving.

One of the difficulties encountered in such an ambitious undertaking is that technology is changing so rapidly that system life in all aspects of networks have shortened to the point that extra care has to be taken in planning. Even by building in transfer capabilities beyond what is feasible today the possibility exists that new developments will render it obsolete.

"One solution to this problem," said Lori Sora-yama, assistant director of IM, "is to use contractors knowledgeable in EIA/TIA (Electronics Industries Association/Telecommunications Industry Association) specifications so that all systems will be able to communicate with each other."

"The 'rehaul' of the cabling taking place now is at the bottom-most layer of a seven-layer infrastructure," said Sorayama. Those seven layers are a model that facilitates dividing up the aspects of networks into manageable tasks.

"Our LAN actually uses only about three of those layers," said Clement Liu, network administrator. "A tale in our business that may not be true is that the structure was divided into seven parts because there were seven people on the original committee and each wanted an area of responsibility."

Origin of the structure notwithstanding, top-most is the application layer. It is what the user sees on screen. Windows for Workgroups and Netscape are two examples.

Figuratively, beneath that are 'operating protocol' layers such as the operating system, the session layer, the transport layer, and the network layer that facilitate transfer of data.

Underlying that is the logical link layer, in POD's case the Ethernet. It controls the flow of data, preventing programs from 'freezing' in place on the screen. And, of course, the final layer is the cabling.

As work progresses with the cabling, POD will soon be ready for full implementation of CEFMS.

Then, of course, the network will no longer be to blame for problems. At least for a few years. However, as in the case of Harris tape-driven computers, someone's favorite easy chair, and CEFMS, as long as the components are able to perform the task for which they were designed they undoubtedly will be used.

Photograph by

Chief of Engineers assumes command

By Alexander Kufel

Lt. Gen. Joe N. Ballard became the 49th Chief of Engineers and Commander of the U. S. Army Corps of Engineers at an assumption of command ceremony Tuesday, Oct. 1., at Fort Myer, Va. Secretary of the Army Togo D. West, Jr. presided at the ceremony which included musical presentations by the U. S. Army Band (Pershing's Own), and a parade in review by the 3rd U. S. Infantry (Old Guard).

Lt. Gen. Ballard, a registered professional engineer in civil engineering, succeeds Lt. Gen. Arthur E. Williams, who retired in June.

The Chief of Engineers provides advice and assistance on military engineering and topographic matters and has Army Staff responsibility in the areas of engineering, housing, construction, real property, natural resources, and environmental programs.

Opinion

CEFMS: The short course

The View from Here by Larry Hawthorne

We will all have to learn CEFMS. It's like death and taxes, only worse. At least with taxes you get a receipt, and with death you get a big party thrown in your honor and you don't even have to pick up the check. But with CEFMS you get another screen. Then another, another and so on until you're back where you started.

Now I don't want to complain because I really believe everyone who is behind this new program called CEFMS (for those of you who are not technically minded, CEFMS stands for "Computer Environment for Moronic Sycophants) had a good idea to begin with. I imagine a whole bunch of former NASA scientists got together one day and decided that rocket scientists should be fully employed when not launching people into space. So, why not a computer program designed by rocket scientists and geared for rocket scientists? And, oh yeah, let's try it out on the Corps of Engineers.

We are the beta testers.

It starts simply enough. We all went to "orientation" classes that were a little like the warden who tells the condemned man that when he hears the pellets drop, "take a big, deep breath. It's easier that way."

Then we attended the actual "hands-on" training where a trained CEFMS-smart computer person was available to whisper in our ears what keys to push, menus to select, and workbook pages to turn in order to get through the exercise and be out of there by lunch. In fact, so long as we are able to continue with one-on-one support when we take these matters back to the privacy of our own offices CEFMS should be no challenge at all -- albeit the work force here in POD will have to, say, increase to approximately twice the size it is today. Small price to pay, I'd say.

But will we all really have to use CEFMS? Here's a simple test to answer that question:

Ask yourself, "does what I want to do require the spending of money or the gathering of the minimal resources necessary to sustain life?" If the answer is yes, well, CEFMS is for you. Everything will be done with an electronic PR&C (Periodic Rage and Confusion) action.

What CEFMS is really designed to do is to take all those little pieces of paper that used to clutter up our desks and provide us baseline information like what day of the week it was or who is sitting in the White House and turn them into electromagnetic blips on a computer disk. And instead of sticking those papers into the mail or an out basket, we just push that send button and millions of electronic bits of information are light-sped away to people who are now forced to deal with them because, they, too, have CEFMS to guide and light their way. Most of the time, they will be forced to give you money in some form. Thus, the people in control of the money have made it almost impossible for you to wade through the system far enough for them to have to actually cut you a check.

Ordering lunch with CEFMS:

And so it goes. There's hope at the end of those menu screens, although there is also a risk that a temporary power outage could mean the end of the civilized world as we know it.

No one can deny the tremendous effort that went into developing a system like CEFMS. The lord of electrons only knows that I have a keen appreciation and respect for the automation that goes into making our lives easier,

fun-filled and eventually totally irrelevant.

I'm sure that once we all learn how to use this latest example of high-tech software, we'll never want to return to those dark, antediluvian days when phones were still answered by people, and "working at home" meant puttzing around the yard.

Face it, CEFMS is the tsunami wave of the future. We'll all be OK when we just learn to dog-paddle. But, I have to admit, this was the last chance I had to get CEFMS before it gets me. And now if I can just dig out my signature card and find the right menu item . . . .

Productive People

Russell Takara
Hometown: Honolulu, Hawaii
Years with Corps: 20
Works in: Programs and Project Mgt.

Sitting remarkably still for someone who spends most of his free time pursuing the sports of running, tennis, tai chi chuan and bicycling, Russell Takara says that he just likes to keep busy.

Even in his four years as an undergraduate at the University of Hawaii at Manoa, Takara kept busy with a part-time job as a delivery-person for Chicken Delight, a company now gone. He grew up in Kaimuki, but before long he knew every street in Waikiki.

"In fact," said Takara. "Even though I worked my way up to becoming a manager, it was during that period when I realized that delivering pizza was not a career. I took engineering a lot more seriously after that."

Pamela Awada
Hometown: Honolulu, Hawaii
Years with Corps: 12
Works in: Fort Shafter Resident Office

Optimism seems to come naturally to Pamela Awada, project engineer for a variety of new work and renovations at Tripler Army Medical Center, including the recently completed print shop.

"I guess I like life and I feel fortunate for a lot of the things that have happened to me," said Awada. "I've been an engineer since 1977, although I've only worked for the government for 15 years. I've lived and worked on the mainland and also in Okinawa and Japan. I really admire excellence and am lucky to find so many competent people both at work and in my personal life."

Pamela is married to Wendell Awada, ET-MA, also an engineer. They have a four-year-old son who keeps them

The seriousness seems to have stayed with Takara and he is currently POD's program manager for civil works.

"When you're young you look to people older than you for knowledge about how things were done previously...about the history of things," said Takara.

Laughing and shaking his head he adds, "Something amazing to me is that I'm now the seat of civil works knowledge in the division. People look to me for answers. I don't know how this happened to come so quickly, it doesn't seem like I've been here very long."

Russ is making POD more productive.

focused on parenting with less time for their mutual love of golf.

"Landon's a really good kid. He loves reading and we don't let him watch a lot of TV, although he does settle for watching sports with us. He has Power Ranger things but is willing to stay away from cartoons and things that are too violent," said Awada.

"We still play golf, but not as much as before. It seems that most of our free time is spent going to swimming lessons and doing domestic things. The rest of the time everything centers on work."

Pam is making POD more productive.

Division Shorts

October is National Disability Employment month. Can you play basketball? From a wheelchair? Discover your own capabilities while developing awareness and appreciation for the abilities of people who don't have a choice. The 6th Annual Able-bodied Wheelchair Tournament will begin Oct. 19. Practice sessions for the POD team will be Oct. 15 and 16, from noon to 1 p. m. at the Hickam AFB Youth Center. POD still needs three people to round off the team. Are you really all that you can be? Call Maj. Linda Fischer at 438-1038 and do your part.

Condolences to Robert (Bob) Morishige, ET-CF at TAMC, on the death of his father, Robert, Thursday, Sept. 12. Memorial services were held at Hosoi Garden Mortuary in Honolulu.