

THE 21ST CENTURY SQUAD

Human and tech dimensions key to providing overmatch capability

By Rob McIlvaine
Army News Service

The Army is working to provide the infantry squad an overmatch capability through network improvements and immersive training.

Maj. Gen. Robert B. Brown, commanding general of the U.S. Army Maneuver Center of Excellence and Fort Benning, Ga., said Oct. 11 at the 2011 AUSA Annual Meeting and Exposition in Washington, D.C., that the Army is focusing on bringing the nine-man squad into the 21st century.

The overmatch capability will not be achieved only through improvements in technology, but also through training and leader development, Brown said. The goal is to improve lethality, survivability, power energy and mobility.

“We really started looking at the tactical small unit, based on what’s happened over the last 10 years, and we said, where is the fight too fair? Where do we not have overwhelming ability to overmatch our enemies,” Brown said.

The enemy, he said, is looking at where they have the fairest fight and their best opportunity, and it’s at the squad level, Brown said. It’s the lowest level that causes the biggest challenges, he said.

“Gen. Martin Dempsey (then Army chief of staff) saw the force about six or seven months ago and said, let’s start at the very pointiest end of the spear, let’s look at where the need is the greatest, so let’s turn the system on its end and look bottom up,” he said.

The dismounted squad is the foundation of the decisive force, Brown stressed. Its nine-man team is the centerpiece of the tactical fight despite the fact the squad is the only level where there is no appreciable overmatch capability to the current threat.

“But what is the measure of effectiveness for that formation

of the squad? A lot of folks came in thinking it would be a lot of items given to the squad, but what we found was it’s really not items, it’s the human dimension: leader development, training, simulations for the small unit,” Brown said.

HUMAN DIMENSION

The human dimension has become even more important today.

In World War II, he said, Soldiers relied on maps and radios, but they still had a lack of situational awareness. Nearly 70 years later, the Soldier still relies on maps and radios and still has a lack of situational awareness.

“The Soldier needs to be networked, mobile, linked digitally and have knowledge of the environments.

“Almost 70 years after World War II, we still don’t have dismounts in the network. And the enemy strategy, of course, is to bleed us by a thousand cuts. And they know that they can have a fair fight against that squad, hiding in among the populace,” he said.

It’s difficult to keep squads fully manned, Brown said. Injuries — combat and noncombat — illness and other effects accumulate over time. Because of the importance of the squad’s effectiveness to overall mission success and the thin margin for loss, careful consideration must be given to the human dimension.

MISSION COMMAND

“We say that mission command is clearly the way to go, it’s fantastic. Well, how do you get mission command? Through trust,” Brown said.

Trust, he said, is achieved through empowerment.

“But you’re just not going to empower somebody if you don’t know them well. You’re going to give them their left and



Photo by Kristian Ogden

right limit and you've got to see them, over and over again, in an immersive environment where they're facing the same challenges they'll face."

Some of that can be done in live fire, he said, and some of that has to be done in small-unit simulation, where they can be immersed in an environment and have the complexities that exist today in a contemporary operating environment.

"The other aspect is ... the squad can't be dominant everywhere. You have to be realistic. You know you're not going to be dominant in open terrain against armored forces; that doesn't make sense. But dominate at a given time and place, and as we've seen, that's mostly in cities, tough terrain, where the squad is required."

PROACTIVE, REACTIVE

An important point, Brown said, is establishing favorable conditions while retaining the squad's ability to react. The squad should be more proactive, less reactive.

"Right now, when we go to do a precision mission, we're in pretty good shape," Brown said. "But when we're out there on patrol and we're moving not to a precision-type mission, 75 to 80 percent of the time, we're reacting to the enemy. We can do better than that.

"You'll never get to 100 percent and nobody's trying to attain that, but wouldn't it be better if only 30 percent of the time we were reactive, instead of 80 percent of the time?" he said. "You

can't be as fast as the enemy unless you have empowerment, and you can't get there unless you have mission command and that trust with the lower echelons.

"Another absolutely critical point: We have not had in the dismounted force the immersive trainers," he said. "Originally, there was supposed to be, like with the close-combat, tactical trainer, a dismounted portion of it, but it never materialized. We have that now coming where you can immerse in an environment and push the squad over and over again, ramp it up for someone who's doing very well and bring the scenario complexities down for someone who's struggling a little bit. This is so critical."

FUTURE SQUAD PRIORITIES

Power and energy will be crucial, Brown said.

"You know, the average platoon on a 72-hour mission carries about 415 pounds of batteries — 11 different types. As Gen. Dempsey has said, you can follow a platoon by the trail of batteries. We've got to do better than that. Soon, we'll have embedded batteries and power into existing uniforms and equipment," Brown said.

Advantages that the squad is striving for include:

- **Network:** Eventually, the squad will have reachback to support weapons platforms.
- **Mobility:** Light-weight ammunition, portable mine-clearing, portable robotics.
- **Lethality:** Connectivity to all supporting platforms, lethal-

to-nonlethal conversion, sensor-to-shooter linkage and pass targets.

- **Force protection:** Lightweight body armor, bio-monitoring and reporting capability, combat ID.
- **Human dimension:** Embedded training capability and avatar linked to simulation performance.

NEW METHODS OF TRAINING

The human dimension has drawn the most interest wherever the Army has conducted briefings.

“The 21st century Soldier competencies, which are cognitive, physical, social-cultural and moral-ethical, are outlined in the Army Learning Concept 2015. And we’re trying to look at how to determine the human capacity and limits within those competencies,” said Command Sgt. Maj. James Hardy, the command sergeant major of the Maneuver Center of Excellence.

Hardy said the squad has not changed over time, but what is expected of the squad has changed significantly.

“One of the things that has come about is Advanced Situational Awareness Training. Over the next 12 months, we’ll run

mance Resilience Enhancement Program. This is about leveraging the emerging cognitive enhancement to get at the human dimension — look at goal setting, imaging management, coaching, focus,” he said.

DIGITAL COMFORT

“Soldiers come in the Army today with a digital comfort,” Brown said. “They’re digital natives. And we actually take them out of their comfort zone when we take their cell phones away and we put them out there.”

They get a comfort from being connected digitally, he said. If they can text, if they can communicate, they can spread apart and do more of the digital comfort aspect.

“It’s pretty powerful. [With avatars,] we have taken Soldiers out of the network to a certain degree. And you know we have kids who like to play games. We have Soldiers who play games, so they want their avatar to be a superhero,” he said, smiling.

In real life, he said, Soldiers know they aren’t superheroes.

“But we’ll issue an avatar to a Soldier when they graduate their Initial Military Training, and it’s kind of like their digital leader’s book that goes with them. It’s tied to their physical performance and their psychological and leadership styles,” Hardy said.

It’s also tied to the digital training management system and the Army Career Tracker.

“As you conduct a PT test, as you conduct your weapons qualification, as you complete a specific course that further develops you, all that stuff goes in there. And as you build your personal strength, you’re building the strength of your avatar.

“So, if you can shoot expert in real life, your avatar will be an expert. If you scored a 300 on your PT test, so will your avatar, but if you’re overweight and you can’t pass a PT test, that’s what your avatar will be,” Hardy said.

The Army’s goal is to develop capabilities that provide squads with combat overmatch.

The squad operates in a three-tiered environment that applies to all operations.

Tier 1 squads conduct dismounted operations in restrictive terrain with great risk acceptance. Tier 2 squads operate with armored, mechanized or wheeled forces, and Tier 3 squads are characterized by a well-established presence with contractor support.

An important goal of the squad-as-a-system concept is transitioning from each tier to the next — up and down — with minimal disruption or loss of capability.

“To ensure these capabilities are carried into the future, the Army must develop a holistic approach to small-unit development that considers training, equipping and networking in light of the squad’s contribution to the overall mission, treating it as a system rather than a collection of individuals,” Brown said.



Photo by Megan Locke

Sgt. Weston Williams of the 101st Combat Aviation Brigade trains in the UH-60 Black Hawk gunner’s seat Oct. 3 at the Nonrated Crew Member Manned Module. The simulator recently opened at Fort Campbell, Ky., providing aviation Soldiers there the opportunity for the first time to train as gunners and practice sling load and hoist operations, all without leaving the ground.

a pilot at the Maneuver Center, and we’re going to incorporate the ASAT training into the Noncommissioned Officer Education System courses, the Captain Career Course, the Reconnaissance-Surveillance Leaders Course, the Army Reconnaissance Course, the Sniper Course and a couple of others,” Hardy said.

To ensure Soldiers are physically and mentally resilient, they will follow the tenets of the Comprehensive Soldier Fitness program.

“Some have heard of the Army Center for Enhanced Performance, which started up at West Point. We pulled that down to Fort Benning to start the Comprehensive Soldier Fitness Perfor-