The Far East District (FED) is gaining valuable experience in master planning and moving toward having this critical expertise customers are asking for with increasing frequency.

In September 1996, the 19th Theater Army Area Command (TAACOM) requested FED support in executing a comprehensive Master Plan for Camp Humphreys and Camp Carroll. They stated up front they wanted off- peninsula support. Discussions with the 19th TAACOM revealed the two installations were the first of a number of master planning actions that would be initiated in Korea over the next five years. Our customer wanted full comprehensive plans fully utilizing the latest Computer Aided Design Drafting (CADD) and Geographic Information System (GIS) technologies, but was not confident the scope they had written accurately defined their needs and was affordable. FED contacted the US Army Center for Public Works and learned about a US Army Corps of Engineers Master Planning Team (USACE MP Team) who had accomplished over $20 million in master planning for US Forces Command (FORSCOM) installations in the last five years.

FED asked the team to provide a proposal for how the District should approach the Korean initiative and then make a presentation to the customer (19th TAACOM). Also included were presentations by the USACE MP Team and each invited architect-engineering firm and a description of the strategy proposed by the Corps' Pacific Ocean Division. From the alternatives presented by FED, the 19th TAACOM selected the USACE MP Team.

On February 10, 1997, a Memorandum of Agreement between the Corps and the customer (19th TAACOM) was signed. Also included were presentations by the USACE MP Team and each invited architect-engineering firm. A description of the strategy proposed by the Corps' Pacific Ocean Division. From the alternatives presented by FED, the 19th TAACOM selected the USACE MP Team.

(continued on page 4)
From the Commander

May you live in interesting times. Chinese proverb


OH BOY! (>: Opportunities without bound!

As we continue our important work in Korea, we must transform ourselves to meet the challenges of our customers. With expanding requirements, due in large part to our aging infrastructure, and shrinking funds, driven by the desire to re-engineer our government, we cannot continue to accept the status quo, the way we have always done things. Change is an imperative we must embrace.

Every member of our team should have a strategy for change. I encourage you to think about the way you work and how to do everything better. Everything we require to process our work more efficiently is already in the minds, hands, and experience of YOU, who handle the work. You know where the waste is and what needs to be changed. And, more importantly, you are often the first to recognize new opportunities for us to pursue. You know in your heart that change for the better is more important than conforming to standards.

So, JUST DO IT!

After 30 months, I continue to be amazed by your selflessness and the credit each of you gives to others with whom you work. Reflect upon our progress since the summer of 1995. Our growth is the result of small victories and changes as we have:

- revolutionized effectiveness
- executed growth opportunities
- invested in people.

Each day rededicate yourself to our vision and goals. You are the key to our success.

Best wishes for a prosperous and successful 1998!

COL James L. Hickey
Safety

The FED Safety Office urges you to use this time to review winter weather hazards and safety rules in order to be better prepared for the winter season. So please take the time to look over this information so that you, your family and your property will have a safe winter.

**Extreme Cold Safety Rules**

Extremely cold temperatures are a big danger during the winter. Prolonged exposure to the cold can cause frostbite, hypothermia, or even death. Infants and the elderly are most susceptible to the cold weather.

**Frostbite:** This occurs when the skin becomes cold enough to actually freeze. Watch for a loss of feeling and a white or pale appearance in extremities like fingers, toes, ear lobes, or the tip of the nose. Get medical help immediately. If you must wait for help, slowly rewarm the affected area(s).

**Hypothermia:** This is a dangerous lowering of the body's temperature. Warning signs include uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness, and apparent exhaustion. If medical care is not available, begin warming the person very slowly. Warm the body core first. Get the person into dry clothing and wrap them in a blanket covering the head and neck. DO NOT give the person alcohol, drugs, coffee, or any hot drink or food. Warm broth is the best. Do not warm extremities such as arms and legs first as this will drive cold blood towards the heart and could lead to heart failure.

**Wind Chill:** Based on the rate of heat loss from skin exposed to the combined effects of wind and cold, wind chill is a good way to determine the threat of frostbite or hypothermia. The lower the wind chill factor, the higher the danger. Animals are also affected by the wind chill; however, inanimate objects are not. If you must go outside in extreme cold, wear several layers of light-weight, warm clothing. Layers can be removed if necessary to prevent perspiring and subsequent chill. Outer clothing should be tightly woven, waterproof, and hooded. Mittens, snug at the wrist, offer better protection than fingered gloves.

**Preparation for Winter Storms**

Advance preparation is the best thing people can do to avoid problems during winter storms. The primary concerns are loss of heat, power, telephone service and a shortage of supplies if storm conditions last more than a day.

**Home/Work:** Have available: flashlight and extra batteries; battery powered portable radio/weather radio; extra food and water; extra medicine/baby supplies; first-aid supplies; heating fuel; emergency heating source; fire extinguisher and smoke detector.

**Winter Car Care**

Your automobile can be your best friend or worst enemy during winter storms. Get your car winterized. The following items should be checked to ensure they work properly: battery; brakes; cooling system; defroster; exhaust system; fuel system; heater; ignition system; lights; oil; tires; and wipers.

A leaky exhaust system can be extremely dangerous. Carbon monoxide, a colorless and odorless gas, can build up inside your car and create a potentially deadly situation. Keep water out of your gas tank by keeping it full as much as possible.

Prepare a winter storm survival kit for your car including these items: blankets; booster/jumper cables; chains; compass; extra clothing; flashlight; high calorie/non-perishable foods; maps; matches/candles; paper towels; sand; and windshield scraper.

If you travel often during winter, carry a winter storm kit in your car at all times. Before you leave, check the latest road conditions and weather forecasts. You may want to reconsider traveling if a winter storm watch or warning is already in effect. Plan ahead and let someone know your schedule. Try not to travel alone and drive in a convoy with other vehicles whenever possible. Wear sunglasses on bright days when the glare from snow may cause a lingering effect that will reduce your ability to see after dark.
Master Planning
(continued from page 1)

19th TAA COM for the execution of this master planning effort was signed. The USACE MP Team incorporated FED team members as they executed the master planning efforts for Camp Humphreys and Camp Carroll. Being a part of this team has provided FED with hands-on experience and knowledge in master planning while also providing an excellent product for our customer.

The plans provide comprehensive updates of the installation master plans for the next five years, incorporating Apache helicopter and Patriot missile system fielding and aviation restructuring initiatives at Camp Humphreys. Plans at Camp Carroll include activation of the 23rd Chemical Battalion. The plans also support mission changes and expansion; address quality of life issues; are environmentally sensitive, energy efficient and cost effective. They provide the optimum functional layout and consider additional requirements for possible base expansion.

The updates include the Spacial Data System which converts existing Basic Information Maps (BIM) to the more accurate electronic format Geographic Information System (GIS) quality maps for spatial analysis, modeling, and Computer Aided Design and Drafting (CADD). We have also included vendor and Corps’ sponsored training for installations, FED, and the 19th TAA COM.

A requirements analysis was done to determine projects necessary to correct facility shortfalls through use of an automated Tabulation of Existing and Required Facilities (TAB) program to automate facility impact assessments.

The team updated the Utility Model (UTIL-MOD) data base and linked it to maps within the GIS to correct deficiencies based on current and future demands of water, waste water, electricity, and infrastructure.

New Real Property master plan documents include a long range component/general land use plan based on charrettes and working sessions, siting analysis providing optimum facility location and capital investment strategy (CIS).

The update includes special products that enhance marketing of the master plan including installation design guides and landscape plans, executive summaries, video tours, and physical models.

The team did a special study for Camp Humphreys to correct airfield deficiencies and propose consolidation of flight line activities and layout of the airfield. They also did a storm drainage study to develop solutions to flooding problems. A fire station study was also done to evaluate the feasibility of a joint-use fire/crash and rescue facility.

FED is using the advantage of the “virtual USACE” capabilities that need to be applied to today’s challenges: a multifaceted team providing a multiple of solutions in a single undertaking. The customer is extremely satisfied with the performance of the USACE MP Team. The project is on schedule and being executed within the original budget, and will be completed in February 1998. The budget for this initiative is $1.9 million for Camp Humphreys and Camp Carroll.

Do You Know?

In what year was the first Kentucky Derby run? 1875

In what year did Congress create the Civil Service Commission, forerunner of the Office of Personnel Management? 1883

When was the Office of Personnel Management established? January 1, 1979

What 20-pound handgun did the musket replace around 1600? Arquebus

How many bytes are there in a kilobyte? 1,024

What is Parkinson’s Law? Work expands to fill the time allotted to it.

When was the nation of Yugoslavia formed? 1918

What political entities combined to form Yugoslavia? Kingdoms of Serbia and Montenegro; parts of Turkish and Austro-Hungarian empires
Military Corner

by LTC Dale Knieriemen

Last month (December 1997) Sergeant First Class David McBride arrived and we shipped him off to work at the Southern Resident Office in Taegu. He will be with us only one year. Welcome Sergeant McBride!!!! Now get to work!

This month, Sergeant First Class Steven Turley will be joining us and is scheduled to be assigned to the Seoul Project Office. Unfortunately, we will be losing Major Christine McMillon-Lane. She and her husband are returning to the United States on January 28th. We will miss her. We wish her and her husband all the best in their future endeavors.

Captain Sheldon Kauffman, from the Tongduchon Resident Office, has volunteered and been accepted to spend 179 days TDY in Bosnia. He has to be at Fort Benning, Georgia, by January 25th and from there will go on to Bosnia. The folks at Camp Casey will sorely miss him. When I get an address (postal and e-mail) for him in Bosnia, I will let everyone know and we can begin sending him mail and care packages to make his life a little better while he is deployed. (All deployed soldiers like cookies and other food.)

"Neither a wise man nor a brave man lies down on the tracks of history to wait for the train of the future to run over him."

Dwight D. Eisenhower

The Difference Between a Boss and a Leader

The boss drives employees; the leader coaches them.
The boss depends on authority; the leader on goodwill.
The boss inspires fear; the leader generates enthusiasm.
The boss says "I"; the leader says "We."
The boss places blame for the breakdown; the leader fixes the breakdown.
The boss knows how it's done; the leader shows how it's done.
The boss uses people; the leader develops people.
The boss takes credit; the leader gives credit.
The boss commands; the leader asks.
The boss says, "Go"; the leader says, "Let's Go!"
SFC David H. McBride joined FED on December 11th as a quality assurance representative for the Taegu Project Office. His home town is Los Banos, California and his hobbies are fishing and woodworking. Prior to arriving at FED, McBride served as a senior instructor for the Basic Non-commissioned Officers Course at Ft. Leonard Wood, Missouri. His awards include the Meritorious Service Medal, Army Commendation Medal, Army Achievement Medal and Joint Service Achievement Medal. McBride is here on an unaccompanied tour. His wife, Abigail, and their two children, Jennifer and John, are residing in Missouri.

COL Hickey presents Army Commendation Medal to SFC James Gilbert.

Frank Doyle receives pin and certificate from COL Hickey for 40 years of Federal service.

Mickey McDonald, Contracting Division and Ricky Rice, Construction Division, receive Korean Service Medals. Ron Castanaga, Construction Division, (not pictured) was also awarded the Korean Service Medal.

COL Hickey presents Army Commendation Medal to CPT Stephen Walker.

COL Hickey presents POD Safety Award to Sam Barnes, Ch, SO, and David McCracken, SO.

Mr. Aaron Tashiro, Engineering Division, receives certificate of promotion to GS-13.
(L-R) Mr. William Baker Jr.; Mr. Chon, Yong-Man; Mr. Chong, Hyong-Kun; Mr. Kim, Yong-Kil; and Ms. Yon, Son-Hyang receive certificates of appreciation at the December Town Hall Meeting.

Mr. Kim, Sung-Uk receives a pin and certificate from COL Hickey for 30 years of service.

Mr. Song, Song-Ho receives a pin and certificate from COL Hickey for 25 years of service.

Ms. Shirley Bearden receives a pin and certificate from COL Hickey for 25 years of Federal service.

Mr. Chong, Hyong-Kun receives pin and certificate from COL Hickey for 10 years of service.

---Worth Repeating---

There is no duty we so much underrate as the duty of being happy.

Robert Louis Stevenson

Congratulations to all the Awardees!
Adults applaud FED team talent!

There was a variety of talent displayed by the FED family members at the annual Christmas party. Skits ranged from the ridiculous - the military contingent’s Newlywed Game - to the Resource Management Office’s moving Christmas Story. The evening also included a delicious meal, the traditional toasts, singing Christmas carols and concluded with dancing to the music of the Evergreen Trio.

Members of the Resource Management Office (RMO) performed a moving rendition of the Christmas Story. Anita Alcantara narrated the story; Michelle and Denny Amigleo portrayed Mary and Joseph; and the angels (l-r) were portrayed by Miss Kang, Miss Yi, Miss Yu, Miss Sin, Miss Han, and Miss Pak. Miss Song and Miss Ma also portrayed angels but are not shown. The Resource Management Office received the judges’ award for being the Most Entertaining group.

Each group, including the ladies from RMO, sang a Christmas song for everyone before going through the buffet line.
Children applaud Christmas treats!

by Stephanie Scott

Ho, ho, ho! Another successful children's Christmas party proves the Christmas spirit brings out the kid in all of us...

This year the FED children's Christmas party brought many FEDsters, young and old, together for an afternoon of fun, games and wholesome family entertainment in honor of the children in our FED family. It was certainly a great way to provide safe holiday fun for the kids.

"We expected about 40 kids, and we had a turnout of 37," said Mickey McDonald, who served as our children's Christmas party committee Chief Elf and Head Coordinator.

"The children were really excited about all the fun activities planned," he added.

For the first half hour, the children lined up to play "Pin the Nose on Frosty", and tested their skills at Mr. Yi's Golf-Putting Challenge. It was nice to see the kids laughing and having such a fun time. Later, the kids enjoyed playing musical squares (an adaptation of musical chairs minus the chairs) and a fast-paced game of Balloon Relay, where everyone was a winner. BoBo the Clown frolicked and kept the children entertained.

The finalists from the golf putting contest were: Yo, Ui-Chu (daughter of Mr. Yo, IMO); Christopher Baker (son of Bill Baker, LO-S); and Mehdi Mizani (son of Mr. Mizani, CD-NS) the grand prize winner.

After taking a short break for snacks and punch, the kids anxiously awaited Santa's arrival. BoBo the Clown entertained the kids with his humorous antics and balloon sculpting. After Santa made his entrance, the kids all lined up to wish him a Merry Christmas, had their picture taken with him and received a special gift from him.

The party ended with a raffle-style drawing for additional prizes, followed by a candy cane scavenger hunt. There was also a grand prize of a huge jar of candy for which the kids competed by guessing the number of pieces of candy in the jar. The candy was won by Mr. Yo's nephew, Yi, Hae-Jin, who was the closest at guessing the correct number of pieces, 117. The children left the party smiling ear to ear as COL James Hickey, District Commander, and his wife, Barbara, gave each of them a special candy treat.

Thanks to Contracting Division and Office of Counsel for all their tenacity with fundraising, planning, coordinating the party this year. Thanks to the CWR Committee for their support. A big thanks to all the volunteers that came to help out. A special thanks to COL and Mrs. Hickey, who were on hand to liven up the games and activities, Scott and Shirley Bearden, Carlos Glover, Anita Alcantara, Mr. Yo,
New Leader Program

Two FED team members find this

This year two FED team members, Isabel McConnell, Programs and Project Management Division, and Larry Drape, Executive Assistant, both graduated from the New Leader Program (NLP), an interagency leadership development program for federal government employees, GS-7 – GS-11. The purpose of the program is to provide the government with a pool of well-trained and capable individuals who are interested in filling leadership positions in the Federal government.

"I had the opportunity to gain exposure to different management techniques and styles..." McConnell and Drape learned about their personality types. This information was helpful when participating on the team to which they were assigned and in their everyday work relationships. The entire program is based on teamwork and emphasizes the different aspects of team dynamics.

"This exercise promoted not only motivation and self-confidence, but also gave me a deeper understanding of my organization’s role within the Federal government."

McConnell and Drape were assigned to different teams in the group of 30 teams in the 1997 program. During the first of three one week TDY trips for the program, the teams were given general parameters for several assignments they were to complete during the six-month program. These assignments included developing a presentation on leadership; reporting on two readings, completing a shadowing assignment, interviewing a member of the Senior Executive Service; and completing a 30-day developmental assignment.

The Today Show was the basis for McConnell’s team presentation skit, for which she was a weatherperson. The skit was based on leadership principles. Conflict management was covered by the weatherperson (McConnell); diversity in the workforce was covered in the cooking portion of the program using a salad metaphor for diversity; and to illustrate avoiding group think in decision-making they used a jury metaphor. Her team of 8 had 4 people with very strong personalities so they had to work hard to get a group consensus. McConnell said

"The key to success in this course is self-motivation and a desire to improve."

McConnell said she became more committed to the Corps of Engineers organization by seeing other aspects of the business process and culture. As part of the program, she performed a self-directed analysis of her professional and personal goals which helped her design a plan that ensures her goals are consistent with those of the organization.

Through the use of the Myers-Briggs Psychological Test, going through this process and through the course made her more determined to complete her goals. For example, she wants to earn a master’s degree and she wants to learn Korean.

Drape’s team also developed a skit for their presentation. It
program beneficial and challenging

was based on good versus bad management styles and techniques. Imaginary companies, Ewing Oil, with micromanager J.R. Ewing as president, representing bad techniques and ABC (All 'Bout Change) Oil Co. representing positive techniques, were the conduits for the team’s message. FED’s own Larry Drape portrayed J.R. Ewing’s secretary, complete with costume.

"If you’re going to stretch, you also have to be flexible enough to know when you’re trying to stretch too far."

"It was very difficult to hold back and get the other team members involved in the process."

and stretch, McConnell and Drape needed to make a concerted effort to listen more rather than take control, which they both said wasn’t easy.

Drape said his team had some very heated discussions.

For their 5-day shadowing assignments, McConnell shadowed Scott Bearden, District Deputy for Programs and Project Management Division and Drape shadowed Jack Church, Chief, Construction Division. During his shadowing assignment, Drape said he learned more about the construction process and gained a true picture of project engineer and quality assurance representative responsibilities. He said he also learned more about design deficiencies and contractor errors.

Regarding their 30-day developmental assignments, McConnell served as an auditor with the Internal Review and Audit Office, 8th Army, Yongsan and Drape served as Deputy Chief, Program and Project Management Division. During her assignment, McConnell helped plan an audit of the IMPAC Credit Card Program in Korea and performed a cash audit of the 175th Finance Office. During his assignment, Drape got to see the big picture of the FED mission and the interface between PPMD and the other technical and advisory staffs. Drape feels it has given him a better understanding of how coordination takes place during the life of a project.

McConnell and Drape stressed the problem of long distance communication with their team members, professors and program coordinators during the six month program. Being in Korea, they had to overcome the time differences with stateside classmates and instructors in order to get feedback on their projects.

"It was a great educational experience. I learned a lot. The comaraderie and friendships will be life-lasting."

Both McConnell and Drape say a drawback of the program is the lack of time available to divide between your regular job, the program requirements and your family.
Another FED success story!
The Apsan Overpass at Camp Walker in Taegu

A memorandum of Agreement, dated March 7, 1994, between the Republic of Korea and the US Forces Korea (USFK), allowed Taegu City officials to proceed with a road improvement and overpass project at Camp Walker. The agreement called for Taegu City to provide replacement facilities and exclusive use of approximately two acres of land adjacent to the east side of Camp Walker to USFK. In exchange, the agreement calls for Taegu City to get exclusive use of approximately 7 acres of land on the south side for construction, maintainence and repair of an overpass road necessary to connect segments of the new Shin Chon Road at Taegu City.

FED provided the names of two SOFA joint-venture architect/engineer firms to Taegu City from which they selected one. The city funded all costs for the complete design and construction of all of the replacement facilities including 4 duplex housing units, a water tank, an enlisted barracks, new road, a new AFN (Armed Forces Network) studio and signal tower, and replacement and relocation of utilities.

"I believe the constant communication and coordination are the most important factor in the project's success," said Mike Heffernan, Southern Resident Office, FED.

"We had weekly meetings with the Taegu City construction officials, the contractors and the Camp Walker Director of Public Works (DPW); mitigating construction problems as they came up," Heffernan added.

COL C. R. Hobby, the 20th Support Group Commander,

The Apsan overpass project is another example of the District's partnering successes and customer satisfaction. Our partners on this project were the City of Taegu and the 20th Support Group at Camp Walker. The entire overpass project was funded by Taegu City, constructed by Samsung Heavy Industries, LTD, and cost in excess of $12.4 million.
The Apsan Overpass benefitted both our partners. The 20th Support Group got new replacement housing, new road, a new AFN studio and signal tower, a paved jogging path, emergency power for the AFN (Armed Forces Network) studio, additional funding for the 1st Signal Brigade to relocate transmitter equipment, additional paved parking, and family housing fuel tank enclosures. The City of Taegu got an early start on bridge/road work and an early start on demolition work for family housing and was able to open the overpass early. The ribbon cutting ceremony was August 27, 1997.

Personally chaired the Joint Administrative Committee which usually met monthly. His interface with Mr. Mun, Huy Kwap, Mayor of Taegu, and other city officials was extremely helpful in getting through some difficult construction problems Heffernan said. There was a lot of give and take and it came out a win-win situation most of the time he added. The well-written MOA was another key factor, according to Heffernan.

The project benefitted both partners, the 20th Support Group at Camp Walker and the City of Taegu. The 20th Support Group, in addition to the original replacement facilities, as part of later negotiations received a paved jogging path, emergency power for the AFN studio, additional funding for the 1st Signal Brigade to relocate transmitter equipment, additional paved parking space, and family housing fuel tank enclosures for family housing.

Because of USFK cooperation, Taegu City was able to get an early start on bridge/road work and on the demolition work for family housing. The ribbon cutting ceremony for the overpass was held on August 27, 1997. The only work remaining on the replacement facilities is some final landscaping.

Taegu City provided funds for all expenses directly associated with design and construction, as well as the relocation of facilities, equipment and furnishings.

"The project improved the city's construction time," said Milton Matsuyama, Project Management Office, Far East District.

"The city was also very receptive to the changes we requested after design was completed," he added.

To work with a host nation government and complete such a project, exchanging use of one site for use of another and replacement facilities, is quite an accomplishment, Matsuyama said.

In the Far East District's role as construction agent for USFK on this project, the District provided oversite and was not involved in the contract negotiations, but through implementation of a well-written Memorandum of Agreement, USFK, 20th Support Group and Taegu City now have quality products and are satisfied customers and partners.

Mr. Kang, K.S., the Far East District's Quality Assurance Representative for the project, received a special plaque of appreciation from the City of Taegu.
The process and the tools

**Standardizing Risk Management**

(excerpt from article originally written by Dennis Keplinger, with the Training Division of the U.S. Army Safety Center, and later updated by MAJ John R. Hefner, with the Force Development Division of the U.S. Army Safety Center)

**The Process**

The risk-management process involves identifying and controlling hazards to protect the force. Its five steps represent a logical thought process from which users develop tactics, techniques, and procedures for applying risk management in their areas of responsibility. Following are the five steps:

**Identify hazards to the force.**

Consider all aspects of current and future situations, the environment, and known historical problem areas.

**Assess hazards to determine risks.**

Assess the impact of each hazard in terms of potential loss and cost, based on probability and severity.

**Develop controls and make risk decisions.**

Make decisions that eliminate the hazard or reduce its risk. As control measures are developed, re-evaluate risk until it is reduced to the level at which benefits outweigh cost.

**Implement controls that eliminate the hazards or reduce their risks.**

**Supervise and evaluate.**

Enforce standards and controls. Evaluate the effectiveness of controls and adjust or update as necessary.

**The Tools**

The five steps of the risk-management process do not change, but risk-management tools are personalized for organizations and individuals. They are tailored to the unique requirements of each leadership level, situation, mission, and environment. Individuals use these tools to assist them in applying the five steps of the risk-management process. Examples of tools for individual, organizational, and systems processes include:

- Next Accident Assessment for Leaders and Individuals (found in Leader's Guide to Force Protection, U.S. Army Safety Center)
- Individual Hazard Assessment Matrix (found in FM101-5, Staff Organization and Operations)
- Automated Risk Assessment and Controls Programs (Rotary-Wing and POV), U.S. Army Safety Center

Risk management in the Army is generally accepted but only somewhat understood. As an institution, we have the opportunity to capture the power of risk management by standardizing it and firmly fixing it as a guiding principle for all that we do.

Dennis Keplinger
Cancer Research Laboratories Foundation

Research focuses on halting cancer growth

Despite recent advances, current cancer therapies -- surgery, radiation, and chemotherapy -- fail to cure many cancers such as breast cancer. Reasons for failure are many. Some tumors cannot be removed surgically because of their location. Also, many cancerous tumors have already spread by the time of diagnosis. Even if radiation and chemotherapy were more effective against tumors, there are severe side effects when used at levels that are necessary to kill tumor cells. In some cases current treatments can be as bad or even worse than the underlying cancer.

Dr. Harold F. Dvorak's Cancer Research Laboratories Foundation (CRLF) project, funded since 1980 at Harvard's Beth Israel Deaconess Medical Center in Boston, is aimed at identifying alternative approaches to cancer therapy through basic research. The idea has been to understand fundamental tumor behavior, and to find steps by which cancer growth and spread could be halted.

It is well known that cancers kill patients by growing, invading adjacent normal tissues, and hence from invading and spreading (metastasizing) to distant parts of the body. There are critical steps which, if blocked, would prevent tumors from growing and hence from invading and spreading.

Breast cancers and indeed all tumors, like normal tissues of the body, require a blood supply to grow. Dr. Dvorak's research has been aimed at understanding the process by which tumors acquire new blood vessels. If scientists could stop this process they could prevent tumor growth and metastasis.

Dr. Harold F. Dvorak, project director for Cancer Research Laboratories Foundation, and his colleagues have discovered, purified, and identified what is now widely believed to be the key molecule causing tumors to grow. By stopping the process by which tumors acquire new blood vessels, scientists could prevent tumor growth and metastasis. Cancer Research Laboratories Foundation participates in the Combined Federal Campaign (CFC) as an unaffiliated agency.

Dr. Dvorak and his colleagues have discovered, purified, and identified what is now widely believed to be the key molecule in this process, the so-called vascular permeability factor (VPF/VEGF). This is also the way the body heals its wounds. Dr. Dvorak has discovered that cancerous tumors are able to turn on this molecule and grow.

(continued on page 16)
Research focuses on halting cancer growth  
(continued from page 15)

However, tumors differ from healing wounds in one important respect. As soon as a wound is healed this molecule production is turned off. Dr. Dvorak's research has revealed that most important human cancers overproduce this molecule. Thus, preventing overproduction would arrest tumor growth before it could invade or metastasize.

For more information contact the Cancer Research Laboratories Foundation, 7315 Wisconsin Avenue, Suite 500W, Bethesda, MD 20814, or call 1-800-321-CURE.

January Events

January 1
New Year's Day.

January 9
Joint Chiefs of Staff established. 1942.

January 14
Ratification Day.

January 15
Martin Luther King Jr's birthday.

January 16

January 28
Challenger space shuttle disaster. (1986).

Lunar New Year
(Year of the Tiger -1998)

1998 General Schedule (GS) Base Rate Salary Table*

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* Reflects 2.3% increase. Does not include locality adjustment, nor COLA