NCOs and other Soldiers from the 82nd Airborne Division, 101st Airborne Division and 10th Mountain Division provide feedback during a developmental test at White Sands Missile Range, N.M., in June to evaluate improvements to Warfighter Information Network-Tactical, or WIN-T, Increment 2. (Photo by Amy Walker)

NCOs Provide Feedback During Tests to Simplify the Army's Mobile Network

Amy Walker

Program Executive Office for Command, Control and Communications-Tactical

NCOs and Soldiers in network-equipped vehicles traversed more than 1,250 accumulated miles a day in harsh desert terrain this summer as they helped evaluate recent improvements to the Army's high capacity, mobile tactical communications network, Warfighter Information Network-Tactical, or WIN-T, Increment 2.

Feedback from deployed Soldiers, the Army's Network Integration Evaluations, or NIEs, and user juries helped the Army make the WIN-T Increment 2 network easier to operate and maintain. Among the many system enhancements are drastically reduced startup and shutdown times; a new, easy-to-use graphical interface; improved and simplified troubleshooting tools and faster, easier calls that extend radio networks.

"The Soldiers don't have a lot of complicated steps they have to go through anymore to get the system online," said Staff Sgt. Brandon Miller, a network operations manager with 4th Brigade Combat Team, 10th Mountain Division, who deployed for nine months with WIN-T Increment 2. "It's pretty much pull the switch and it boots right up."

The rigorous WIN-T Increment 2 developmental test was supported by Soldiers from the 82nd Airborne Division, the 101st Airborne Division and 10th Mountain Division from June 9 to 27 at White Sands Missile Range, N.M. Though some Soldiers were training on and using the system for the first time during the test, nearly a third of the Soldiers were from the 4th BCT, 10th Mountain Division, who had previously deployed to Afghanistan with the system, and were able to provide a unique real-world comparison of the new system enhancements.

"One of the great things about this particular developmental test is that it is being tested by Soldiers from various units assigned throughout U.S. Army Forces Command," said Command Sgt. Maj. Jimmy Sellers, the command sergeant major of White Sands Missile Range. "The Soldiers' experience, perspective and feedback during this test have been extremely instrumental as the Army continues to move forward and improve the WIN-T Increment 2 system before it's tactically employed during the culminating test event, NIE 15.1."NIE 15.1 in October and November will be the first to utilize new configurations of the WIN-T Increment 2 network that include network-equipped Strykers.

White Sands Missile Range, with a sprawling 2.2 million acres that borders Fort Bliss in Texas and New Mexico, is the largest land test range in the Department of Defense. Its varied terrain, restricted airspace and fleet of instrumentation and logistics support make it an ideal location for operationally relevant testing of military equipment and network communications capabilities.

"You have all the terrain you would ever want to work with out here as far as training and testing," Miller said. "If you go out far enough, you get into mountainous areas. So it's the perfect place for a test like this as far as line-of-sight and satellite communication."

WIN-T Increment 2 offers enhanced capabilities that provide on-the-move communications and situational awareness from anywhere on the battlefield.The changes are in line with the Army's overall effort to simplify the network so it is intuitive and more closely resembles technology that Soldiers operate in their daily lives.

"WIN-T Increment 2 is a simple system to use; it's not difficult to learn and operate," said Sgt. 1st Class Andre Dixon, a platoon sergeant with 2nd BCT, 82nd Airborne Division, who used the system for the first time during the test. "It's a big benefit to the Soldiers using it every day. It provides ease of reporting and additional benefits to perform our jobs. It enhances everything we do on a daily basis and during our missions."

During the test, Soldiers were on the move, conducting a wide variety of realistic missions that included village reconnaissance, route clearance, key leader and enemy engagements, and calls for fire. During these missions, they were required to exercise all of the improvements, applications and capabilities in the network-equipped vehicles, including mission command applications, email, chat and fires communication.

As part of the recent improvements to WIN-T Increment 2, the Army reduced more than a dozen buttons and switches to a single startup switch, dropping the total time to get a networked vehicle up and running from more than 12 minutes to less than five.

An NCO from 2nd Brigade Combat Team, 82nd Airborne Division, boards a Soldier Network Extension vehicle during the WIN-T Increment 2 developmental test in June. The vehicle provides network communication and extension capabilities at the company level. (Photo by Amy Walker)

"When we were overseas, we had a lot of problems with Soldiers hard-shutting the vehicle without going through all the steps, and that hurt the equipment a lot. We had to re-image a lot of the hard drives in the vehicles," said Sgt. Cody Lotter, a multichannel transmission systems operator-maintainer in 2nd Battalion, 4th Infantry Regiment, 4th BCT, 10th Mountain Division. "The way it is now, you just hit the switch and it's on, or hit the switch and it's off."

Perhaps the most important improvements to WIN-T Increment 2 are simplified and streamlined troubleshooting capabilities. The in-depth interface that could only be deciphered by Signal Corps Soldiers was redesigned to one more suitable for general-purpose operators. The intent was to enable

operators, in a matter of minutes, to troubleshoot and resolve a majority of the issues themselves. The Army also cut in half the time it takes to launch mobile communications applications.

While vehicle instrumentation and various data collection methods monitored the network's performance in the background, NCOs and other Soldiers provided feedback on system performance and usability from their perspective, Sellers said.

"These NCOs played a critical role here [at White Sands] in enhancing the reliability, usability and simplicity of the system," Sellers said. "Their insights will pay huge dividends in the way we execute testing and network improvements for some years to come." ■

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