



U.S. Army Corps  
of Engineers  
Far East District

# East Gate Edition

September 1998

Volume 8, Number 8

## FED performs emergency repair of 80 groundwater-drinking wells

In response to the recent flooding on U.S. military installations in the Republic of Korea, the Far East District (FED) provided support in areas of damage assessment, landslide investigations, and emergency repair of groundwater-drinking wells. FED has the continuing mission to maintain 258 water wells on 55 U.S. military installations on the Peninsula. Field crews have been busy returning 80 flood-damaged wells to full service.

"Water well teams have completed repairs according to installation priorities, availability of electricity, and access to the flooded sites," said Doug Bliss, Chief, Foundations and Materials Branch, FED.

*(continued on page 5)*

### **Inside**

***F&M Branch teams perform emergency maintenance and repairs on 80 wells***

*..... see page 5*

***FED cost estimators crunch numbers***

*..... see page 6*

***Asbestos Removal -  
A necessity for Camp Henry  
Project***

*..... see page 7*



*(l-r) Mr. Pak, Tok-Kun, Mr. Chang, Ik-Ton, and Mr. Yong-Sop, members of one of the four Foundations and Materials Branch's well maintenance teams, perform emergency maintenance on well No. 24 at Camp Hovey.*

# From the Commander



COL David J. Rehbein

## One Corps, One Regiment

A lot has happened in the last month. . . and in every case the District has performed magnificently! I can't begin to tell you just how important our role was in the response to the devastating flooding that hit many of USFK's northern installations. While I'm proud that our expertise and professional reputation is the cornerstone of justification for relief funding, I was even more impressed by the attitudes and willingness to tackle the job that every District member displayed.

I want to thank each one of you for your part in the events of the last few weeks. Even if you didn't go north to do damage assessments, you faced extra work as you filled in the gaps created by missing officemates . . . and, we still executed our missions in the UFL exercise! One thing that became very clear as we did normal operations, flood damage assessment, and UFL exercise

play was how important our links are to the other engineer organizations in USFK. The especially urgent demands placed on all of us reinforced some long established relationships, created some new ones, and, quite frankly, strained others. But we collectively made it work; and I think we all gained from it an appreciation of how interlinked we are in the engineer community.

The commanders in the field who needed support didn't ask - or even much care - if a particular person doing work was a DPW engineer, a troop unit engineer, a staff engineer, or an FED employee. To most of the rest of the world an engineer is an engineer.

That reality needs to be understood by all of us. When you wear a castle, whether it's the USACE logo or the Army Branch Insignia, we are all engineers. Many of us, soldier and civilian alike, have had assignments at one time or another in several different "flavors" of engineer organizations. That interchange in the community keeps us healthy and also reinforces the "One Corps, One Regiment" philosophy. In a similar manner, the "U.S. Army" in front of our name makes us all "soldiers". Whether under armistice conditions or in the event of war,

our military-civilian team provides vital services in direct support of the military forces here in Korea. Again, the issue of what brand of engineers we are, whether we're a reimbursable organization or a direct funded troop unit, is moot to most people needing our special skills. Our challenge is to properly, responsively, and professionally render superb support whether fighting floods or executing our wartime mission. We can't do that alone. We all need to build and maintain relationships with the other engineers with whom we work. We need to help each other be successful and provide coherent, teamed engineer solutions to the requirements that the various commands on the peninsula hand us.

We've been very busy. Thank you again for all your work. You can all be proud of what we've accomplished. Although I'd hate to keep up this pace long, I want you to know how pleased I was by our ability to handle many complicated operations at the same time. Just remember, as they say, "No good deed goes unpunished." Next we get to face year-end closeout. In comparison to the last few weeks, it ought to be a cakewalk!

Essayons!

COL David Rehbein

Check out the Far East District web site at [Http://www.pof.usace.army.mil](http://www.pof.usace.army.mil)

The East Gate Edition is an authorized publication for members of the Far East District, U.S. Army Corps of Engineers. Contents of this publication are not necessarily official views of, or endorsed by, the U.S. Government, DoD, DA, or the U.S. Army Corps of Engineers. It is published monthly by desktop publishing by the Public Affairs Office, Far East District, U.S. Army Corps of Engineers, APO AP 96205-0610, telephone 721-7501. Printed circulation: 500.

District Commander: COL David J. Rehbein Public Affairs Officer: Gloria Stanley Photographer: Yo, Kyong-il

# Safety

## Too early to think about Chusok?

It's just about that time of year again when everyone will be hitting the road for Chusok.

Officially, October 4-6 are the celebrated dates, but you can bet Korea's highways and byways will start to get busy as early as Friday, October 2, if not sooner. So, it's time to start thinking about any travel plans you may have for those time periods.

Best thing to do is to postpone any travel you may have to do or try to get it accomplished beforehand. But, if you are one of the millions who will hit the road to visit family or friends . . . plan accordingly. Most major routes will be bumper to bumper to include a lot of the lesser traveled roads -- folks trying to avoid the rush. Plan to leave early to give yourself plenty of time (both going and coming back). Plan on the traffic congestion and spending a lot of time in the car. That means stocking up on the essentials for your family as well as the car.

Here is a list of some items to think about before the trip and during the holiday:

**-- Take along plenty of water. For consumption, and for the car. Remember, it's still hot out there and dehydration happens without you realizing it. Vehicles have a way of**

**heating up when stuck in traffic. And don't forget the tool bag of essential items. (When was the last time you checked your spare tire?)**

**-- Wear seatbelts, minimize and consolidate trips if possible.**

**-- Alcohol - Celebrate Sober - Responsible use of alcohol - Drinking and driving is a crime.**

**-- Food/Picnics - Properly store, cook, and dispose of leftovers and waste.**

**-- Sports Activities - Review the area, the rules, and inspect the equipment.**

**-- Review safety tips for jogging, hiking, mountain climbing, rappelling, swimming and other physically demanding activities.**

**-- Review policy on the use of protective clothing and equipment while riding bicycles and other recreational vehicles.**

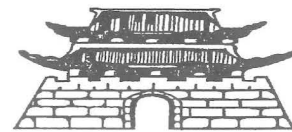
**-- Maximize the use of on-post facilities and participate in on-post activities.**

**-- Remember heat injury and sunburn**

**prevention.**

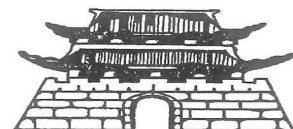
**-- Use the buddy system.**

Take safety with you all the way and have a happier holiday.



## September Safety Slogan:

*"If you're inclined to risk your life, don't include your kids and wife!"*



# The 2IC's Corner

by LTC Mark Cain  
Deputy Commander



## UFL and more and more . . . .

I start this month's article at Taegu during the one-day break between Ulchi Focus Lens (UFL) Part I and Part II. This exercise has been a real eye-opener and a sobering reminder of our status in the Republic! More on that later.

But first . . . as a portion of the FED family is exercising, another portion is conducting flood damage assessments, and a third portion continues to execute our design and construction program with fiscal year-end approaching. I am very sincere when I say that only a truly great organization can execute three major simultaneous tasks to standard. We have done it and are continuing to do it. Ladies and gentlemen, I salute you!

Back to UFL . . . FED's (Emergency) Operations Center (FEDOC) deployed to Taegu on Sunday, August 16. UFL started the next day. Our total force staff of civilians, reserve, and active duty military started working: tracking the battle, passing and receiving data from our liaison officers, reporting to higher headquarters, and briefing, briefing, briefing. Command Post skills require continuous training to maintain proficiency but after a slow start the FEDOC was rolling. As with all exercises, real world

warfighting shortfalls and deficiencies were exposed, and FED's leadership has some tasks to execute over the next months to keep the District ready for contingency operations.

Once again this CFK/USFK exercise has revealed our true situation in Korea. You have all heard that there is no peace on the peninsula: we are at armistice. This point drives home the urgency that we all should feel. That is . . . to be ready for war. When (or if) war does occur on the peninsula, all of us must be ready. Today's Army fights as a total force: civilians, reserves, and active duty military . . . and yes, contractors. Basic combat survival skills for civilians and military must be learned or relearned at a minimum . . . the difference may be life or death. *And believe me, the North Koreans will not ask whom to charge your time to or which budget to tap.*

Clearly, we must be able to carry out our District mission of Direct Support to USFK. This mission will be difficult. Clausewitz, a German military theorist, said that everything in war becomes an order of magnitude more difficult. Even the simplest tasks become virtually impossible. It doesn't take a rocket scientist to imagine the difficulty of executing District operations while North Korean (nK) Special Operations Forces are active in the rear areas. I say this to get across the point that we must conduct not only individual but collective training

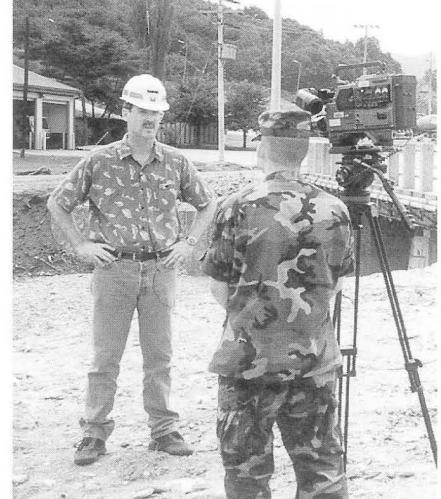
too. In particular, the FEDOC must train in armistice to enable the District to accomplish its mission in wartime.

The FEDOC is a Command, Control, Communications, and Intelligence (C3I) structure that provides situational awareness to the District. This situational awareness is the status of nK and CFC forces. Each of these forces can have a tremendous impact on our operations. Simply the nK forces we want to avoid; and we want to stay out of the way when CFC forces move. Through situational awareness, the District can continue to function in war. Maybe not at 100% efficiency, but at an acceptable level that still provides service to our customers.

Ulchi Focul Lens '98 was another great opportunity to train our FEDOC for war. We relearned some old lessons and captured some new ones. Next exercise we will get better. And next exercise, I hope to see more of you participating. Remember it is a total force effort. The District needs all of us to support USFK in a contingency.

I leave you with a quote from a former CINC UNC/CFC, **"Think War!"** In the Republic, it's necessary.





(above left) The Foundation and Materials Branch well maintenance team flushes water from well 24 at Camp Hovey and cleans the pipes removed from the well. (above right) Doug Bliss, Chief, Foundations and Materials Branch, FED, is interviewed by AFKN television about the well maintenance and repairs.

## FED teams perform emergency maintenance on 80 wells damaged by the August flooding on U.S. installations in Korea

(continued from page 1)

Work commenced in the Camp Casey area and then moved on to Western Corridor facilities. The final portion of the work was the four wells at Camp Hovey, which could not be repaired earlier due to an extensive power outage and one remains at Camp Casey which is still inaccessible. The Camp Hovey wells average 500 feet in depth, with 8-inch steel casing extending at least 100 feet below ground to seal the wells into bedrock. These wells tap potable water contained in voids and fractures within the underlying bedrock.

The 28 producing wells in the Camp Casey area provide approximately 2.1 million gallons per day of clean drinking water to the U.S. military population. Municipal water from the City of Tongduchon normally contributes from 50 to 30% of the total water need of these camps. However, no municipal water is available during emergency conditions such as the August flooding. A reliable source of clean groundwater is therefore a vital commodity for daily installation activities.

The Far East District has mobilized four well maintenance crews, consisting of eleven employees of the Foundation and Materials Branch and three Korean Service Corps personnel in supporting roles. A typical crew includes a plumber, electrician, equipment technician, and drill rig operator.

Repair and maintenance of a flood-damaged water well involves these tasks: clearing site debris and mud; removing well pipe and servicing the submersible pump; flushing and chlorinating the well; and repairing electric control panels, valves, flow meter and other accessories. After the well is operational, the groundwater yield is measured and the recommended pumping duration is determined.

"The Department of Public Works (DPW) at the installation then samples and verifies that the groundwater meets all drinking water standards before bringing the well back into service," concluded Bliss.



## Worth Repeating

"Most of the important things in the world have been accomplished by people who have kept on trying when there seemed to be no help at all." -- Dale Carnegie

## FED cost estimators crunch numbers on flood damages

by Maureen Ramsey

The flood damage assessment team surveys were in from the August flooding. Now came number crunching time. Far East District cost estimators worked long hours to determine how much the construction bills for facility and infrastructure repair and replacement will be.

Although not final, the Corps estimates about \$110 million for replacement of facilities/buildings and about another \$50 million for repair of military buildings and infrastructure (roads, bridges, utilities, etc.) caused by the flooding in South Korea, according to Scott Bearden, Deputy District Engineer.

Robert Kiehlm, acting Chief of the FED Cost Engineering Branch, led the team of nine cost estimators. They were a crucial element in determining the cost of repairs. Kiehlm visited one of the ravaged areas -- Camp Casey, which had sustained extensive damage -- with flood damage assessment teams. These field survey team reports itemized flood damage and recommended needed repairs by specialty. This detailed reporting enabled Kiehlm to organize his team's plan of attack back at the FED compound in Seoul.

While field teams surveyed the damaged areas, the cost estimating team

simultaneously gathered prices together for various items.

"Since the damage covered the gamut of engineer specialties, we had a team of architects, structural, mechanical, electrical and civil engineers doing cost estimates," Kiehlm said.

---

***Although not final, the Corps estimates about \$110 million for replacement of facilities/buildings and about another \$50 million for repair of military buildings and infrastructure (roads, bridges, utilities, etc.) caused by the flooding, according to Scott Bearden, Deputy District Engineer.***

---

A focus of the cost estimators' work was attention to detail. They ensured that

recommended repair work included all the elements needed for completeness. Besides repairs, some estimates also included the removal and disposal of debris, according to Kiehlm.

Typical repairs recommended by the survey teams included replacing walls and floors in many of the flooded facilities. Since much of the damage was similar, the team developed unit prices. This allowed the group to work more efficiently and it also served as a check ensuring the completeness of the cost estimate.

Cost estimators spent 10-hour workdays plus weekends crunching numbers. Limiting the work hours to no more than 10-hours per day kept errors or omissions to a minimum, according to Kiehlm.

"Most of our work was done at the compound. We prepared 690 individual estimates -- 90 per cent between August 19 and 29. It was a real team effort . . . When the chips are down, people tend to become more than their normal selves," said Kiehlm.

As a result of all the hard work, FED provided a timely response to the U.S. Forces Korea call for repair estimates.



# Asbestos Removal

## A necessity for Camp Henry Family Housing Renovation Project

When the Taegu area Department of Public Works decided to renovate some duplex family housing on Camp Henry, they discovered a safety hazard - asbestos in the ceilings. They then called on the Far East District, Southern Resident Office, for assistance with the asbestos abatement project.

The 5-building project has been done in two phases under a delivery order of nearly \$574,000. The first phase (3 buildings - 148, 149 and 104A&B) was begun and completed in February. Phase II 2 buildings - (109A&B and 127A&B) began in August and should be completed by September 11th.

"While performing these visits, we not only look for compliance with asbestos related regulations, but also other safety and occupational health standards such as electrical safety, scaffolding, and heat stress," said David McCracken, industrial hygienist, FED, during a recent site inspection.

The procedures followed by the contractor are in compliance with OSHA and EPA standards and included: barricading the area; accessing the ceiling; bagging loose insulation; cutting the insulation from the ducts and bagging it; vacuuming particles from the ceiling; and taking air samples to assure the air meets EPA final clearance standards.

"When the work is complete the DPW then samples the air to assure it passes final air clearance standards for EPA", said Sam Adkins, Resident Engineer, Southern Resident Office, FED.



**David McCracken, Industrial Hygienist, talks to Mr. Pak, Chae-Chol, supervisor, Astec Corporation, and Mr. Lee, Ki-Tae, Representative Director, Astec Corporation, while performing an asbestos abatement health and safety inspection at the Camp Henry family housing asbestos abatement project site.**



**Mr. Hilton Kalusche, industrial hygienist, Pacific Ocean Division, inspects the contractor's air sampling equipment with Mr. Pak, Yong-Mok, quality assurance representative, Southern Resident Office, FED, during a recent staff assistance visit to the Far East District.**

## New Team Member



Charlotte Stockwell arrived in FED on August 3 and is serving as the Chief of the Resource Management Office. Ms. Stockwell comes from U.S. Army Dist., Europe, in Wiesbaden, Germany, where she served as the senior program analyst on the Contract Closeout Team for the last 4-1/2 years. She also worked with the Europe District from Feb '76 to Jul '77 and Mar '87 to Aug '89. Ms. Stockwell also worked at the Louisville District from Jan '82 to Mar '87. Her outside interests are reading, walking, and travel. She has two daughters, Sherry and Judy, and two sons, Richard and Christopher, and is the proud grandmother of 6 (2 boys and 4 girls).

## Congratulations

-- to **Steve and Angela Cho** on the birth of their son, Peter Y. Cho on August 5, 1998.

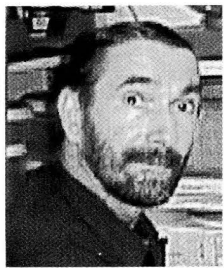
## Condolences

-- to **Pete Perez** on the recent death of his father.

and

-- to **Ms. Pak, Chu-Cha** on the recent death of her father, Mr. Pak, Kye-Un.

## Two FEDsters become Registered Professional Engineers



Mr. William H. Barna joined the FED team in October 1995 as a quality assurance representative

to oversee two much needed infrastructure power upgrade projects for the electrical distribution system of the Camp Casey area. He is eager to help wherever his abilities can be utilized and is always willing to assist with other projects to resolve problems. Prior to arriving at FED, he served with the DPW at Fort Lee, Virginia. His first experience in Korea dates back to 1966 when he was in uniform with the 2nd Infantry Division.

Barna holds a Bachelor of Science degree in electrical engineering from West Virginia University. He worked in the mining industry in his home state attaining the level of Certified

Mine Electrician. He is also a licensed Journeyman Electrician and a member of the International Association of Electrical Inspectors. His most recent accomplishment is becoming a Registered Professional Engineer through the State of Oregon.

Barna is unwilling to rest on his laurels and is working to complete the requirements for Master Electrician's License in the near future.



Congratulations to Mr. Kim, U-Kon on his recent notification by the State of Oregon he passed the

Professional Engineers examination. This is a great accomplishment as he is the first Korean National employee of FED to obtain a stateside

Professional Engineering License.

Kim is a civil engineer assigned as a quality assurance representative (QAR) in the Kunsan Project Office. He is currently providing quality assurance on the FY98 MCP Dormitory, one of the larger contracts being administered by the Kunsan Project Office. Kim was recently honored as FED's Hard Hat of the Year for 1997. He earned that honor for his efforts as QAR on the Collocated (Loring) Club and several smaller OMAF contracts.

Kim worked for various organizations within USFK for more than 9 years before working for FED. He has a Bachelor's degree in civil engineering and a master's in structural engineering. He is also working on his doctorate studies. Kim resides in Kunsan with his wife and two children.

