



by Angie Antonopoulos

# window on the world

From The White House to the Pentagon to the deserts of Iraq, an IUPUI alumna is helping top officials communicate more effectively than ever with U.S. troops and American allies.

Sara Jane Haehl, a 1985 graduate of the Purdue School of Engineering and Technology at IUPUI, helps American military services stay connected electronically via the latest communication technology available.

As a civilian United States Marine Corps lead systems engineer under the Department of the Navy, Haehl ensures information technology used by the U.S. Armed Forces and its allies interfaces with each other. It isn't easy, since all systems must meet the needs of all friendly forces.

The Shelbyville, Ind., native is a lead member of the "Family of Interoperable Operational Pictures" (FIOP for short), a big name for a precise technological tool that lets American military leaders and their allies gain a real-time understanding of where friendly forces are located in combat.

The FIOP also provides a Web-enabled management capability to locate targets and exchange information. With the support of the FIOP, she and her colleagues can help U.S. troops and allies stay safe — and save lives.

"Our military war fighters have much better knowledge of where both friendly and enemy forces, along with the neutrals, are located, and the dangers facing them

in their areas of operation," says Haehl. "There is better data, better information and better communication."

Haehl does not have to go to the battlefield to do her job, but she deals regularly with various military services here at home. Her work contributes to the Department of the Navy, also benefiting the Department of Defense.

She says the big difference for troops fighting in Operation Iraqi Freedom is that the intelligence available is far more reliable. Ultimately, Haehl says she can see the direct impact her work and the work of her colleagues have made in how the U.S. Armed Forces fight.

"The greatest difference the FIOP has — and is still making — is providing our armed forces the ability to provide real-time information about the enemy," Haehl says. "By using computers to function much like chat rooms on a personal Internet system, our troops can share information about the enemy, targets to shoot and terrain conditions.

"We can also avoid unknown run-ins with the enemy — over the horizon or around the bend," she adds. "By knowing specifically where we are and where our enemy is, we move to kill the enemy and eliminate the killing of our own."

## Battling a wired war

Major Eric A. Peck, Tactical Command & Control team leader for the United States Marine Corps and a colleague of Haehl's, says the FIOP has significantly changed the way the United States fights its wars. Laminated maps used by U.S. troops to track the movement of friendly forces during the Gulf War have been replaced with high-tech computer systems in military vehicles and tents.

To handle the natural conditions of heat, sand and wind in Iraq, the FIOP released what is referred to as "ruggedized" computer technology to U.S. troops. The software is secure and may be destroyed remotely. Furthermore, military services can use text messaging and graphic mapping software to track the location of military units.

Peck says the technology has helped in executing the war, linking General Tommy Franks, then the commander in chief of the U.S. Central Command, to forces positioned throughout Iraq.

"It helped us with our decision-making," Peck says. "We could move a lot faster than we ever thought we could."



## Humble beginnings

Being in the midst of intelligence and national security operations for the United States is something Haehl — who has three grown daughters and one grandchild — never imagined for herself, growing up in Shelby County.

She says math and science have always come easily to her, and the opportunity to study electrical engineering came through a National Science Foundation/Purdue School of Engineering & Technology program for women who pursue first degrees in mathematics and science.

Along with a bachelor's degree in electrical engineering, Haehl earned a degree in mathematics from Franklin College in 1972, a master's degree in mathematics from IU in 1976 and a master's degree in national security and strategic studies from the Naval War College in 2002.

She began her tenure for the Navy in 1982, and was introduced to the department through working at the Naval Avionics Center (NAC) as a student in Indianapolis.

What Haehl likes most about engineering and technology is staying on the cutting edge with new and innovative systems. Often the only woman in a meeting of 20 or more people, she hopes more women will consider a field in electrical engineering.

"It is still rare for women to be in the field of engineering, and even less in electrical engineering," Haehl says, believing early recruitment is crucial. "We need to start with our young females in elementary school."

Her job may be demanding, but Haehl "enjoys it immensely."

"I hit the road running and continue until I drop in the evening," Haehl says. "I see my job as 24/7, but I love it! It is very exciting and continues to be a wonderful challenge. It's exciting because it is real." ■



Sara Jane Haehl uses technology (above) and personal contact (below) to make a difference.



Sherry Ricchiardi doesn't need much to convince her IUPUI journalism students of her credentials — just her 2003 National Press Club award and her status as a senior writer for the *American Journalism Review* (AJR).

Oh, and her passport — the one that shows regular visits to the war-torn region once known as Yugoslavia, where people are trying to rebuild their lives and where journalists are in need of the kind of training she has been delivering there for the past decade.

Ricchiardi has taken past IU School of Journalism students with her to the region to help educate and train the men and women who will write the new history of countries like Croatia, Serbia and Montenegro, Bosnia-Herzegovina and Macedonia.

Two years ago, Ricchiardi took a group of IU School of Journalism students with her to the Balkans for a summer school.

## by Ric Burrous journalism on the front lines

During two weeks in the field, the neophyte reporters visited refugee centers, attended briefings with U.S. military officials and met with media professionals who covered the conflict.

The threat of terrorism hasn't stopped Ricchiardi. Her most recent work is a seminar series with the International Center for Journalists on human trafficking in southeastern Europe, which has broken up families and forced women and young girls into selling themselves. This form of sexual slavery is widespread in the region where thousands of women are forced into selling themselves.

The workshops are "what I call front-line training," she says. "We show journalists how to use the Internet to gather information and how to do investigations. And we spend a lot of time on media ethics — the use of hidden cameras in the brothels, the use of the real names of victims, whether it's acceptable to buy a woman's time to ask her questions instead of, well, her usual activities."

Ricchiardi's Arthur Rowse Award for Press Criticism from the National Press Club in July and her work covering the war in southeastern Europe for such

newspapers as *The St. Louis Post-Dispatch* and *USA Today* are all the credentials she needs to teach prospective journalists at IUPUI. She teaches them the same basic tenet she offers to her European students: "We preach that a free press is the foundation of democracy."

The difference, she notes, is that danger may await those who cover crime in that region of Europe. "It's a tough problem for journalists who come to our workshops, because they could be killed for digging too deep into trafficking," Ricchiardi says. "We have to walk quite a tightrope in our training so that we don't encourage them to do stories that place them at serious risk."

She admires their dedication to their profession and finds that working with these journalists energizes her performance in the classroom at IUPUI. "The work I do abroad definitely has an impact on what I do here," the veteran instructor says. "Over there, I'm actually doing what I teach, such as uncovering stories of human rights violations and helping the media plan coverage. I think my students appreciate the experience that gives me when I return home." ■