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We're working together today to develop innovative solutions to meet the challenges facing tomorrow's world. For more information on how to experience the Spirit of the Corps, contact:

U.S. Army Corps of Engineers
Director of Human Resources
Washington, D.C. 20314-1000



**U.S. Army Corps
of Engineers**

U.S. ARMY CORPS OF ENGINEERS

Practically since the beginning of the Nation, the U.S. Army Corps of Engineers has played a vital role not only in military engineering, but in meeting America's civilian infrastructure needs.

The Corps of Engineers manages a program of Army and Air Force construction, civil projects and support for other agencies of nearly \$10 billion a year.

In its military construction role, the Corps of Engineers builds hospitals, schools, day care centers, and thousands of family housing units; as well as work and training facilities. In its civil mission, the Corps is the major developer of water resources in the U.S. In support of other Federal agencies, the Corps cleans hazardous waste sites for the Environmental Protection Agency; builds facilities for the National Aeronautics and Space Agency, underground storage space for nuclear materials for the Department of Energy, and transmitter sites for the Voice of America; works with the Department of Transportation on magnetic levitation, and provides engineering and management services to 26 other agencies.

As a Federal agency, the Corps of Engineers shares the government's commitment to equal employment opportunity; and is committed to providing training and challenging assignments for women and minority members. Most professional-level members of the Corps are enrolled in Army career programs that offer planned technical and management training and referrals to positions of increasing responsibility.

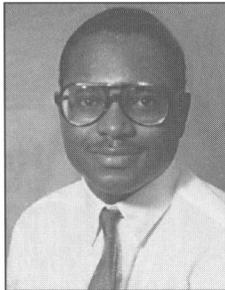
The Corps of Engineers is committed to a program of "Recruiting for Quality and Diversity." Corps recruiters maintain relations with colleges, universities, and minority and women's organizations that provide a diverse group of high quality candidates for internships and higher level positions. Once hired, these candidates soon learn the seriousness with which the Corps takes the first statement in its Vision: "We are committed to our people."

Many Corps offices sponsor "adopt-a-school" and other partnership activities with local school districts. Our members spend time as mentors of high school and younger students, encouraging their interest in math, sciences, and the challenges of an engineering career. We believe these partnerships are important, not only in developing the engineers and other professionals (and potential Corps members) of the future; but in developing an understanding of the communities we serve.

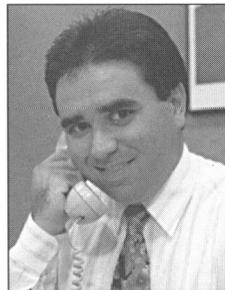
The profiles of these three Corps civil engineers are typical:

Allen Shevlin, Anniston, AL

A civil engineering graduate of the University of Southwestern Louisiana, Mr. Shevlin is project engineer in the field construction office at Ft. McClellan, AL, where his responsibilities include quality assurance, technical management, safety management, and contract management. He is also secretary of a two-year-old organization, Black Men for the Development of Black Males,



Allen Shevlin



Jorge L. Nadal

which concentrates on re-directing the lives of young Black men identified as "at risk" by the Anniston public school system. "My energy is spent trying to serve as a mentor and role model and a helping hand in motivating youths to have a desire to be a productive part in the societal equation."

Allen recalls the best piece of career advice he ever received. It came from his section chief at the Mobile, AL, District Office where he was an engineering intern. "He stated that if my intentions were to remain in the field of construction, I should learn as much about the other engineering disciplines as my brain and time would allow, because this knowledge would be invaluable later in my career with the Corps."

Lise L. Ditzel-Ma, Honolulu, HI

Ms. Ditzel-Ma joined the Corps the day after graduating from the University of Hawaii in 1982 with a degree in civil engineering. "My first project was a flood control project. It was very satisfying, because I could see the direct impact, both positive and negative, on the people in the neighborhood." She is now technical manager of military family housing in Hawaii. "It's a wonderful feeling to build houses the military can be proud of."



Lise L. Ditzel-Ma

Being a technical manager, she explains, involves motivating people on every level. "My division chief says it best when he reminds us to be like a bamboo tree. If we are inflexible, we will break; so we must learn to be flexible, like the bamboo tree, to be effective and respected by our peers."

Lise also serves as chairperson of the Pacific Ocean Division's Career Outreach Committee. "We have encouraged over 10,000 students, elementary through college, to continue their education and have shown them what an exciting and dynamic field engineering can be. It especially pleases me when a young woman is interested in the sciences. I can assure her that she can pursue her dreams and not let anyone's "old school" thoughts stand in her way of becoming anything she desires.

Jorge L. Nadal, Norfolk, VA

Upon graduating from the University of Puerto Rico, Mayaguez, in December 1982, Mr. Nadal reported to his first job with the Corps—at Loring Air Force Base in northern Maine. As a project engineer there, he supervised \$17 million in construction projects. In 1985, Jorge moved to the Corps District Office in Norfolk, VA, where he is currently a project manager, responsible for projects through the entire cycle of feasibility study, design, and construction.

"After being with the Corps 10 years," he recalls, "I realize that it is not by chance that my supervisors have been exceptional, it is that the vast majority of employees in the Corps have been hand-picked to be team players. The working environment and management support has always been there. Two of the factors that keep the Corps ahead of the pack are its respect of employees and training. The Corps is a firm believer in supporting employees who want to be trained." In May 1993, Jorge received his master's degree in engineering management from Old Dominion University in Norfolk.

U.S. ARMY CORPS OF ENGINEERS

Name: Monica Simon Dodd
Current Employer: U.S. Army Corps of Engineers
Job Title: Study Manager
Academic Degrees: Bachelor of Science Degree,
Civil Engineering, University of Pittsburgh



Monica Simon Dodd

After my impassioned speech about saving the environment during my sophomore public speaking class, I wondered why I was majoring in Civil Engineering, when what I really loved was speaking to people about important issues, like the environment. I wanted to be successful, happy, and make a real difference in life! I didn't want to be the stereotypical engineer, sitting behind a desk designing.

Never in my widest dreams did I think that some day I would not only have papers, articles, and reports published, but that I would be giving zealous presentations about environmental issues and concerns to technical people with all types of backgrounds. These people include generals, colonels, top management, mayors, city dignitaries, and my peers from various agencies. And these people

would be asking me questions, and asking for my recommendations! As I was sitting in my college classes, never did I imagine that I would be leading a study that is the first environmental restoration study of its kind for our Savannah District, and bringing approximately \$800,000 into this District for this study alone. Once it goes to construction, it will bring in approximately \$6 million, largely due to my tenacity as a study manager. Nor did I ever think that I would look through technical manuals and see my name and my credentials at the top of an article.

Leading the Savannah District in this front burner environmental study was incomprehensible to me several years ago. Yet, I find myself daily setting up and leading meetings, giving interviews to the press, preparing for presentations, briefing our colonel, writing papers, some of which will eventually be published, and leading the Savannah District in this first-of-a-kind environmental study.

In my nine years of working for the Corps of Engineers as a Civil Engineer, I have finally found my

niche in the Planning Division. I now realize that my forte is being out in the public's eye, being the contact person, and telling others about our enlightened, everchanging, environmentally aware COE!

There is, however, one big difference in my life now. Presently, when I travel overnight to give a presentation and educate important groups of people about this environmental restoration study, I carry my briefcase under one arm, and my baby boy Samuel under the other, along with my husband Gene

on-hand for babysitting.

These days, I am even more enthusiastic about my career. Not only am I a respected, intelligent engineer and mother, but along

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the way I have also found time to be involved in the local chapter of the American Society of Civil Engineers by serving at various times as Secretary, Treasurer, Vice-President, and President.

Am I content with my career as a Civil Engineer? Do I feel that I am successful and making a difference in life? Am I happy? I can honestly respond with a resounding YES!

U.S. ARMY CORPS OF ENGINEERS

The U. S. Army Corps of Engineers has the dual role of supporting the Department of Defense in military activities and supporting the nation in a broad range of programs which benefit the civilian community.

To accomplish its diverse mission, the Corps operates research and development laboratories and technology centers to meet today's increasing high-tech needs and to ensure that our nation's civil and military challenges are met in the future.

Research results and technologies developed at the Corps R&D facilities are transferred to agency sponsors and to the general public through an aggressive technology transfer program. This active technology development and transfer program mirrors President Clinton's National Technology Policy. This policy calls for government research to shift toward technologies which benefit today's businesses and economic growth.

One such emerging technology is the Site Characterization and Analysis Penetrometer System (SCAPS), a breakthrough in underground hazardous waste investigations. The U. S. Army Engineer Waterways Experiment Station developed, patented and is now in the process of turning the technology over to the private sector for marketing and use.

Another way the Corps is using its considerable research and development capability to benefit the nation is through a comprehensive Construction Productivity Advancement Research (CPAR) Program. This program is a partnership with the U.S. construction industry which is aimed at making our construction industry more competitive at home and abroad. In CPAR, the cost of construction research in an

area of interest to the Corps is shared by a private industry partner. The research provides the Corps and the construction partner a better, more competitive construction method, material, or technique.

An example of CPAR in action is the lightweight concrete block developed by the U.S. Army Construction Engineering Research Laboratory (CERL). In cooperation with the University of Nebraska, CERL developed an improved design and lighter concrete building block that has the potential to save the U.S. construction industry \$500 million a year.

Often Corps R&D is disseminated directly to private industry and the economic system through contractor

marketing of products they developed for the corps technical base. An example of a tech base contract contribution is the Terrain Information Extraction System (TIES) developed for



The SCAPS truck is completely self-contained with a separate instrumentation area in the back of the truck body and a penetrometer rod handling area in the front. Data appears in real time on the instrumentation in the truck as the SCAPS penetrometer is pushed into the ground. Instrumentation personnel can monitor the rod area visually through the glass and by instrumentation sensors to ensure the safety of personnel. Both compartments have separate air-conditioning units for safety.



the Corps' Topographic Engineering Center (TEC).

TIES extracts up-to-date terrain data from remotely sensed imagery. TIES is the first low-cost, end-to-end digital, image based mapping system in the Department of Defense. Since TIES also has many potential commercial applications, the commercial developers of the computer software, workstations, and other hardware are aggressively marketing the system configuration on the commercial market.

In addition to WES, CERL and TEC research facilities, the Corps operates the Cold Regions Research and Engineering Laboratory, the Water Resources Support Center and the Engineering and Housing Support Center.

This network of laboratories and technology centers is making major contributions to the Corps of Engineers' ability to support the military and infrastructure needs of the nation. The benefits are significantly increased when the products of the Corps' R&D people and facilities are applied to the nation's business and economic needs.