

No search, all rescue

Boeing delivers 10,000th CSEL communications radio to U.S. Air Force

By Jerry Drelling

For many U.S. warfighters serving in Iraq and Afghanistan, being lost or isolated in hostile regions is less of a concern—if they're carrying Boeing's Combat Survivor Evader Locator, a sophis-

ticated combat search-and-rescue communications system developed by employees in Anaheim, Calif.

Boeing in October delivered the 10,000th CSEL radio to the U.S. Air Force customer. Col. Leslie A. Blackham, commander of the Air Force's 753rd Electronics Systems Group, accepted the milestone radio at a ceremony in Palmdale, Calif., where the CSEL units are assembled and tested.

"We know what CSEL means to the warfighters who depend on it," said CSEL program manager Michael Bates.

Combat Survivor Evader Locator program teammates Steve Lew (clockwise from left), Mike Bates and Mike Alexander discuss a matter relating to the CSEL radio. Boeing recently delivered the 10,000th CSEL radio to the U.S. Air Force.

CSEL is the first military end-to-end system that provides multisatellite, over-the-horizon communications and the latest-generation military GPS module in a small, lightweight hand-held unit. The system provides line-of-sight recovery forces and over-the-horizon joint search-and-rescue centers with two-way, secure data communications capability. That allows rescue forces to authenticate and communicate with isolated personnel in near real time, anywhere in the world. "CSEL literally takes the search out of a search-and-rescue mission," Bates said.

Demand for CSEL—which is performing very well in the field—remains strong, with the Joint Services having ordered 16,272 units as of September. Demand was fueled even more when U.S. Central Command, which oversees military operations in the Persian Gulf region, authorized CSEL for use in Afghanistan and Operation Iraqi Freedom. Total orders could eventually exceed 40,000 radios.

Boeing developed CSEL in response to the U.S. Air Force's request in 1995 for the industry to develop technology that would decrease the amount of time it took to safely locate and rescue personnel in hostile territory (see Page 42 of the September 2005 Boeing Frontiers). Six members of the team that started on the Boeing CSEL contract in 1996 are still working for the program—including Steve Lew, a software engineer and Team Lead for the Ground Segment. "CSEL is designed to save the lives of pilots, and that's very rewarding. I'm proud that we got it into the field and it's being used on a daily basis," Lew said.

Mike Alexander, a Lead Systems Engineer, was also a member of the original contract team. "CSEL makes a big difference to the rescue forces," he said. "They know exactly where to go to rescue people. And they can also communicate that they're coming at a certain time, so the downed pilot is ready."

With Boeing's CSEL team currently working on its second full-rate-production order, there will be more of the hand-held radios in the field. But, in the eyes of many warfighters, there still aren't enough to meet their needs. "Demand for CSEL is huge," Alexander said. "And they want it out there as fast as they can get it."

jerry.a.drelling@boeing.com