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GAME TRAINS FDNY

LIEUTENANT TONY MUSSORFITI of the Fire Department of New York is something of a game master. As a hazardous materials technician and training instructor, he creates scenarios for HAZMAT: HOTZONE, a game that trains New York's finest how to deal with emergency situations, such as terrorist attacks involving weapons of mass destruction or hazardous materials.

The game's development began four years ago at the Entertainment Technology Center at Carnegie Mellon by Shanna M. Tellerman, who is producing the game using Unreal Engine, and faculty advisor Jesse Schell, who's also chair of the IGDA.

"The greatest challenge in designing HAZMAT: HOTZONE was to create a tool that would truly be useful in a classroom setting while still maintaining the immersive environments of a video game," says Tellerman. "In order to engage the first responders in a training session, certain elements had to be highly realistic."

HAZMAT: HOTZONE was designed to supplement, not replace, field exercises, which are expensive to conduct (large-scale field exercises are typically run only once or twice



per year) and lectures. The game allows an instructor to set up an emergency situation, initiate the game, and then pause it or trigger new actions during play so that the activity can change at any moment.

"It was also necessary to constantly design for the fact that we are not hazmat experts, and therefore we needed to create a tool that would allow the experienced instructors a mechanism for transferring their expertise to a new generation," says Tellerman. The players also wear radios to communicate with one another, as

they would on the job.

Though technology, in some learning environments, can hinder students, Tellerman says firefighters had few impediments in adding the game to their curriculum. "The fire departments are currently training a new generation of fire fighters. This new generation has grown up in an immersive world of video games and computers. At the same time, we have kept highly aware that in order to gain full acceptance into the training curriculum, the software would have to appeal to

the experienced generations [of firefighters] who are less comfortable on computers. This is why we designed an instructor-centered game experience in which the experienced instructor controls the training session from start to finish, and therefore does not feel as though the computer is taking charge of the lesson," she says.

Unfortunately, HAZMAT: HOTZONE hasn't been well supported thus far. "We had been hoping that the Department of Homeland Security would see this as an opportunity to get behind the development of innovative training techniques that could be distributed for nationwide use, but we have not had the support we had been hoping for," says Tellerman.

Still, Tellerman and her team are working toward distributing the game for free to first-responders.

"When the students finish a training session in which they have discussed in depth the methods of responding to chemical attacks in the subway and then finish by asking if they can play again, you really know you have hit onto something huge for the future of education."

—Jill Duffy