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## **‘Ghost Recon’ Tests Tactical Shooter Skills**

Newly-released computer game simulates small-unit warfare, circa 2008

by **Sandra I. Erwin**

The notion that a computer game can help teach soldiers how to make tactical decisions on-the-fly may seem farfetched to traditional military planners. But even skeptics must acknowledge that PC games today are more “real” than ever.



During the past several years, the military services have taken advantage of the high-quality graphics and the realism in video games, and have used them to develop training tools. Some games are sophisticated enough—they are played with real-world tactics and codes of conduct—that they are being turned into training aids for the elite U.S. special operations forces.

The company that develops Tom Clancy’s video games recently licensed the so-called “game engine” of Clancy’s popular Rainbow Six Rogue Spear to a Defense Department contractor, who will develop training systems for U.S. special operations and conventional forces. Clancy’s latest game is called Ghost Recon. Unlike Rainbow Six, which emphasized top-secret counter-terrorism, Ghost Recon focuses on covert military strikes and international peacekeeping missions that do not always go as planned.

The best-selling author of military thrillers founded Red Storm Entertainment about three years ago. The company recently was acquired by Ubi Soft Entertainment, based in San Francisco.

Ubi Soft signed an agreement that allows LB&B Associates Inc., a Pentagon contractor, to use the game engine from Rainbow Six Rogue Spear to develop urban-warfare training games for U.S. military personnel.

“They are going to use that [technology] to build simulations to train special operations forces,” said Marcus Beer, a spokesman for Ubi Soft Entertainment. He explained that a game engine could be described as “the codes that make the game tick.” It determines how the graphics look and how the computer thinks.

The engine, however, will not be used for weapons training. Instead, “the government wants to use the high-tech system to help hone decision-making skills at the small-unit level,” he said.

“We’ve looked at all of the first-person shooters on the market, and no game engine comes close to the realism of Tom Clancy’s *Rainbow Six Rogue Spear*,” said Michael S. Bradshaw, division manager at LB&B Associates. “We need to train the elements of the small-unit on how to prepare for a mission, how to work as a team during mission execution, and how to conduct after-action debriefs, and this engine will let us do that and more.”

The engine will be modified to conform to the maps and scenarios requested by the military, said Ubi Soft representatives. They expect that military personnel will begin training within six months. LB&B Associates will have this technology on display later this month at the annual I/ITSEC simulation and training conference, in Orlando, Fla.

In *Ghost Recon*, players take command of ‘The Ghosts,’ an elite military squad. The scenario chosen is classic Clancy: Russia has fallen under the control of ultra nationalistic politicians intent on rebuilding the Iron Curtain. This leads to conflict with NATO as Russia attempts to reclaim the breakaway Republic of Georgia and the Baltic states of Estonia, Latvia and Lithuania. As the war escalates, casualties mount, hostages are taken, and the Ghosts are sent in.

The squad conducts extensive missions on foot, but occasionally gets assistance from troops in tanks, helicopters and close air support. In many cases, they work with international military forces and NATO to fight against rising dictators and rebel groups. The Ghosts must scope out the defenses of the enemy, blow up bridges to stop an advance, raid rebel bases and rescue an American pilot who gets shot down deep in enemy territory.

The Ghosts also are the guinea pig squad for testing the Army’s latest equipment and weaponry while under fire. They carry M-16 assault rifles with the M203 grenade launcher mounted underneath, but the commander also may opt to use the next-generation rifle, the Objective Individual Combat Weapon. To destroy tanks, the Ghosts have M-136 rockets.

The producer of *Ghost Recon*, Darren Chukitus, conducted the research for the game at Fort Bragg, N.C., home of the U.S. Army special operations forces.

The soldier systems designed for *Ghost Recon*, for example, picked up many of the features of Land Warrior, the U.S. Army’s modernization program for

dismounted infantry. “We went with artists and our chief designer to see Land Warrior,” he said. The problem with using the system in its current configuration is that it’s too bulky, because of the large battery packs, said Chukitus.

“Land Warrior has a lot of good ideas, but it’s going to take some time” to make them come to fruition, he said. The most significant technology that Ghost Recon picked up from Land Warrior was the visual command interface, which allows the soldier to look into his eyepiece and see the location of his squad members. “We wanted to simplify that look,” said Chukitus. “Our command interface is our version of what the heads-up display might look like. What information it might provide.”

The game also simulates futuristic “bio-medical” technology. Sensors embedded in the soldier’s uniform transmit data about his physical conditions. If someone gets injured or killed, the soldiers in the squad can see who was killed or injured, and where the injury occurred.

The reality of today’s simulation-based games, however remarkable, should not be overestimated, said Ernest L. Lewis, a former naval aviator who now works for a company that develops fight simulators and other training systems.

Games are “very compelling,” he said, but they tend to be “fantasy-based simulations.” When it comes to training professionals, such as military commanders or firefighters, simulations must be exactly like the real world, he said. “When you put a firefighter in a simulator and the fire doesn’t behave the way real fires behave, the professional begins to discount the value [of the simulation] and begins to distrust everything else.” That phenomenon is known as “negative training.” The lack of credibility and confidence in the simulation, said Lewis, “spreads out into everything.”

Maintaining that confidence is the biggest challenge in reality-based simulation, he said. “If I present one transaction that is terribly wrong, the firefighter

or the soldier sees that simulation

and wonders what else in there is not real.”

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