THE MILITARY JANUARY/FEBRUARY 2010

A new computer game lets army officers practice counterinsurgency off the battlefield.

by Brian Mockenhaupt

SimCity Baghdad

IMAGE CREDIT: QUICKHONEY

LIEUTENANT COLONELS Matthew Moore and Kevin Mindak repaired the airport, the bus terminal, and the water-treatment plant. They silenced three insurgent groups and won the support of many in Al-Hamra'. But the mayor, Anwar Sadiq, still spoke out against the U.S. Army battalion stationed in his town.

Sadiq was causing similar headaches for Lieutenant Colonels Brian Payne and Isaac Peltier.

"We may have to remove him from office," Peltier said.

"Why is he not on board?" Payne wondered. "We fixed something for him. We went to visit him. And still, governance is going down."

"We've done a lot for the Sunni people, too," Peltier said. "He's just corrupt."

As Payne and Peltier debated what to do about the mayor, a female suicide bomber killed 20 police recruits, and the people's anger shifted from the insurgents to the U.S. troops.

The Americans had met men like Sadiq before, albeit under different circumstances. Peltier had been to Iraq three times; Payne spent 26 of the past 40 months there. And they would likely be going back to Iraq or to Afghanistan. As part of their training, Peltier, Payne, Moore, Mindak, and five other lieutenant colonels in the Army's School for Command Preparation, at Fort Leavenworth, Kansas, were wrestling with Sadiq in a new computer game called UrbanSim. Rolled out last May, UrbanSim allows U.S. officers to practice counterinsurgency without suffering real-world consequences.

As the men hunched over their computers trying to decide how to handle Sadiq and a range of other problems, Matthew Bosack, his crisp blue shirt a sharp contrast to the officers' combat fatigues, peered over their shoulders with a slight smile. "The cocktail-party explanation: I say I make SimCity Baghdad," said Bosack, a project manager at the University of Southern California's Institute for Creative Technologies, which developed the game. "You're basically the mayor. But instead of tornados, earthquakes, and Godzilla running around your city, it's insurgents."

In recent years, the military has ramped up training at places like the National Training Center, in California, and the Joint

Readiness Training Center, in Louisiana, where Arabic speakers play the parts of mayors, police chiefs, and townspeople. Although effective, these exercises are hugely expensive and logistically complex; any one officer might have just a few interactions with his "counterparts." But computer games are cheap and can be played anywhere. And because the students all run the same scenarios, they can compare the efficacy of different approaches.

Over dinner several years ago, an Army officer lamented to Randall Hill, the executive director of the Institute for Creative Technologies, that he and his men had been unprepared for what they faced after Baghdad's fall. "We need SimCity," he told Hill. The institute, which receives much of its funding from the Army, modeled UrbanSim on those experiences—the blood and tears of officers who had served in Iraq and Afghanistan. Bosack and his team then built the game's characters as autonomous agents that react not just to specific actions, but to the climate created by a player's overall strategy. Members of a tribe, for instance, want jobs, but they won't work if they don't feel safe. Instead, they might join the insurgents. Patrolling neighborhoods, meeting with tribal elders, and creating more economic opportunities—tactics straight from counterinsurgency manuals—can reduce the likelihood of that outcome in the game.

Critics say such simulations can give a false sense of mastery over impossible-to-predict real-life situations. Indeed, some players have assumed the simulation is a crystal ball. Students have asked Bosack if the game can be loaded with real data for areas to which they'll be deploying so they can use it as a tool for planning operations. Bosack, who studied sociology at UCLA after a Basic Cadet Training injury at the Air Force Academy, is quick to quash such notions. "This isn't a predictive tool," he says. "We're not trying to say that if you go meet with the mayor eight times, then you're going to have the support of the city and there will be less IED attacks." Rather, the intent is to teach commanders new ways of thinking about multiple problems in a fast-changing environment, always reevaluating instead of fixating on one approach. "You have to think through the cause and effect of your decisions," said Colonel Todd Ebel, the director of the School for Command Preparation. "Like chess, you have to look two or three turns down the road."

Specifics can be substituted to match any country: the Institute for Creative Technologies hopes to have a full Afghanistan-based simulation built in the next few months, with new variables for culture, tribal relations, and geography.

Students, partnered in teams of two, spend about three hours playing through 15 turns, each of which represents several days in the fictitious Al-Hamra'. Bar graphs show how the players' actions affect governance, economics, security, essential services, and the capabilities of local police and soldiers. Overall success is measured by residents' support for the coalition and the local government. The game starts with 25 percent supporting coalition forces, 35 percent neutral, and 40 percent against.

The worst student so far ended up with 70 percent of the town against him. "He thought the only way to increase civil security was to go bust down people's doors," Bosack said. Of course, there's a balance here; the insurgents must be dealt with. "You can't just let them run around," Bosack said. "We've had students focus on essential services and ignore civil security, and they stay stagnant. They inch forward, but insurgents knock it all back."

Most of the students playing on the September morning I visited had already walked that line in Iraq and Afghanistan, and they recalled hard-earned lessons as they pacified Al-Hamra'. "Just because you can shoot, doesn't mean you should," said Moore, whose Stryker Battalion helped clear the al-Qaeda stronghold of Baquba during the 2007 Iraq troop surge. "We relentlessly pursued the enemy, mostly at night, just crushing guys," he said. "But during the day we were kissing babies and shaking hands. It's a balance. You can't just do one."

That approach worked well for Moore and Mindak in UrbanSim. They recruited more police officers, arrested a sniper, and

rebuilt the market. They worked around the mayor without alienating him, and finished with 76 percent of residents supporting them, 13 percent against, and 11 percent neutral, results that any commander today would yearn for—and will probably never see.