

Combat Controllers To Get Better Targeting Gear

BY RON LAURENZO

Air Force researchers are finishing work on a lighter, more compact targeting device for special operations troops who call air strikes on enemy forces.

By simplifying the process of identifying and locating targets, the new system will also help reduce the risk of friendly fire casualties, a service official said.

Developed by the Air Force Research Laboratory, the new system condenses eight separate pieces of equipment that weigh 60 pounds into a single manageable unit that currently weighs around 12 pounds, said Maj. Jeff Salter, head of the tactical laser systems branch in the laboratory's directed energy directorate.

Testing Technology

Salter said the lab-which is working closely with Combat Controllers who will use the system-is working to cut the weight of its Integrated Target Identification System down to 10 pounds before fielding this summer. The system will also go to the Special Operations Command, where it will be used by members of all services.

"Between this technology and the right procedures, we hopefully will reduce the risk of fratricide," Salter said in a telephone interview. "That was one of our goals going in."

The two-year, \$19 million development project is a direct response to Air Force Secretary James Roche's call for better, lighter equipment as a result of lessons learned in Afghanistan, Salter said. The new system can be used day and night, includes lasers for range-finding and "painting" to cue laser-guided weapons, and a geo-location system for pinpointing targets. It's powered by lightweight batteries.

Stories about Air Force Combat Controllers lugging 150-pound packs through the Afghan mountains for weeks at a time-and several fratricide incidents attributed to equipment that was not user friendly-convincing Roche and others that the troops must have better gear. Combat Controllers are Air Force Special Operations Forces, in the same league as Army Green Berets or Navy SEALs. Part airborne commando, part air-traffic controller, they were among the first U.S. soldiers dropped into Afghanistan in late 2001 and were instrumental in routing Taliban forces.

Roche has spoken of eventually developing a binocular-size device that would allow an observer to zoom in on a target, mark it with a laser designator for laser-guided weapons, or calculate its exact location for targeting with a satellite-guided weapons.

In the latter case, the unit would, with the push of a button, zip the target's geo-coordinates into the computer of a warplane above the battlefield. It would be a simple, light system that would minimize the risk of error by humans engaged in the stress of combat.

Afghanistan Friendly Fire

During the war in Afghanistan, spotters on the ground used radios to pass coordinates to planes, where aircrews would punch the numbers into a computer to program satellite-guided bombs. This method was slow and filled with opportunities for mistakes. In Afghanistan friendly troops were killed in several cases by bombs dropped very precisely on their own positions because of data confusion.

It will take more time to fulfill Roche's vision, but the Air Force lab's new integrated system is a significant improvement over what military spotters now have.

It includes a range finder, a laser designator, an image-intensification device for night vision, a 40X day scope, a ballistic wind measurement device, a Global Positioning System unit, computer processors and batteries in a box measuring almost a square foot in area and about four inches thick.

For transferring data, it includes a plug-in that connects it to the standard military radio, the PRC-117.

The system could still be fielded even if the lab can't shave off the two or three pounds needed to get down to the 10-pound goal.

Fielding The System

Salter said Roche's orders to the lab were to work quickly with stuff at hand, then let the controllers play with the result and determine whether they like it better than their current equipment.

"The deciding authority is the Combat Controllers," he said.

The integrated system is one of five initiatives the lab is working on for targeters.

"This is just one piece of that whole package," Salter said. "This is the piece that will allow them to locate and identify a target up to 10 kilometers [away] and decide how they want to engage that target, whether it's just gathering data on it or actually calling in a strike mission on top of it."

The program began in January last year and should be finished ahead of schedule, Salter said. The next step is to get the technology ready for production.

Ron Lorenzo
Defense Week
t. (202) 662-9727 f. (202) 662-9719