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Taking Learning to the Field: Fort A.P. Hill Demining Equipment Demonstration

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Legislation Department Thor Clerha, in America for the first time, explained his misconceptions. “I first thought the people are very proud. I thought before they were very controlling and wanted power. . . . I felt scared at first; I came alone and thought people would not accept me,” he said. “But in contrast, the people I met provided help with my problems. I’m very happy for all of this.” One example of this support, he recalls, was when his computer electrical adapter didn’t work; staff from MAIC found a replacement adapter and took him to the store where he could buy it.

Habib-ul-Haqq agreed, saying the people he met were “friendly, supportive, helpful, honest, clear—opposite to what people often think of them abroad.” Gonçalves’ words were even stronger. “I have been to over 30 countries. American people may be the best in the world—the way they are, the way they interact. That was made more clear by coming here. . . . I did expect to see some attention from people, but not as much as we did. We were all surprised with the way you have arranged this and been so supportive. You’ve been so kind and so supportive that we won’t forget.”

The participants were also eager to share their cultures and traditions with their fellow students as well as the staff running the course. Many brought gifts representing their home countries to present to their colleagues and the JMU staff. Many discussions were had during and outside of classes on differences in culture and religion, and in that respect, the students were teachers, too.

Jennifer Schrader, a student employee of the MAIC, shared an experience she had that had a profound impact on her. The Muslim participants invited her to attend one of the prayer services at the mosque they went to once a week during the course. “I was surprised as how closely the message resembled what I grow up hearing in a Methodist church. It was amusing to experience another culture, yet find so many similarities,” she explained. “Throughout the entire course I was pleasantly surprised by the participants’ basic morals and desires, and how they reflected mine.” Indeed, what was intended to be a chance for mine action practitioners to study management tools and techniques turned out to be a learning-experience for everyone involved.

For more information on the Senior Managers Course, please visit http://maic.jmu.edu/managers/ or contact Project Manager Amy Burkhardt at burkhaam@jmu.edu.

See “References and Endnotes,” page 107.

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A s part of the Senior Managers Course conducted by the Mine Action Information Center during the summer of 2005, representatives from international mine action organizations had the opportunity to see the latest demining equipment demonstrations at Virginia’s Fort A.P. Hill. Watching from the bleachers in the mid-summer heat, the participants saw demonstrations highlighting over a dozen pieces of demining equipment ranging from detection to neutralization technologies. Their visit was hosted by the U.S. Department of Defense Humanitarian Demining Research, Development and Engineering Center, Night Vision and Electronic Sensors Directorate at Fort Belvoir, VA., as part of the Department of Defense Demining Research and Development Program Requirements workshop. Below are some of the highlights from the day-long presentation.

One of the first to show off its capabilities was the Rotary Mine Comb. Designed to be mounted on a commercial agricultural tractor, the RMC is a mechanical anti-tank mine clearer that can be operated manually or by remote control. Two rotors with four times counterscarre and dig into the ground, gently lifting and moving mines from the path of the vehicle. Because the RMC is armored, it is capable of handling large anti-tank mines. Depending on the type of soil in the mined area, the RMC is reliable to 95.5 percent to excavate to 30 centimeters (12 inches) below the surface in heavy and 40 centimeters (16 inches) in lighter soils. With an estimated cost of $88,000 (U.S.), the RMC will be sent to HALO Trust in 2006 for use in Angola or Afghanistan.

Similar to the Rotary Mine Comb, the Tantra is designed for mechanical mine and vegetation clearance. The Tantra removes vegetation in hard-to-reach areas, making it useful in developing countries where roads are often less accessible. Reaching out from the vehicle is a 4.5-meter-long (15 feet) arm with a flat head that quickly clears vegetation and tripwires. The Tantra can obtain speeds up to 40 kilometers per hour (25 miles per hour) and is built to withstand the explosion of an anti-personnel mine.

After a quick stop under the military tent for cold water and sunscreen, participants progressed to the next site, where the NEMESIS was demonstrated. The NEMESIS, a manually or remote-controlled system, is designed specifically for detection and neutralization of anti-tank and anti-personnel landmines. It has a robotic platform for safe operation and capabilities for other quick-to-attach tools. A detection platform, back-hoe, unexplosive ordnance surface-clearance attachments, small munitions disruptor and box rake make it a multi-function tool.

Also used for detection is the HD-HSTAMIDS. The HD-HSTAMIDS, a portable system designed to be mounted on a small truck, detects landmines and other anti-personnel devices. The RMC, the RMC Combs and the HD-HSTAMIDS are all reliable on minefields from 15 to 25 meters in size.

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false alarms. Those who had experience with other types of handheld mine detectors were impressed with this time-sav- ing feature. Participants were given a chance to try the de- tector and also appreciated its lightweight of 10 pounds. The HSTAMIDS is currently used by the U.S. Army in Afghanistan and Iraq.

Following a morning of field demonstrations, the group moved to a sheltered area for a neutralization and detonation presentation. John Yasuke and Dwyakane L. Paul, members of the U.S. Army Communications-Electronics Command’s Night Vision and Electronic Sensors Directorate at Fort Belvoir, Va., introduced several neutralization items.

NMX foam, or nitromethane explosive foam, neutralizes landmines closer to their maximum detonation rate on the ground, above the ground (such as mines attached to trees) and in hard- to-reach areas. The process of mixing nitromethane and hydrocarbons (propane and isobutene) results in chemical compound capable of producing an explo- sive. Contained in two aerosol cans, both components are highly flammable liquids but do not become explo- sive until combined and sprayed on the main charge of the mine. Because each kit of NMX foam costs less than $20, this neutralizer is cost-effective for most mine programs. These demonstrations gave mine action workers from around the world an opportunity to see the latest developments. Many hoped to be able to influe- nce their own demining organizations to bring this technology home.