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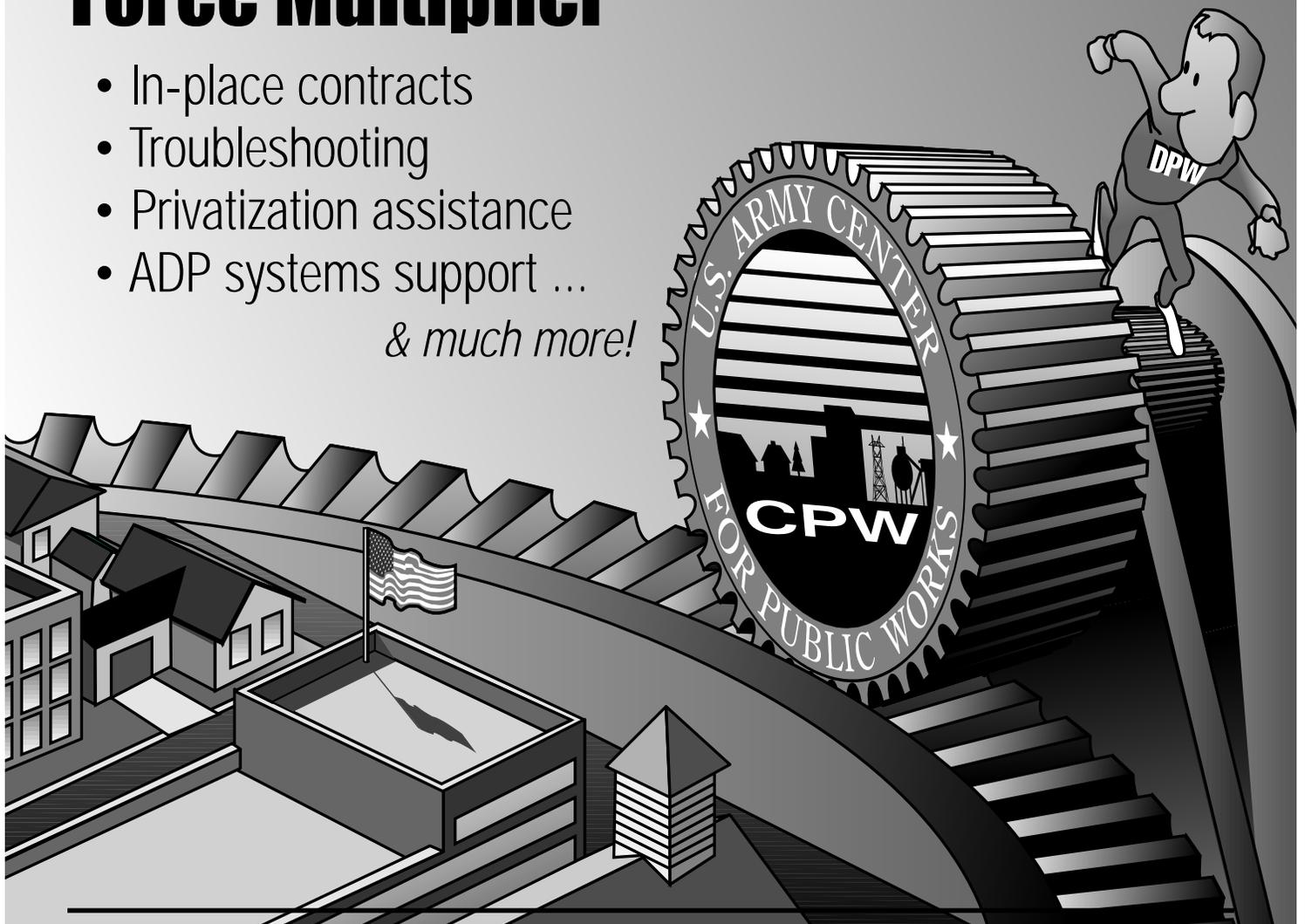
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- ADP systems support ...

& much more!



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CPW's 1996 Annual Report

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Conditions change— but not our commitment to you!

by Edward T. Watling, Director

"The more things change, the more they stay the same..." It's an old adage, and often gets delivered with a sigh. This year, an upbeat tone is more fitting for CPW. Why? Because the more things change in our organization and the Army, the more we hold to—and increase—the same high quality service and support to installations around the world.

That is our overriding goal—to provide you with excellent public works support based on your needs.

We are better positioned to support you at the end of this year than we were last October for several reasons. An important one is that Army leadership has greatly increased its level of commitment to installation support in recent months.

Two ongoing Functional Area Assessments (FAA) at Department of the Army level are addressing Base Operations and Engineering support. The second FAA is known as the "Construct" FAA. Don't let that discourage you! Operations and Maintenance, repairs and renovations are receiving more attention at every level. Your realities are finally becoming part of the big picture.



At Corps of Engineers Headquarters, I am happy to say, commitment to your needs for Installation Support has grown exponentially. I see Installation Support becoming a fully-recognized and co-equal mission of the Corps, along with Civil Works and Military Construction. In FY 97, the Corps will establish an Installation Support Division in the Directorate of Military Programs. I will add a second hat this year to head up this division, along with my duties as Director of CPW. Thus, our tradition of commitment to your needs,

viewed from your perspective, will become a presence and a force for change at the top.

In the field, some of you are beginning to experience positive change as your supporting Districts move to meet your needs. We have worked closely with the Fort Worth District Reinvention Center for Corps District Support to Installations. We see the great job Transatlantic Programs Center, Europe, is doing to support USAREUR.

It's still too soon to say what kind of Base Operations Support and Public Works Support organizations we will have ten years from now. Indications are, however, that your needs are being taken seriously, and new business processes are being built to meet them.

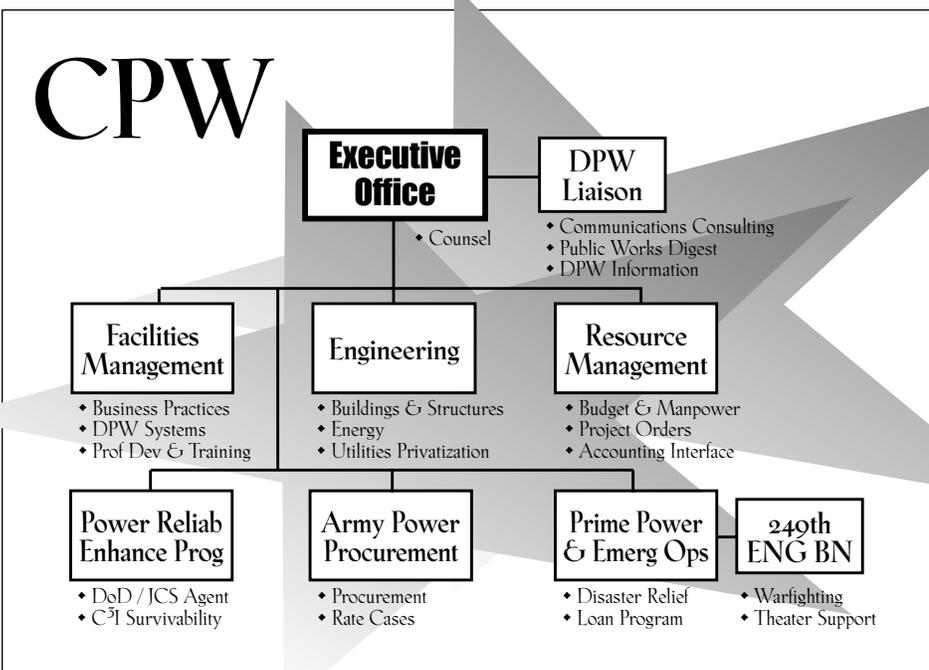
I say "business processes" rather than "organizational structures," for a reason. It is no longer a right answer to propose a new empire to meet every service need. We need ways to deliver service that make a difference rapidly. Fort Worth District calls their array of instruments to help you a "toolbox." The "toolbox" concept provides DPWs with additional methods to get the job done.

Here at CPW, I see us as your "force multiplier." You know what you want to do. You focus your effort and some resources. Our job is to be the "gear" that exponentially increases the force you're able to exert, turning your limited dollars into support that literally "makes the world go around" for your installation.

That's not just a sentiment—it's a fact. Or maybe, I should say, it's an accumulation of hundreds of ways we helped you get your money's worth, and more, during the past year.

Leveraging your resources—

This year, you entrusted us with \$30 million of your precious Public Works dollars. That's a growth of \$10 million since last year. We performed 520 different reimbursable orders for you, including services rang-





The 249th Engineer Battalion and the Prime Power Loan Program saved the Army about \$5 million by trading in old equipment for new.

ing from business improvement to engineering support to training.

The center holds more than two dozen indefinite delivery order contracts that you can call upon for help. We at CPW write the scopes of work, let the contracts, and provide contract management. You pay only for the work the contractor does for you. This year you called for 270 delivery orders for boiler inspection, systems support and maintenance, plant operator training, lead based paint abatement and a host of other services.

Late in FY 96, the Center received authorization to accept your project orders. In September alone, we were able to accept 16 project orders for services at eight installations. Several installations called on us for help in validating real property records and completing master plans.

Installations saved themselves another \$3 million in overhead and administrative costs by making use of our library of sample contracts and scopes of work. This means DPWs don't have to write a contract—we share existing documents with the field. In FY 96, we supplied installations with 800 sample contracts.

Cutting utilities costs—

As usual, the Army Power Procurement Office proved to be a source of major savings for installations across

the Army. Due to their efforts, the Army again achieved a cost avoidance of about \$20 million through acquisition negotiations and utility rate negotiations.

Our Energy Conservation program continues to support your efforts to cut power and water consumption.

Through our energy audit and retrofit contract, we helped you achieve lifetime savings of \$7 million through lighting retrofits at 17 installations.

The 249th Engineer Battalion and the Prime Power Loan Program saved the Army about \$5 million in equipment by trading in obsolete equipment for three new generators. Installations who participate in loan program projects to shave peak power costs have achieved savings of \$500 thousand to \$1 million each during the year.

Business process improvement—

This year, we nearly doubled our support to installations privatizing their utilities systems. In FY 95, we served 19 installations, in FY 96, we helped 35 installations conduct utility system studies preparatory to privatization actions.

The ACSIM has been encouraging installations to find ways to streamline supply operations. We assisted 77 sites in addressing supply issues—whether that meant helping you to move toward more credit card purchases, consolidate with DOL, resolve long-standing issues, or fine tune your business practices.

We helped you keep IFS-M serviceable. This was a tough year for IFS-M, the premier facilities management system for Army installations. Without warning, we took a 75 percent cut in funding early in FY 96. You and your MACOMs were also blindsided by the shortfall. As a result, our support to the system has to be curtailed. Yet this year

US ARMY CENTER FOR PUBLIC WORKS

Your Installation's Force Multiplier

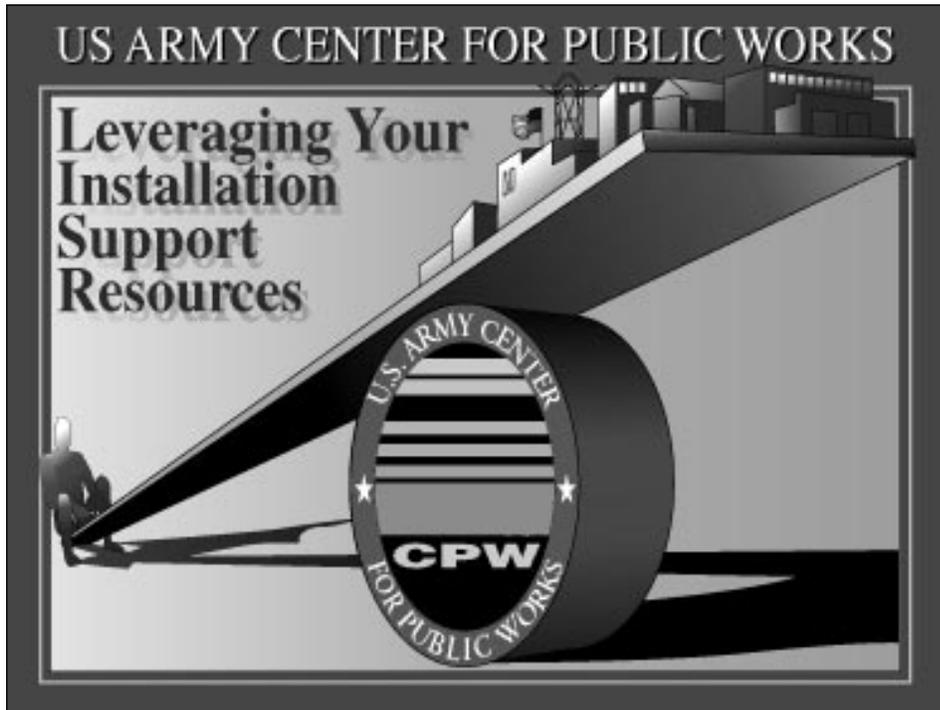
we continued to work with you to field a major systems change package and to respond to thousands of calls for help. In fact, our IFS-M functional assistance hotline answered 1,445 calls, of which 84 percent were answered in the same day. We also provided help in response to 2,229 calls for system help.

We continue to field Activity Based Costing support to installations upon request. Fort Campbell was our happiest customer this year. They identified \$200,000 in immediate cost-avoidance actions during our ABC analysis there, and recognized our team with Commanders' Awards for their services.

Technical support, information and services—

Technical experts who understand installation needs and problems are rare. I don't think it's an exaggeration to say that CPW owns more such expertise located in one place than any other support agency in the Army.

You have called on us to respond to emergencies and irritating problems and even to create preventive maintenance solutions for your installations. This year, we sent our staff members out on 31 consulting assistance visits to address systems and business issues, and



made about 50 trouble shooting visits to installations.

We made 23 Staff Assistance Visits to DPWs, both to help solve installation problems and to share your successes and good ideas across the Army.

We funded 13 gas utility systems surveys to get the ball rolling in an ini-

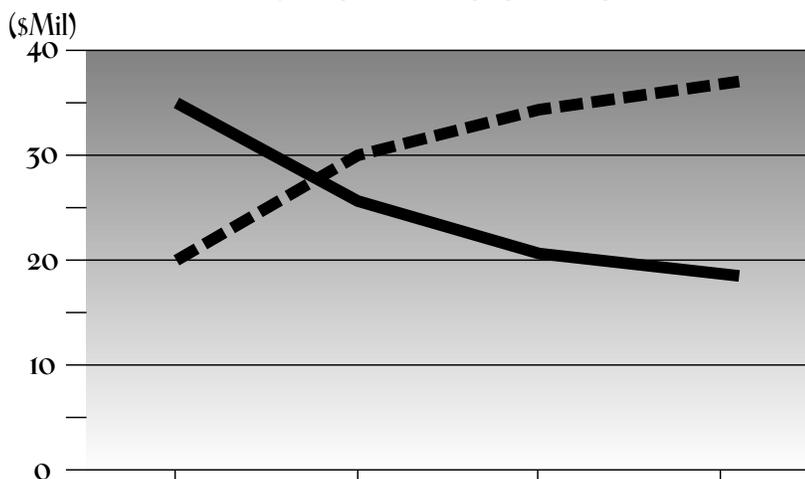
tiative to bring the Department of Transportation's Transportation Safety Institute on board to help the 100 installations that still own and maintain gaslines.

We provided 8,411 training days for 1,740 DPW staff members and others through our Professional Development and Training Division and other directorates. As a result, your staff has enhanced skills for everything from utility plant operation to bridge and dam inspection to housing management and automated systems management.

Information is king these days. CPW is making more and more data available to you through its telecommunications capability. A visit to our Web site will put you in touch with:

- The full array of services available from CPW.
- A contracts library you can download and use.
- Recent issues of the **Public Works Digest**, the **DPW Roster**, and the **DPW Reference Book**.
- Detailed information about the ROOFER engineered management system.
- The Executive Information System—a great tool for installation managers. You can access several years' worth of DPW Redbook data and conduct your own analysis using the data as you wish. **CPWD**

INCREASED REIMBURSEMENTS



Increased reliance on reimbursement from our customers has become necessary to maintain expertise and continue the level of effort needed by the DPW community. Many customers who "purchased" services during FY 96 realized significant cost savings and increased productivity through this centralized support concept.

Outsourcing? Don't go it alone!

Outsourcing is the new Mantra in the Department of Defense. As the part of the Army that puts a platform under power projection, Directors of Public Works are among those most pressed to contract out for support and services. The Army Center for Public Works can help DPWs confront the Goliaths in the Public Works service industry with more assurance that the contracts you sign will get you the service you want at a price you can afford.

This year, the Center expanded its efforts to help installations get the most for their contracted O&M expenditures.

We helped installations with:

- Sample contracts and scopes of work.
- Center held and managed indefinite delivery order contracts.
- Support to installation JOC programs.
- Special assistance to installation contract managers.

Check our contracts library—

Planning to outsource an operation? Before you spend valuable manhours writing a scope of work, check the Center for Public Works Contracts library.

In FY 96, Directors of Public Works avoided \$3 million in contracting costs by making use of our

library of contracts and scopes of work. We provided 800 sample contracts to installations, enabling them to go straight from the decision to outsource to a procurement process without using valuable time and manpower to reinvent the wheel.

It's easy to visit our **contracts library on the Worldwide Web. More than 300 sample contracts are available on our Website** for downloading. Many can be used as is, and others can easily be adapted to your local needs.

If a visit to the web doesn't locate just what you want or need, call Bob Hohenberg for assistance.

CECPW-FM Bob Hohenberg
(703) 428-6227 DSN 328.

Using JOC? Get the most for your money with CPW support—

Installation DPWs have found Job Order Contracting a superb tool for flexible and responsive support to real property maintenance and repair and minor construction.



Diane Roles of the Directorate of Resource Management cheerfully accepts customer orders.

The Center for Public Works sustains DPWs with a variety of services that keep Job Order Contracting operations as efficient and effective as you need them to be.

The Center provides—

- Hotline support to assure that your system works for you.
- Annually updated Unit Price Books.
- Training for installation personnel who manage JOC.

The JOC hotline responds to about 40 calls for help each month.

CPW is also available to help your installation with unique problems. This summer, a CPW Staff Assistance Visit Team discovered that Fort Bragg's JOC program was inoperative due to software problems. We arranged for a contractor visit to correct the software problem and provide added training for installation staff.

Installation and Major Command "subscriber" dollars support the Center's overall JOC sustainment program. With your fees, we buy software maintenance for the Automated JOC Proposal Development System, Unit Price Book updates, hotline support, training, and system requirements that must be centrally funded.

The Center also publishes the **JOCKEY** newsletter to keep you informed of JOC successes and good ideas, ways to



Bob Hohenberg of the DPW Management Division maintains the Contracts Library.



avoid problems and pitfalls, and new developments in the system.

☎ POC is Tim Sweeney, (703) 428-8184.

Use CPW contracts for fast response—

The Army Center for Public Works manages a wide variety of indefinite delivery order contracts that can be used by Army installations. Help is just a phone call away! CPW provides all the COR support and contract management; DPWs just get the work done.

In FY 96, DPWs around the Army called on our 18 contracts alone for 275 delivery orders. Some of the work you did through CPW-held contracts included—

- Providing FIPS Resources for Real Property Maintenance.
- Conducting utility rate analyses.
- Utility life cycle analysis services.
- Boiler operator training.
- JOC instruction.
- Lead-based paint abatement.
- Energy audits and retrofits.
- Functional and Automated Data processing support.
- Boiler inspections in CONUS and Panama.
- CCB-CD ROM lifecycle analysis enhancement.

Whether you need to survey your steam traps for leaks and damage, deal with lead-based paint problems, inspect a building or a bridge, train plant operators, or other services, call on CPW for help.

The best way to find help? Check our Website for support service providers, or call our hotline 1-800-RING CPW. We'll connect you with the support you need!



Sanitary and Chemical Division's (L to R) Malcolm McLeod, Laura Seabeneck, Bob Fenlason, Jane Anderson, Greg Jones, and Jennifer Conrad (seated).

Pilot project shows promise for big savings—

Planning to contract out all of your operations? The Center for Public Works may be able to help you arrive at maximum efficiency for minimum cost.

In FY 96, the Center for Public Works Contracts Management team was asked to help the Presidio of Monterey. The installation needed to develop documentation for an Acquisition Requirements Package that would cover Maintenance and Repair Work on the Presidio and its Annex (a portion of the former Fort Ord, California).

The purpose of the requirements package? Congress passed legislation allowing the Army to test the effectiveness of buying Fire, Security, Police, Public Works and Utility services from local governments. In this case, the installation worked with agencies in

Monterey County, California.

The installation's first step was to create an Interservice Support Agreement between the Presidio and the US Navy Post Graduate School for maintenance and repair. The agreement was implemented after Fort Ord closed.

When the CPW contract evaluation team reviewed the agreement, they found that it does not clearly define the quantity, frequency and quality standards for the work to be performed, and the existing accounting system prevents a clear understanding of where the Army's resources are used. The agreement also lacks a requirement or methodology for upward reporting and does not require that historical data be documented.

The DPW has requested that CPW assist in revising the agreement as soon as funding becomes available. The CPW Contracts Evaluation Team estimates that **annual savings of about \$4 million could result** from a revised agreement.

The project's success will be reported to Congress in the hope that the program can be expanded. The ultimate goal will be to meet and support a major recommendation of the Army's Construct Functional Area Assessment, that installations cut maintenance and repair costs by contracting out to local municipalities.

☎ POC is Fred Reid, CECPW-FM (703) 428-6358. **PWD**

Public Works problem?

Call us first!

1-800-RING-CPW

Peter Tranchik has been the Director of Public Works at Fort Dix, New Jersey, for the last three years. A graduate of the Virginia Military Institute, Tranchik also has a Master of Science in engineering management from the University of Alaska (Fairbanks). From 1992 to 1993, he was the DPW at Fort Indiantown Gap, and from 1987 to 1992, he was the chief of EP&S in Grafenwoehr, Germany. His last assignment in Grafenwoehr was as the chief, EP&S, of the 100th ASG.

On a six-month developmental assignment, Tranchik will be CPW's Executive Director through February 1997. Before his arrival in the Washington area, he had extensive dealings with CPW as an organization and already knew some CPW personnel from the annual CP18 Career Program Management Workshops. He is here to gain broader experience in the engineering management field and is enjoying meeting and working with members of CPW's various components as well as personnel from the ACSIM, USACE and the Secretariat staff.

"Telephone conversations and e-mail messages are good, but meeting people in person is always better," said Tranchik. "There's no substitute for face-to-face discussions, whether those discussions are about engineering programs, installation problems and their solutions, or executive development programs and their use as selection criteria in the future for engineer hiring. I like putting a face to a name."

"CPW is like an old friend. Of the various support organizations available to Fort Dix, I have found CPW personnel to be the most attuned to our installation needs. They really try to provide the services to meet those needs. It's reassuring to find so many professionals who take pride in their jobs and who want to do what is right for the Army."

Even before Tranchik's time, Fort Dix was using CPW for boiler inspections and boiler operator training on-site. This working relationship goes back to the late 1970s, when the installation had a major substation failure and got help from CPW's predecessor, the Facilities Engineering Support Agency (FESA). Many of FESA's employees are still with CPW today.

"Knowing who the people are behind the programs available from CPW and ACSIM is a large benefit," said Tranchik. "Knowing in advance whom to call and to have a level of personal contact saves a lot of time."

"The challenge at Dix is to support the Army mission in an efficient manner. We are no longer a basic training installation, but we are still one of the Army's 15 power projection platforms in the United States. We are proud to transition to the US Army Reserve Command in FY 97. Our primary mission is to support training of Reserve Component soldiers. Since November 1995, we have mobilized and deployed more than 2000 Army Reserve and National Guard soldiers to Europe in support of Operation Joint Endeavor. We take our work very seriously and are willing to work hard at anything that will help us do a better job. Having CPW in

Peter Tranchik

CPW's Executive Director



our corner just makes things a little easier."

"Recently, we worked a lot with CPW counsel and utilities contracting personnel on privatization of our natural gas and electrical distribution systems. CPW helped us with the economic analyses and negotiation of the contracts. Fort Dix will enjoy a cost avoidance of about \$5 million over a ten-year period."

Today, Fort Dix houses non-Army tenants and activities. With privatization, the utility company becomes the supplier, where previously the Army bought the service from the utility and acted as a middleman in the process. As a result, Fort Dix won't need to perform as many billing actions in the future.

Fort Dix's electrical system was in good condition, so the electrical company was anxious to buy it. But the natural gas system was very old. Under the terms of the new contract, Fort Dix will abandon the Army-owned system after purging and vacuuming out any residual gas. The utility company has built a new gasline and put in an entirely new distribution system, which it owns and operates. The Army is committed to buying their gas for a ten-year period at the local prevailing rate. After those ten years, Tranchik is confident that the installation will come back to CPW for another cost analysis.

"By now, most installations know that if they have a problem, they can call CPW. As the central point of contact for technical engineering services, it provides a variety of services you can't get elsewhere. For example, based on a CPW staff assistance visit, CPW helped us with lead-based paint abatement, facility engineer property book training, and ROOFER infrared scans. Even now, we are using CPW for Army family housing surveys at Fort Dix, and not so long ago, CPW helped us abate lead-based paint to facilitate demolition of 200,000 square feet of World War II wood."

"And they don't disappear when problems come up. CPW assisted us with the fielding of IFS-M—we recently hired CPW to install our local area network. Last year, we found that our supply system purchases were not crossing into STANFINS. We were buying materials, but the funds were not being obligated—about half a million—so we called on CPW to work with local management. CPW found the glitch, resolved the problem and got our obligations rolling."

"Since I arrived at CPW in August, I have learned a lot about engineered management systems (EMS) and plan to use them more when I return to Fort Dix. I would like some members of the Engineering Directorate to come out and give us estimates on putting EMS in place. I am particularly interested in ROOFER and PAVER, because these systems can help us develop sound investment strategies with decision criteria."

"HQEIS is another program I'll take back to Dix—also, RPLANS and ISR. I knew about these programs before, but now I appreciate their importance in decision-making at the Army level. I've only been here a few months, but I'll be taking back years of experience to Fort Dix." **PWD**

CPW PROFILE

Ed Irish is the US Army Center for Public Works' (CPW) program manager for utility privatization. His initial role was to work with installations on the technical reviews of privatization concept proposals. However, privatization became a high priority for CPW last year when it was highlighted as a major effort in the business plan, and his role increased substantially.

Last year, the Office of the Assistant Secretary of the Army for Installation Management published guidance to encourage Army installations to privatize their utilities. The reasons were varied, including financial difficulty in supporting current outdated systems to Army standards, ever increasing environmental requirements, changes in workforce and loss of skilled personnel, as well as National Performance Review encouragement of privatization of non-core functions.

"Privatization can improve the quality of our systems if we have a utility whose primary function is operation and maintenance of utility," said Irish. "It may even reduce our costs. These utilities can be investor-owned, municipal or regional agencies, or even commercial businesses such as CH2M Hill."

Irish encourages installations to look at their systems' costs and compare them with the costs of privatization. The CPW approach has been to create a privatization team to handle the different aspects and to assist in the evaluations and analyses. The team includes utility contracting experts from Power Procurement; electrical, mechanical and sanitary engineering personnel, our legal counsel, and Irish.

"In the past year," said Irish, "we've gotten more involved with real estate issues, working with HQUSACE personnel to assist in the process to transfer real property associated with the utility system. We get their help in addressing real property issues as they develop."

"Each installation is unique—in a different state, with different requirements, with different conditions of utilities, and each uses a different utility company with different priorities and interests. The key is that the installation commanders are the decisionmakers, and different commanders have different concerns about the impact on their mission. We work directly with the installations and try to get the MACOMs involved in all privatization issues."

"FORSCOM has been centrally funding most of its utility feasibility studies, with assistance from Huntsville Division in managing the program. TRADOC has also funded many of its installations and many more of its commanders are funding their own utility studies. AMC, on the other hand, has no central funds for privatization, but quite a few installations, like Fort Monmouth and Aberdeen Proving Ground have funded themselves. The AMC approach is that installations should do it themselves with the requests for proposal and evaluation as part of the technical process."

Ed Irish

Projects Office



"I think that the Army is moving towards the AMC approach because of the pressure on the garrison commander to continue to operate the whole BASOPS with reduced personnel. Thus, most commanders favor privatization because it would get them out of the utility business **and** allow them to allocate limited personnel resources in other areas."

Privatization helps commanders improve the quality of their systems and should not conflict with the installation's mission or reduce support capability. Irish feels there is a real desire at the installations to privatize, and interest from private industry creates an atmosphere of competition. As a result, many installations are going straight to the formal request for proposal as opposed to feasibility studies. With a formal proposal, an installation can do a comparison life-cycle cost

analysis of binding privatization proposals with the cost of continued Army operation of those systems.

"The request for proposal becomes a major installation effort," said Irish. "Privatization is viable and they're going right into the formal process. Fort Monmouth is doing this and it should speed up the process. Potential utility providers treat a formal request for proposal much more seriously."

"But privatization may not be for everyone. Economics is not the only factor to consider. We are hoping for a better system that will improve service. If you can't negotiate a satisfactory deal, it may not be a good idea for your installation."

"It's a life-cycle cost which includes your current expenditures and capital investments to be made in the future. Those capital expenditures don't come out of your current budget, so you could have a higher annual payment, but for the Army on a life-cycle basis, cost should be lower. The result is a more reliable system and a lower cost of service. Breakdown maintenance is always more expensive than preventive maintenance, and that's what many installations are doing. It's a costly way of doing business. Successful utility companies don't operate that way."

"We also support the other services in their privatization efforts. We recently helped the Marine Corps Logistics Base in Albany, Georgia, the Public Works Center in Jacksonville, Florida, and the Naval Air Station in Pascagoula, Mississippi.

"We open our privatization workshops to the other services as well. Last year, we had two—one in Springfield, Virginia, and another in Reno, Nevada. Next spring, we're planning one in Oklahoma City. The makeup of our workshop participants varies—we get installation DPW and DOC personnel, Corps district real estate personnel, as well as Navy and Air Force members.

Irish has been in the 416th Reserve Engineer Command for 22 years. A Lieutenant Colonel, he is currently working with AMC in support of their operational deployment missions. You may reach him at (703) 806-6003 DSN 656. **PWD**

United States Army Center For Public Works

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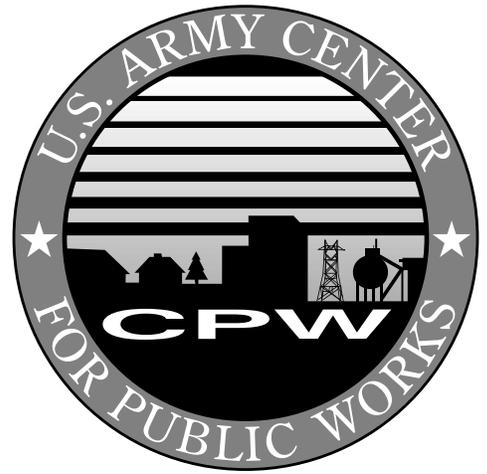
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LTC JOHN RIVENBURGH

- 249th Engineer Battalion
- Company A
- Company B
- Prime Power School, Company C
- Generator Loan Program

Directorate of Resource Management



MR. EDWARD B. VOGEL

- Budget & Programs Div

So you couldn't privatize? CPW can still help!

It may be the new rule that you'll privatize your utilities—but the Army Center for Public Works knows what you know: Reality is—you will not be able to outsource every boiler and HVAC system, and it may be a while before the gaslines and other utility systems are off your property book and in the hands of a regional provider.

Until the day when you no longer have any responsibility for safe and efficient operation of mechanical, energy and utility systems, the Center will be available to help you manage these "exceptions to the rule."

Safer gas systems—

More than 100 Army installations still have natural gas or propane/air distribution systems. Most are still owned, operated and maintained by the Army. For safety's sake, these systems are among the most important to maintain and operate properly.

The Center for Public Works has been a leader in improving maintenance strategies for gas systems. During FY 96, CPW funded 13 surveys of installation gaslines. Four TRADOC and AMC systems, and five FORSCOM systems benefitted from the CPW initiative.

The surveys were one part of a DOD-wide effort to upgrade maintenance and operation of DOD-owned systems. This year, the Army and other military services made a smart move—we are adopting the Department of Transportation Guidance Manual for Operators of Small Gas Systems as the new technical manual.

This DOT manual is updated as regulations and guidance change, and will let the Army provide the most up-

to-date information to system managers without long bureaucratic delays.

The Army has also adopted the technical provisions of 49CFR, Part 192-Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards. This is the same document used by private sector utilities. It will bring the Army in line with the standards for design, operation, installation, inspections, maintenance and repair used throughout the country's gas systems.

The Center for Public Works is playing a major role in implementing the new guidelines. **We work with the DOT's Transportation Safety Institute to offer a 10-day training class for gas systems operators at a DOT school.**

The Center is also working with the Transportation Safety Institute to encourage installations to survey their gas systems. This is NOT an inspection, but rather a way to help installations enhance their systems' safety. During the survey, Transportation Safety Institute personnel review installation procedures and provide guidance on how the installation can best meet the new-

to-the-Army 49CFR Part 192 requirements.

The survey includes a three-to-five day visit by Transportation Safety Institute experts. The cost is \$5,900—a bargain for the expertise and assistance.

Because installations have been slow to respond to the program, CPW funded 13 surveys last year to help spread the news and start implementing safety and maintenance improvements.

If you have a gas system, check with your MACOM—the Major Commands have prioritized the installations they believe will benefit most from a survey.

☎ POC is Phil Connor CECPW-EM, (703) 806-6068

CPW helps minimize utility rates—

Why pay more? Contact the US Army Center for Public Works Army Power Procurement Directorate for help when your utility company proposes a rate hike or other expensive changes.

Again this year, the Power Procurement folks helped installations avoid more than \$20 million in increased utilities costs. Their seven year savings and cost avoidance record now stands at a whopping **\$162.97 million for FY 89 through FY 95.**

For Assistance with privatization issues:

Ed Irish, Project Officer,
(703) 806-6003 DSN 656.

Ken Zandler, Action Officer,
(703) 806-6010 DSN 656.

Michael Organek, Contracting
Officer, (703) 806-6020
DSN 656.



Directorate of Army Power Procurement's Ed Gerstner, Annette Harley, Cliff Beasley and Robin Banerjee.



Call on John Lanzarone, Mechanical & Energy Division, for assistance with boiler inspections.

When your installation has to face a state utilities rate commission, the Directorate can send a contractor negotiation specialist to stand up for the installation's needs. In many cases, lower rates are the result.

The directorate can also help with technical and legal issues surrounding the acquisition and sale of utilities services. They can help administer sales and purchases. The Directorate also represents the whole Army on the Federal Acquisition Regulation Joint Committee on Utilities and on the Defense Utility Energy Coordinating Council Acquisition Committee.

In other words, this Directorate is your "voice at the top," advocating policies and practices that will help you get the utility power you need at the most beneficial cost.

☎ POC is Thomas J. Evans
CECPW-C, (703) 428-7362, DSN 328

Day-in, day-out, CPW supports your operators—

Cool comfort in summer, cozy warmth in winter, and safety for soldiers and families every day of the year—that's what you want to assure your installation customers.

This year the Army Center for Public Works continued a wide variety of programs that support you and your workforce in providing that comfort and safety. We can offer technical sup-

port ranging from on-the-phone assistance to on-site visits. We can review your in-house designs, troubleshoot your systems, conduct surveys, studies, or do training. We have both in-house and contractor resources. If our in-house staff are used, we are reimbursable for TDY and travel. Our contractors are fully reimbursable.

Here's a sampling of the support we can offer:

- Heating, Ventilating, Air-Conditioning (HVAC): The Center has in-house expertise to help you maintain building HVAC systems, boilers, chillers, and distribution systems, controls, utility monitoring and control systems, trouble shooting, studies,

O&M help, indoor air quality assistance, CFC conversions and refrigerant management plans.

- Utility Plant Operator Assistance Program: Our indefinite delivery order contract covers central boiler and chiller plants, plant analysis and design, review of O&M practices.
- Boiler Operator Training and Certification: Our contract offers 5-day training to prepare Operators for the National Institute for Uniform Licensing of Power Engineers (NI-ULPE). Operators take NIULPE exam at the end of the training session.
- Boiler inspection program: Our contract can be used to perform required semiannual inspections on high-pressure steam boilers and water boilers. The contract scope has been expanded to include unfired pressure vessel inspections, deaerator tank inspections, pressure vessel integrity studies and boiler failure analysis.

☎ POC is John Lanzarone,
CECPW-EM (703) 806-6067.

Getting well—it takes more than a band-aid!

Finally, there's hope you can replace or modernize your coughing, wheezing, leaking central energy plants. **The Army has programmed \$300 million**

to be spent over the five years beginning with FY 98 for the Utilities Modernization Program. The goal? To provide installations with safe, energy efficient, environmentally friendly heating and cooling services at lowest cost. **Major repairs or replacement should not be needed for 15-25 years.**

The impossible dream?

We at CPW want to make sure it is a dream come true for as many DPWs as possible. We are putting together a project development package to give you the best shot at receiving some of the programmed funding and buying a plant renovation or replacement that will last until 2015 or 2025.

We know you want to avoid the old mistakes that led to failing steam traps and corroding buried pipes. The package will help you determine what is truly the best type of design for your installation. Will it be a central energy plant or individual boilers? Should you choose steam or low-temperature hot water? Direct-buried distribution system or a shallow concrete trench? Privatization? What about unique mission requirements, safety, maintainability?

Working with a team from CERL and the ACSIM, CPW will assess the validity of proposed projects. We'll help you plan and choose the options that will cut costs, simplify maintenance, and provide reliable, safe, environmentally-friendly systems for many years to come.

☎ POC is Dennis Vevang
CECPW-EM (703) 806-6071. **PWD**

Reference Book soon to appear on the Web

The April 1996 edition of the DPW/DEH Reference Book will soon be appearing on the Worldwide Web, complete with hypertext links between the text and both the Table of Contents and the Index. We'll keep you posted. **PWD**

Energy savings— what have we done for you lately?

Installation Directors of Public Works know that energy costs keep rising, demands for conservation keep pressing—and funding to meet the goals goes up and down unpredictably.

What DPWs can predict is the US Army Center for Public Works will help them achieve the maximum possible savings for every investment they make.

Here's the FY 96 record for energy management services:

Energy audit and retrofit

The Army has been able to spend \$3.1 million a year for two years under a special contract to perform audits and retrofits that will save money for installations. CPW executes the contract through the Baltimore District Corps of Engineers contracting office. CPW coordinates projects with MACOMs according to the command's priorities.

This year, CPW has supervised contractor lighting audits at 17 installations in 15 million square feet of buildings. Motor audits have been conducted at one installation.



Jim Patton, John Lanzarone, Michelle Suss, and Christie Mills of the Mechanical and Energy Division are ready to assist your installation with energy issues.

Thirteen installations have ordered lighting retrofits. The work will cost \$3.5 million, and will pay for itself in about four years. Beyond the payback, installations can expect a savings of \$7 million over the life of the systems.

Other lighting audits, motor audits, and steam trap surveys are scheduled at 10 installations. When an audit is completed, the installation receives a report to document the results and to help them establish energy projects for this contract or for other funding sources,

including in-house execution.

POC is Jim Paton CECPW-EM (703) 806-6091

How to save? Let us count the ways!

From workshops to contractor support, to technical assistance, CPW can power up your efforts to save and manage energy use at your installation. Our services are all available on a reimbursable basis for contract support and travel expenses.

- Natural Gas Chillers.
- Renewable/alternate energy sources—**check out ground coupled heat pumps! We think they're proven savers.**

- Energy Savings Performance Contracting—**five are in place, saving installations a total of \$5.7 million each year!**
- Fuel cells.
- Energy manager training.
- Energy audits and retrofits—**\$7 million lifetime savings last year for lighting alone.**
- Energy Conservation Investment Program
- Facilities Energy Technology Service—**let us do a little background check on that product before you buy!**
- Demand side management.
- Energy Engineering Analysis Program.
- Energy Security Program.
- ADDS-DUERS—**tracking your success: and yes, the Army is still ahead of all others in the Energy Conservation race.**
- Energy distribution.
- Facilities Energy Application Program—**demonstrating new products and technologies that save you energy.**

POC is Roger Cundiff, CECPW-EM, (703) 806-6102 DSN 656. **PWD**

Need help? Request an SAV!

If requested, CPW can arrange a 2-5 day staff assistance visit (SAV) to your installation to help with resource and work management, technical operations, planning and real property issues, housing management, and any other areas of special interest to you. Our SAV program coordinator, Milt Elder, will put together a team of experts based on your specific set of problems, coordinate the visit with your DPW, and provide him with a detailed written report of the findings and recommendations. Often, the SAV team can solve problems on the spot.

This fiscal year, we visited 23 installations on a rescheduled cycle. Be sure to read our **SAV Bulletin** for good ideas we picked up at those installations. Our September 1996 issue of the **Public Works Digest** highlighted an SAV to Fort Bragg. For those of you who have asked to see us more often, we started moving towards an invitational program last October.

For more information about the SAV program, please call Milt Elder at (703) 428-7969 DSN 328 or e-mail: milt.r.elder@cpw01.usace.army.mil. **PWD**

CPW to the rescue



Damage from boiler explosion in basement of Fort Belvoir Adjutant General's Office. The force of the blast blew out a portion of the wall in the adjoining men's bathroom.

When major facility problems occur in the field, what you get is an opportunity to excel. CPW helped out with some of these “opportunities” this year:

- A hot water boiler explosion at Fort Belvoir, Virginia.
- A power outage at Military Ocean Terminal, Bayonne, New Jersey.
- Piping leaks in the feedwater system at Fort Wainwright, Alaska, power plant.
- Power outage at Defense Personnel Supply Center, Philadelphia.

Here's how CPW engineering experts helped assess damage, troubleshoot problems, and recommend permanent solutions in two of these cases.

Belvoir boiler blows

Most of the folks at the Fort Belvoir Adjutant General's Office had gone to lunch when the hot water boiler exploded at around 11:30 a.m. on October 9. The explosion devastated the basement boiler room and blew out the wall to an adjacent men's restroom.

Miraculously, nobody was injured, according to Belvoir Fire Chief W.G. Shelton, Jr.

“I expected to see serious casualties when I arrived on the scene,” Shelton said. “When that boiler failed, it became a lethal weapon. It was like a grenade going off that threw shrapnel all over the place.”

Four employees were shaken up by the experience, but were otherwise unscathed.

Shelton's people, along with Military Police and bomb-sniffing dogs, examined the scene but found no evidence of a criminal act, such as sabotage or a bomb. Agents from the Bureau of Alcohol, Tobacco and Firearms (ATF) Fairfax County Fire Service investigators also examined the scene.

The Belvoir DPW, the ATF and County investigators agreed with Shelton's assessment — they needed help from somebody with mechanical engineering expertise.

“I said I'm going to call CPW, because this is way out of my league,” Shelton said. “Fortunately, John Lanzarone came on the scene, and he was heaven-sent.”



Anh Vo of the Electrical Division spent several days in Bayonne, NJ, helping the Military Ocean Terminal recover from an electrical fault.

Lanzarone, who works in CPW's Mechanical and Engineering Division, came with two other engineers, examined the scene and said it looked like a steam explosion rather than delayed ignition on the burner mechanism as Shelton had initially suspected.

"John did an excellent job," Shelton said. "He and his team determined that the explosion was caused by water deprivation. I can't say enough for what they did."

Lanzarone told Shelton that the explosion was probably caused by catastrophic failure of the boiler because of water deprivation — deprivation that was related to water makeup.

"But the greatest thing John did was give us 2½ pages of strong recommendations to help make sure this doesn't happen again, at Fort Belvoir or anywhere else in the Army," Shelton said.

The lights go out in Bayonne

At 3 a.m. on Friday, March 8, an electrical fault occurred in one of the electrical feeders emanating from the switchgear in Bldg. 44C at Military Ocean Terminal Bayonne, New Jersey. Normally this fault would have resulted in a tripped feeder circuit breaker resulting in a localized outage. However, the feeder and main circuit breakers did not operate.

The upstream circuit breakers at the main substation did not trip. This in-

cludes the upstream feeder circuit breakers, the transformer main secondary circuit breaker, and the 26.4 primary transformer circuit breaker. The fault was removed from the system when the utility circuit breakers operated outside of the installation. This resulted in a postwide outage (with the exception of the GBV substation).

Bayonne got on the phone to CPW.

Ron Mundt and Anh Vo from CPW's Electrical Division went to Bayonne for several days to see if they could help. It all came down to frozen batteries.

According to Mundt's report, "The initial electrical fault that occurred was not unusual in nature. However, the amount of damage that resulted was. The amount of damage that occurred appears to be the result of inadequate battery control power available to operate the 4.16 Kv and 26.4 Kv oil circuit breakers."

The battery system at the main substation was in unacceptable condition, according to Mundt:

- Battery voltage measured approximately zero volts (less than two volts).
- Battery cells were found cracked.
- The battery room was very cold. The window was wide open.
- The DC control panel door was open.
- There was evidence of corrosion on the equipment.
- Ice was formed inside the battery cells.

"The lack of switchgear and circuit breaker maintenance performed at the switching station and main substation may also have contributed to the amount of damage, but to a lesser degree," the report said.

Mundt made several recommendations, to include:

- Every effort should be made to increase the number of electrical personnel to required levels and provide training in high voltage and substation maintenance where required.
- Circuit breaker and relay maintenance should be performed on all switching and substations every two years.
- The battery systems at the switching station and main substation should be serviced and brought up to reliable operating conditions. The system should be maintained based on TM 5-684.

Mundt had also recommended that the switching station lineup be replaced entirely, according to Bill Messer, Chief of Engineering Plans and Services at Bayonne. But the installation had spare modules in its switch gear and used them instead.

"Ron's report was very helpful," Messer said. "We're pretty much following CPW's recommendations on repairing the switch gear that was damaged."

POCs are John Lanzarone, CECPW-EM, (703) 806-6067, DSN 656, e-mail: John.R.Lanzarone@cpw01.usace.army.mil; and Ron Mundt, CECPW-EE, (703) 806-5181, DSN 656, e-mail: Ron.K.Mundt@cpw01.usace.army.mil. **PWD**

Submit your articles and photographs to the *Public Works Digest*

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CPW helps installations stay on-line

CPW provides installations with automated information systems support. At present, we're converting the Integrated Facilities System Micro-Mini (IFS-M) system, developed during the late 1980s, to operate in a client/server LAN environment, using Windows NT and ORACLE 7. This will bring us up-to-date with current technology, reduce cost, and provide greater flexibility.

We expect the operating cost at the installation to be lowered by replacing the aging minicomputer with Pentium servers. The cost for one year of maintenance for the minicomputer is the same as the cost for a new server. As we convert the system, we will be providing an environment that allows commercial software to be used.

A 75-percent reduction of funding this year, \$3.8 million, caused a loss in government personnel as well as in contract effort. We hoped to offset this by requesting the installations to make up the shortage in funding. However, because we were not aware of this plan until the beginning of FY 96, our request for funds took the commands by surprise. Therefore, neither the installations nor the MACOMs were able to respond to this major funding shortfall, resulting in our curtailed support for FY 97.

A Process Action Team recommended a commercial off-the-shelf (COTS) work management software package as a possible replacement for all or parts of the IFS-M system. We are planning to test this package in this fiscal year to determine the feasibility for Armywide deployment. In addition, the test will tell us what business processes are properly supported by the package and if there is a need for any additional software, either other COTS or government-developed. The hardware and software environment needed for the client/server version of IFS-M is an industry standard that supports the recommended COTS and most software applications.

POC is Leo Oswalt, CECPW-FB, (703) 428-7120 DSN 328. **PWD**



Jim Webster, Business Improvement Division, wrote the IFS-M Cookbook to the Future, which tells installations how to install a LAN.

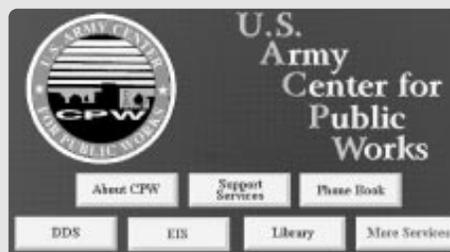
CPW's Home Page—something for everyone

The U.S. Army Center for Public Works' Home Page showcases our installation support activities. It has something for everyone.

Installations can customize our many libraries to their individual needs. These downloadable word processing files include SOPs for the DPW work processes, job descriptions, contract support guides and contract statements of work, training information, Real Property/Master Planning instruction, IFS-M and Work Management modules.

Most of CPW's publications, including the **Public Works Digest**, **DPW Forum**, **SAV Bulletin**, **JOCKey**, **Visions**, **Red Book**, IFS-M

User Manuals and the **Gray Book**, are available on our home page. In addition, there are phone books, a bulletin board with job announcements, training schedules, conference and workshop information and a guest book. Even the latest HQEIS software is available for downloading as well as information about the DDS.



We are constantly working on improving our home page by adding features asked for by installations. Our latest additions are a search mechanism that allows users to search for specific information available on the CPW web server and the Chat Room, which promotes sharing of information and provides a forum for getting questions answered.

Based on your suggestions, we are making some major changes. We're still working on a new look, which will include the new Corps banner in accordance with headquarters requirements. We're also trying to be more user-friendly by providing a point of contact

page with e-mail links and phone listings. Future enhancements will include a page of available programs and services, a database listing CPW Contracts for DPW use, and links to the DDS file libraries. Check us out at: <http://www.usacpw.belvoir.army.mil>.

POC is Brigid O'Connor, CECPW-FM, (703) 428-8455 DSN 328. **PWD**

IFS-M Hotline support

The CPW IFS-M Hotlines provide direct functional and technical assistance to individual DPW users. This includes dial-up modem support that allows the support team to dial in and log onto the installation DPW system while in telephone contact with the user.

The functional hotline provides customer assistance for work management, supply management and contract management issues. This support includes providing interpretations of existing regulatory guidance, advice on automation methods, and remote find-and-fix query assistance. This customer assistance is a one-stop service for problem resolution.

“Poor resolution” means the identification of regulatory or policy issues that need additional clarification, and includes appropriate follow-on actions to coordinate with the proper HQDA activities or steering committees. It also means processing the appropriate paperwork, which identifies inadequacies with data processing systems supported by the Work Management Hotline. It may also mean pursuit of a business practice standard that enhances current automated systems. The functional hotline responded to 1,445 calls for assistance, with an 84 percent same day turnaround time.

The Customer Assistance Office provides technical support and is open

24 hours a day, seven days a week. This office provides answers to IFS-M calls when related to change packages, problem report status, or reshancements of change packages.

Technical support includes:

- Guidance on IFS-M software and hardware.
- Assistance in correcting operational problems.
- On-site assistance for complex system change/correction.
- Technical support for Oracle, Informix, and Access databases.
- Assistance with communication/network issues.
- Installation of IFS-M applications and system software.
- Evaluation of hardware problems and reconfiguration.
- Query writing to help sites meet management requirements or evaluate stored data.

For fiscal year 1996, calls totaled 2,229. Calls requiring more than 120 minutes to resolve by category included:

- 108 hardware/system software.
- 116 application software.
- 7 installing change package.
- 57 other classifications.

☎ POCs are Deanna Devier, (703) 428-6076, DSN 328, and Vaughan Edmondson, (804) 862-3000. **PWD**

EIS—it's easier than you think

Our Work Management Team has developed two Executive Information Systems (EIS) which display summarized data from the Integrated Facilities System and other existing DPW databases. Both systems were designed to allow users easy access to data without knowledge of Structured Query Language or specialized computer skills. The Executive Information System provides an easy method for HQDA, MACOM and installation personnel to view management information.

The Installation Executive Information System (I-EIS) uses a multidimensional database to provide on-line graphical and tabular information displays by months, quarters and fiscal years. These displays help installations to analyze their real property inventory, RPMA costs, and performance indicators.

The Headquarters Executive Information System (HQEIS) also uses a multidimensional database to display installation Real Property Inventory and Real Property Maintenance Activity costs at an aggregate level.

Both EISs will provide consistent and accurate management information to foster improved decisions in planning, programming and carrying out the Army's mission. They will also significantly improve the process of tracking cost and mission execution at all management levels.

The EISs support the Army's Infrastructure Decision Architecture and display, organize and analyze facility data that can be used for planning, decision making, problem solving, and preparing briefings and reports.

HQEIS will replace the Headquarters Integrated Facilities System (HQIFS) by providing users with one system that has a user friendly interface to existing databases.

☎ POC is Deanna Devier, CECPW-FM, (703) 428-6076 DSN 328. **PWD**



CPW's Work Management/IFS-M Functional Hotline team members (L to R):
front row: Jack Geifer, Kay Wilson, Kenny Rowland, Deanna Devier, Elizabeth Fricke;
back row: Linda Smith, Miriam Ray, P.J. Krueger.



FEAP takes fear out of new technologies

Chuck Racine and Fidel Rodriguez of the Buildings and Structures Division discuss training sessions for new users of decision support software.

CPW manages the Facilities Engineering Applications Program (FEAP), which assists the DPW by transferring emerging technologies from the research environment into the hands of Army users. As part of this program, we distribute a quarterly publication, called the FEAP Technology Transfer Bulletin, to provide general information about all facets of the program as well as worldwide product fliers to illustrate the proven technologies to potential users.

FEAP is the only Army program that demonstrates new technologies. This year, although we received limited funding for demonstration projects, we were able to complete carryover projects from FY 95, such as implementing guidance for self-help projects and development of guidelines for historic structures.

In addition, we sponsored several Engineering Management Systems (EMS) workshops to demonstrate their new capabilities and GIS interface.

Some of the new projects we started this fiscal year are demonstrations of:

- Electro-osmotic pulse (EOP) technology (controlling seepage in basements) at McAlester Army Depot.
- Anti-scale/corrosion resistance coatings (for use on swamp coolers) at Fort Irwin.
- Remote monitoring for cathodic protection systems (using commercially available remote equipment) at Fort Drum.

We continued to publish User Guides, available from CERL for certain technologies, which help to determine if a technology's performance is

appropriate for the site. Videotapes that describe many of the FEAP technologies are available from CERL's FEAP Information Center.

Our various workshops, including the annual Technology Transfer Leadership Workshop at CPW (Fort Belvoir) for installation O&M chiefs, helped you to learn even more about certain technologies. For example, we held two workshops on decision support software, both WINDOWS-based programs—EPANET for water quality management and SIMMS-IIC for

sewer system operation and rehabilitation. Both workshops were co-hosted by CPW and CERL as one-day training sessions geared towards new users.

For more information about new technologies, please contact the POCs indicated in the product flyers or FEAP Bulletins.

POC is Fidel Rodriguez, CECPW-EB, (703) 806-5979 DSN 656. 

Are you on the *Digest* distribution list?

If not, give Linda Holbert a call at (703) 428-7931 DSN 328.



Public Works *Digest*

Our Pledge:

*To be your Public Works
Center of Expertise
dedicated to installation support
and excellent service
based on customer needs.*