

# CS13

## Army's new mobile network hits the ground running in Afghanistan

*By Amy Walker*

A battalion commander on patrol in his vehicle crosses a desolate Afghan valley, miles away from his command post. Chat messages start pouring in: the situation has changed.

The commander quickly makes Voice over Internet Protocol calls to his headquarters. He taps a screen to view real-time updates to the common operational picture. Armed with the right information, he coordinates air and ground assets to safely complete the mission.

Before this summer, this scenario would have been impossible. But with the Army's new on-the-move network backbone, Warfighter Information Network-Tactical Increment 2, now reaching the field, leaders can be more mobile and effective.

"WIN-T Increment 2 gives us access to the same secure capabilities we have in our Command Posts – both voice and data at lower levels – while operating on the move," said MAJ Gary Pickens, communications officer for the 4th Brigade Combat Team, 10th Mountain Division, the first unit to deploy to theater with these advanced network capabilities.



(U.S. Army photo by Amy Walker)

**A Warfighter Information Network-Tactical Increment 2 Point of Presence equipped vehicle was utilized on-the-move during 3rd Brigade Combat Team, 10th Mountain Division training exercises at Fort Drum, N.Y. in April 2013.**



**A simulated explosion at a mock Afghan gas station was part of a training mission thread for the 3rd Brigade Combat Team, 10th Mountain Division (Light Infantry) at the Joint Readiness Training Center, Fort Polk, La. on 7 June 2013 in preparation for the unit's deployment. The Warfighter Information Network-Tactical Increment 2 equipped vehicles enabled Soldiers to relay information throughout the brigade and increase operational tempo.**

“What we have seen in the past as commanders transitioned from their Command Post to mounted operations, an information gap would arise; but with the capabilities of WIN-T Increment 2 and supporting applications, this gap isn't as large or as disruptive to maintaining a commander's rhythm.”

WIN-T Increment 2 is currently being fielded and deployed as the network backbone of Capability Set 13, which provides the Army's first integrated, interoperable communications capability across the entire BCT formation. Currently, 4/10 employs CS13 in Afghanistan, with the 101st Airborne Division Headquarters also using WIN-T Increment 2 elements in that theater. The 3rd BCT/10th Mountain Division will be deploying with CS13

capabilities in the fall. Meanwhile, the 2nd and 3rd BCTs of the 101st Airborne Division are undergoing CS13/WIN-T Increment 2 fielding and training operations.

In theater, supported by their Division Headquarters, the CS 13 BCTs serve as Security Force Assistance Brigades and work with Afghan National Security forces to improve their capability and help the Afghans stabilize their country. At the same time, as part of U.S. retrograde operations, units are removing fixed communications infrastructure, while commanders' and units' areas of responsibilities increase.

“If you take a look at what we're doing in Afghanistan right now, as U.S. forces start to reduce their presence, we're still partnered with the Afghan National Security Forces and continue to focus on their

development, but we're doing it over greater distances,” said COL Sam Whitehurst, commander of 3/10. “We are distributed throughout the area on a much greater scale than we were before.”

Deployed Soldiers are also battling the country's remote and challenging terrain. Despite the obstacles, SFAB teams armed with WIN-T Increment 2 are equipped to maintain voice, video and data communications while on patrol, with connectivity rivaling that found in a stationary Command Post. WIN-T Increment 2 exercises both satellite and line-of-sight capabilities for optimum network connectivity and bandwidth efficiency, and its self-healing capability automatically reroutes blocked links so critical information gets through.

Additionally, its advanced suite of Network Operations tools helps communications officers manage the network more effectively to help keep vital signal links connected.

“During retrograde is where WIN-T Increment 2 will provide a significant gain as we can maintain a robust communications capability even while the infrastructure around us on forward operating bases collapses,” MAJ Pickens said.

From inside their WIN-T Increment 2-equipped vehicles, Soldiers and commanders can now provide and receive real-time situational awareness across the BCT utilizing on-board mission command systems, VoIP calls, chat and other enterprise capabilities. They can conduct and attend meetings from secluded locations, exchange information with other SFAB teams and send

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and receive orders as missions evolve.

Now that these advanced capabilities have hit the ground in theater, the Army is operating in a hybrid network for the first time, with newly deployed WIN-T Increment 2 units working alongside enduring units that were fielded with WIN-T Increment 1. However, the Army designed, tested and fielded WIN-T Increment 2 to interoperate with WIN-T Increment 1, so users can “talk” no matter which increment of the network they possess.

“One of the biggest lessons I have learned over the past year is that a network is a network is a network,” MAJ Pickens said. “Interoperability between the versions is plug-and-play when conducting a direct interface; however we did conduct some ad-hoc network configurations to complete full interoperability.”

Last year the Army began fielding upgrades to WIN-T Increment 1, referred to as the “Colorless Core upgrade” or “WIN-T Increment 1B,” which increases interoperability between the two increments and improves the security and efficiency of the network. As part of the upgrades, WIN-T Increment 1 equipment will receive the same modem utilized by WIN-T Increment 2, providing seamless

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interoperability without any lag time. Currently, WIN-T Increment 1 and Increment 2 share a core set of NetOps tools, but in the future they will share the same baseline NetOps capabilities, further enhancing increment interoperability.

The WIN-T Increment 1B upgrades are currently projected to be fielded to the entire force by end of 2016. To date, 25 percent of the WIN-T Increment 1 units have received the upgrade, with three of the five Regional Hub Nodes complete. All WIN-T Increment 1 divisional Tactical Hub Nodes are upgraded prior to deploying into a WIN-T Increment 2 scenario, which enables both increments to fully communicate using the Network Centric Waveform to simultaneously facilitate WIN-T Increment 1, Increment 1B and Increment 2 units in theater.

Now that the mobility and advanced capabilities of WIN-T Increment 2 have hit the ground, Soldiers and commanders down to the company level can communicate at the pace of

operations, decrease decision making times, while solidifying the foundation on which those decisions are made. Being able to communicate real-time information across the brigade while on the move is a vital component to the operational success of SFAB and future missions.

“The quicker and more responsive we are in sharing information, [the more] it allows me to gain situational understanding,” COL Whitehurst said. “That speed and that ability to quickly share information are critical.”

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## ACRONYM QuickScan

**3/10** - Third Brigade Combat Team, 10th Mountain Division

**4/10** - Fourth Brigade Combat Team, 10th Mountain Division

**BCT** - Brigade Combat Team

**CS** - Capability Set

**NetOps** - Network Operations

**PEO C3T** - Program Executive Office for Command, Control and Communications-Tactical

**SFAB** - Security Force Assistance Brigade

**VoIP** - Voice over Internet Protocol

**WIN-T** - Warfighter Information Network-Tactical