

Tobyhanna streamlines Nett Warrior fielding process



By Jacqueline Boucher

Team Tobyhanna connects Soldiers to cutting-edge technology, which gives leaders the ability to soundlessly maneuver and track a unit's movements on the battlefield using a handheld device.

Several shops here are supporting the U.S. Army's Nett Warrior system that provides warfighters secure and mobile voice, video and data communications capabilities. With this system leaders can send information using services such as e-mail, text messages and icons that signify different threat levels.

Depot personnel are streamlining the fielding process by performing tasks that until recently were handled by multiple vendors. In addition, tens of thousands of cables are being produced to meet customer needs.

While Tobyhanna engineers are involved with the design of cables, it's the employees in the System Integration and Support and Communications Systems directorates who actually have hands-on tasks with the product, according to William Ramey, chief of the Production Management Directorate's Manufacturing Support Division.

The Nett Warrior program is pairing commercial off-the-shelf Smartphones with the AN/PRC-154 Rifleman Radio transmitter/receiver to display maps, troop positions and operational updates previously restricted to vehicles or hard-wired command posts.

"We pull everything together for testing, and then assemble the kits for fielding," said Sean Namlick, Communications Systems Directorate's Communications Security Logistics Management Branch chief. "Soldiers are getting everything they need to train or conduct missions in one partially assembled package."

To date, more than 900 kits containing items



(Photo by Steve Grzedzinski)

Peter Ankner, electronics worker, configures a Smartphone with the radio's secure network. Ankner works in the Communications Systems Directorate's Communication Security Division.

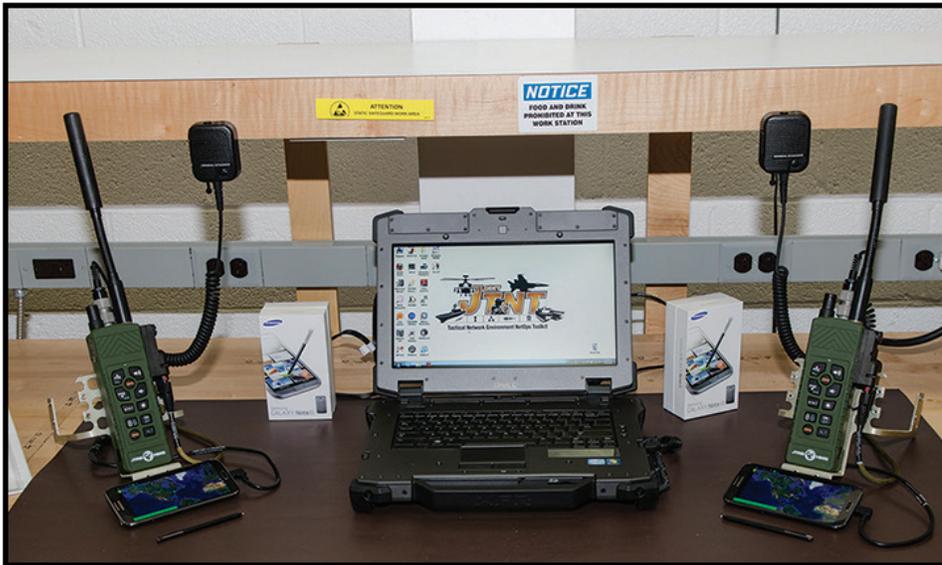
such as radios, ancillary items, smart phones, cables and chest mount pouches have been fielded. One program official remarked that after conducting a survey of several depots, Tobyhanna proved to be the one stop shop they were looking for.

Tobyhanna Army Depot supports Nett Warrior from cable manufacturing, Field Service Representatives to communications systems, according to Chad Speight, Integrated Logistics Support Manager, Nett Warrior Program, PEO Soldier – PM Soldier Warrior, Fort Belvoir, Va.

Employees in the depot's communications shop integrates, boxes and organizes components into company sets and ships them to our fielding locations, he explained. They also helped start the lateral transfer process by loading information into the unit's property books.

"Tobyhanna offered the most capability for our program," Speight said. "In addition to the kitting operation, we have cables manufactured and in the future we will replicate software loads on mission

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(Photo by Steve Grzedzinski)

Nett Warrior pairs the AN/PRC-154 Rifleman Radio with commercial off-the-shelf Smartphones.

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planning computers and end user devices." Speight oversees all aspects of logistics, property accountability, supply, depot repair and supportability for the Nett Warrior and related products.

So far, Nett Warrior has fielded/issued equipment to two Infantry Brigade Combat Teams using Tobyhanna support; both have "gone off without a hitch," according to Speight. "We are extremely satisfied with the service Team Tobyhanna has provided. We're looking forward to the continued partnership as the program moves forward."

According to the Army's website, Nett Warrior provides leaders advanced navigation and information sharing capabilities to aid them in making faster and more accurate decisions on the battlefield. Soldiers are able to see graphic displays of their location, the location of their fellow Soldiers, and the location of known enemies on a digital geo-referenced map image.

"The commercial off-the-shelf

phones are loaded with custom software that takes advantage of existing technology to meet our needs," said LTC Kenneth Quimby, former chief of the Field Logistics Support Directorate's Readiness Training Division. "The phone is used as a computer platform. For instance, if you need a medic, with a few quick taps

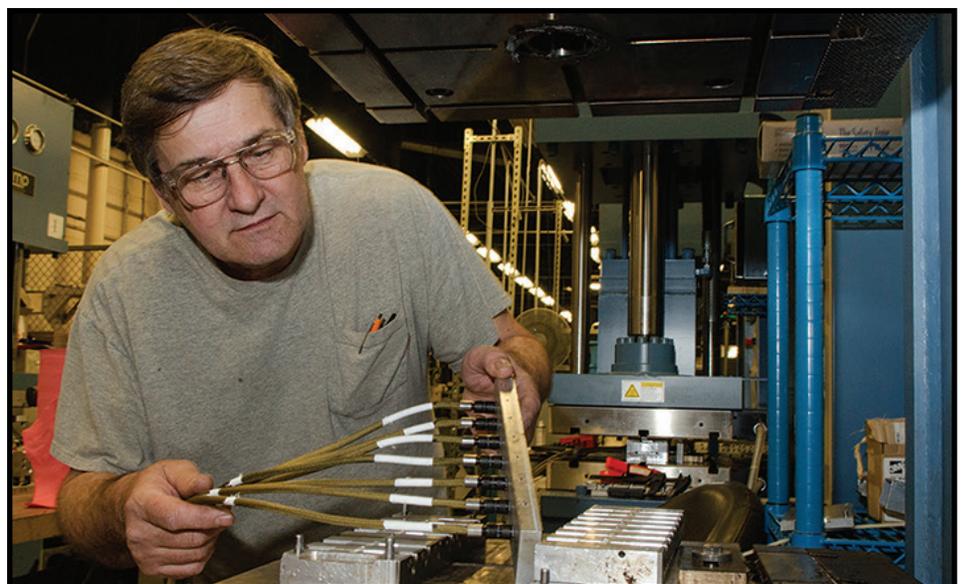
on the screen all the information needed is instantly sent in the form of a text message.

As the program develops, new apps will be added for all kinds of functions. For example, it would be a valuable tool to have access to facial recognition to help identify a person or gather intelligence information in the form of photos of people places, or things," he added.

Communications Systems Directorate personnel are speeding the fielding process by ensuring everything is tested and put together in one kit. "Users no longer have to wait to load all the software in the field. We're doing it here," Namlick said.

Nett Warrior is connected to a combat network through a radio [AN/PRC-154 Rifleman Radio] that acts like a computer modem, sending and receiving information from one system to another.

The radio delivers networking connectivity to the frontline Soldier in a lightweight, ruggedized, body-worn device, according to Frank Babarsky, project officer



(Photo by Steve Grzedzinski)

Robert Wydro, rubber products fabricator and repairer, molds the ends on some of the cables fabricated in the Systems Integration and Support Directorate's Machining Branch.

for the Rifleman Radio and Nett Warrior. The radio connects every warfighter to the combat network, enabling enhanced situational awareness, he added.

“The Army’s Rifleman Radio is relatively new workload – since 2012,” said Babarsky. “We’re upgrading some software and screening assets.”

The radio is the “modem” that makes the Nett Warrior smart technology work, according to Stephen Holiday. He explained that the cables made here are used to connect the radio to the handheld device.

Tobyhanna is scheduled to complete 11,580 cables by the end of the fiscal year.

Molding defects on the Nett Warrior extension cables presented a challenge in the beginning, according to Patrick Tierney, chemical engineer in the Productivity Improvement and Innovation Directorate. Consequently employees have learned a lot about how to prevent defects that can slow production – like bubbles on the surface of the molded cable end that requires remolding to repair.

“Tobyhanna employees have used a variety of molding techniques to reduce the defects,” said Tierney.

“Personnel are continuing to develop improvements to the molding process by introducing alternate materials and techniques that allow cables to be molded at higher production rates, with fewer defects.”

In 2010, the Ground Soldier System was renamed Nett Warrior Program. The Army intends to use Nett Warrior to provide mission command and position location information down to the team leader level.

The Nett Warrior Program – named after Medal of Honor recipient COL Robert Nett – has evolved based on Soldier feedback received via the Army’s Network Integration Evaluations, Soldier ‘user juries’ and operational use in combat. User juries are conducted outside test events and provide Soldiers the opportunity to evaluate what they’d like to see in the equipment.

NIEs are semi-annual exercises used to conduct operational tests and evaluations of equipment in realistic mission environments designed to measure network performance at all levels.

“It’s exciting to be part of this new program,” said Troy Morgan, electronics worker. “This is the latest and greatest thing for the



(Photo by Tracey Condi)

LTC Kenneth Quimby, former chief of the Field Logistics Support Directorate’s Readiness Training Division, demonstrates how the Nett Warrior end user device is worn and used by Soldiers in the field.

Soldiers to have in the field.”

Tobyhanna Army Depot is the Defense Department’s largest center for the repair, overhaul and fabrication of a wide variety of electronics systems and components, from tactical field radios to the ground terminals for the defense satellite communications network.

Tobyhanna’s missions support all branches of the Armed Forces. About 3,500 personnel are employed at Tobyhanna, which is located in the Pocono Mountains of northeastern

Pennsylvania. Tobyhanna Army Depot is part of the U.S. Army Communications-Electronics Command. Headquartered at Aberdeen Proving Ground, Md., the command’s mission is to research, develop, acquire, field and sustain communications, command, control computer, intelligence, electronic warfare and sensors capabilities for the Armed Forces.

Jacqueline Boucher is a public affairs Specialist at Tobyhanna Army Depot where she serves as editor of the depot’s newspaper, The Tobyhanna Reporter. She began her military career in the Air Force in 1982 and retired as a technical sergeant in 2004. She served on active duty in Alaska, California, Germany, New York, Texas, Georgia, Korea and Bahrain where she managed media, newspaper and community relations programs. She joined the Tobyhanna Public Affairs Office in 2005. Ms. Boucher has earned numerous command, Air Force and Army-level awards throughout her career, as well as several journalism and newspaper awards in the Army’s annual journalism competition, the Keith L. Ware awards program.