## Services Cope With Demand For Joint Training

## by Sandra I. Erwin

ilitary officials recognize that the Army, Navy, Air Force and Marine Corps will need to adjust their training exercises and equipment to make them less service-centric and more joint-service oriented.

But it is not yet clear how the services will go about doing this, given the lack of specific guidance from the Pentagon on how to implement joint training programs.

Feedback from military units that fought in Iraq pointed to the need for the services to train together at the tactical level, in areas that traditionally have not gotten much attention, such as learning how to speak each other's vernacular and how to share targeting information.

"One of the problems we have today is that we get together in a joint exercise, but we play it at the operational level," said Capt. Dave "Roy" Rogers, a Navy aviator who served as a joint air-war planner in Operation Iraqi Freedom.

What is needed is "integration at the tactical level," Rogers said at a conference of the National Training Systems Association. "That does not typically happen, you can make the argument, to the level of detail that it needs to."

A case in point is joint close-air support, he said. "Refining JCAS doctrine and training is a hot-button item right now."

The war in Iraq illustrated the value of joint training in CAS operations, said retired Rear Adm. Fred Lewis, president of NTSA. "The Navy trains with Marine ground units all the time," he said. "That is why we saw great performance in OIF."

When Navy and Marine aircraft had to support Army missions, however, things didn't work out as smoothly, Lewis said. "They don't train together. Very rarely does the Navy or the Air Force train with the Army."

Close air support, he said, has been a "major training deficiency in the joint world for a long time." The Army's National Training Center, for example, rarely hosts joint CAS exercises. The Army relies on Air Force CAS, but they don't work very well together, said Lewis. That is why the Army has attack helicopters.

Gen. Michael Hagee, commandant of the Marine Corps, said that many of the interoperability problems in Iraq between the Marines and the Army were solved once in theater, but should have been addressed much earlier, in training exercises.

Marine gunship helicopters, for instance, fought along the Army V Corps' Apache attack helicopters. But the Marines didn't learn about the V Corps' tactics and procedures for deep attack operations until after the war started, Hagee said at a conference of the U.S. Naval Institute. "We found that we could support them if they got in trouble," he said. "But you shouldn't be working that out as you cross the line of departure. ... We need to do more joint training at the tactical level, so we can identify these seams and fix them before we are ready to cross the line of departure."

Air Force Gen. Charles F. Wald, deputy chief of U.S. European Command, said the Air Force often gets an undeserved bad rap for not being committed to close-air support training.

He admitted, however, that the service had let such CAS capabilities as advanced air-toground modems and communications

CAPT V.F. SHORTS "BOXER"

> Naval aviators assigned to the "Diamondbacks" of Strike Fighter Squadron VFA-102 prepare to launch their F/A-18 Super Hornet from the flight deck of USS John C. Stennis, during training exercises in Southern California. (Navy photo)

ZGARRA



A Stryker mortar carrier exits the tail of an Air Force C-130 Hercules aircraft after landing at the National Training Center, Fort Irwin, Calif. (Army photo)

systems "atrophy" up until 2001, when it was tasked to prepare for a bombing campaign over Afghanistan, where CAS was a primary mission.

"It wasn't a matter of commitment to the mission," Wald told reporters. "We just got lazy on it. Since that time, we had meetings with the Army a lot. I think there is a lot of old rhetoric that still occurs about the Air Force not being committed to CAS."

The Army, for its part, will make its training more relevant and more focused on missions such as a close-air support, said Gen. John Keane, former Army vice chief of staff. At the NTC, he said, "we undervalue air power significantly. We've got to stop that. We have to integrate ourselves with Air Force Red Flag and Navy Blue Flag exercises and get them involved in what we are doing."

Nonetheless, he said, NTC always will retain its focus on armor. "We have to keep the normal clash of armor present on the battlefield, but also make the war more realistic in what's around those armies, as well."

Joint training should reflect the way wars are fought now, said Rear Adm. Kenneth F. Heimgartner, director of Navy fleet readiness. "As soon as we chop overseas, we go into a joint environment. So it's logical to do our training jointly, as much as we can," he said. "You find that we do a lot of it now, but it is somewhat ad hoc. JNTC will bring a formal structure."

## **Joint Forces Command**

The U.S. Joint Forces Command is in charge of developing a plan for joint service training, under a program called JNTC, or Joint National Training Capability.

One JNTC exercise planned for early next year at the Marine Corps' 29 Palms training range and the Army National Training Center will focus on inter-service close air support operations. A couple of battalions on the ground will work with aviation units, including Air Force A-10s, F-15s and B-1 bombers.

"There should be more training opportunities for me to talk to the joint guys, so we are talking the same language, so we are confident we are talking about the same things," said one Navy pilot. "That would be huge."

He said the Navy often trains with Marines and SEAL special-warfare units. But more integration is needed with the Army and Air Force. "In Iraq, we weren't sure if the FAC [forward air controller] knew our procedures. It almost became a waste of time."

Among the items that led to miscommunications among the services were the different denominations each of them employs for geo-coordinates used to target satellite-guided weapons, such as the Joint Direct Attack Munition. "The JDAM-quality coordinate definitions are a little different" for each service, said the Navy pilot.

The services already do "a lot of joint training, but they need more visibility into joint training, on a routine basis," said Paul W. Mayberry, deputy undersecretary of defense for readiness.

The Defense Department will provide \$1 billion for JNTC over five years, he said. The funds will cover the cost of upgrading training range instrumentation and communications systems, so they can interoperate.

"A lot of the joint training in the past was done on a handshake," Mayberry said. JNTC will address the "gaps and seams, but we'll expect the services to continue their investments in range development and sustainment."

JNTC dollars will fund things like doubledigit infrared emitters, to simulate ground targets, for example, said Mayberry. They will pay for high-speed Internet connectivity and digital databases, such as maps or simulated forces.

A former commander of the Army National Training Center, Brig. Gen. Mark P. Hertling, agreed with critics who claim there is not enough inter-service training. "At NTC, we have done some great joint training, but it was ad-hoc. It was based on what the specific services wanted to do. It wasn't based on anything the combatant commanders wanted."

During one exercise with Nellis Air Force Base air-ground operations school trainees, it turned out that the Air Force couldn't provide close air-support aircraft. The Navy stepped in and sent over fighter aircraft from a carrier off the coast of San Diego. "We had a pretty good link with the Air Force, but the first time the Navy air came in, they didn't drop a bomb. Things were that screwed up. Folks didn't know how to talk to each other," said Hertling. "We have to get beyond that."

In OIF, an Australian wing commander had a better capability to drop bombs for the Marines than for the V Corps. The Australians didn't know how to talk to the Army, but they had previously trained with the Marines.

"Exercises need to have a closer link to what the commander needs," Hertling said. "We are evolving at the joint level. The services have some pretty good metrics, but linking that to a joint environment is a relatively new thing."

Marine Maj. Gen. Gordon C. Nash, commander of the Joint Warfighting Center at JFCOM, said that the plan is not to burden the services by creating more exercises, but rather to enhance existing ones, like Red Flag, Blue Flag, the Army brigade rotations at NTC and Marine rotations at 29 Palms.

"We want to synchronize and consolidate exercises," said Nash.

For JNTC to work, however, the services will need to spend millions of dollars upgrading their ranges. That could be a real problem for the Marines, who have "very little instrumentation at 29 Palms," Nash said. The Marines historically have shunned instrumented training, and prefer live training with real bullets.

Col. Walt Augustin, the program manager for training systems, said the Corps "never had the money to put instrumentation" in 29 Palms.

"We are completely and utterly unprepared to make it [29 Palms] work with



Marines prepare their aircraft for flight operations aboard USS Harry S. Truman. (U.S. Navy photo)

JNTC," said Mike Bailey, program director at the Marine Corps Training and Education Command. "We have a lot of catch up to do," he told the NTSA conference. "We are committed to instrumenting our live-fire training environment, so we can play with JNTC."

The Marine Corps' urban-training sites eventually will be instrumented as well, Bailey said.

The Navy, meanwhile, will adapt to JNTC requirements by taking advantage of existing systems, said Heimgartner. "As we mature JNTC, we have to build on what we've already invested." The Navy has spent hundreds of millions of dollars in the battle force tactical trainer system, said Heimgartner. "We have money already dedicated to buying the new generation of trainers for aircraft."

Losing the live-fire range in Vieques, in many ways, was good news for the Navy, he said. "It finally kicked us out of the Cold War approach to training," in a single site, in blue water and not joint. Without Vieques, the Navy increasingly is training along the Atlantic and the Gulf Coast, setting up a network of ranges much along the lines of JNTC, he said.

Heimgartner stressed that he is in favor of shifting more of the live training to simulators, a notion that does not fly with many junior officers, who dislike simulators and view them as poor substitutes for flying hours. "I'm convinced we are ready to make the leap to where simulation actually can replace some live fire," he said. "Having grown up in airplanes, one of the worst things one could talk about was replacing flight hours with simulation hours."

In the future, he said, "one of our challenges will be the right proportion of live and virtual."

The concept of JNTC is not foreign to the Navy, which has for years conducted training via remote links. "When we are out at sea, we don't have fiber-optic cable hooked to the carrier, as we drag it around through the ocean. We've always done distributed training and distributed operations," said Heimgartner.

"The challenge will be to take what we do at sea and link it to this JNTC effort ashore. We are not there yet. Not close to the level that it needs to be."

On the aviation front, the Navy expects to conduct up to 14 percent of all flight training in simulators, said Rear Adm. Mark P. Fitzgerald, director of air warfare.

"There's a certain balance that we have to strike between flying and simulation," he said. "Things that require in-cockpit technical knowledge can best be done in a simulator. You don't have to expend flight time. Those things that require basic flying skills are best done in the airplane."

The Air Force has not yet set a numerical goal for simulation-based training, but generally the service is moving in that direction, said Col. Michael Chapin, director of the Air Force Training Systems Product Group.

"We need a training program that looks broadly at live vs. simulation, and replaces live only with simulations that can be done in high fidelity," Chapin told National Defense. Fighter aircraft trainers, for example, are static, because it would cost billions of dollars to simulate the gravity forces of



Members of a U.S. Navy SEAL team fast-rope onto a submarine during joint training with Navy undersea-warfare crews. (photo by Alexis R. Mulero)

high-performance flying. "They can do that cheaper in the aircraft," he said. "Other features can be done in simulation that couldn't be done 10 years ago."

Chapin's office now is focused on networking existing flight simulators under the Distributed Mission Operations program, or DMO. This effort is replacing what used to be called DMT, or Distributed Mission Training.

"Team training and mission rehearsal is what we are after," said Chapin. "So far, we've done LAN connectivity between a few trainers, without much in the way of mission rehearsal. We have to move beyond that."

Often, he said, "The first time we work together in a strike package is during the first night of the war. That is not healthy for anyone."

The DMO network will include 187 cockpits and 549 aircrews.

For joint close-air support, the DMO program will develop an air-to-ground simulator, said Chapin.

Air Force Capt. Ryan "Buster" Hodges, an F-15 pilot with the 71st Fighter Squadron at Langley Air Force Base, had mixed reviews about simulators. The F-15 trainer, he said, is not as realistic as flying the jet, but serves as a "decent substitute for familiarization."

The fidelity of the imagery, however, is so much better in the simulator than in the jet that it results in "negative training," said Hodges.

F-16 pilot Maj. Dave "Oscar" Meyer, of the 157th Fighter Squadron, in the South Carolina ANG, said that the command-andcontrol fidelity is much better in the simulator than in reality, which also leads to negative training.

"The communications are 100 percent in the simulator," said Meyer. In combat operations over Iraq, however, the AWACS "only hears you 50 percent of the time."

For DMO to be effective, he said, "you need the AOC [air operations center] in the training," so the command-and-control is executed more realistically.

Marine Capt. Steve Myers, a helicopter pilot, said simulators generally are bad news. "The status is pretty poor," he said. "The simulators we have are pretty low-rent. Somewhere between an Atari and a Commodore 64. ... We are 1970s guys, in terms of technology."

But even the high-end simulators cannot truly replicate live flying, said Myers. "What I want to do is go out with live ordnance and get in close. I am not sure that technology exists yet to really simulate how we fight. That is not to sound high and mighty. It's just the truth. Our best simulator for us is our airplane."