

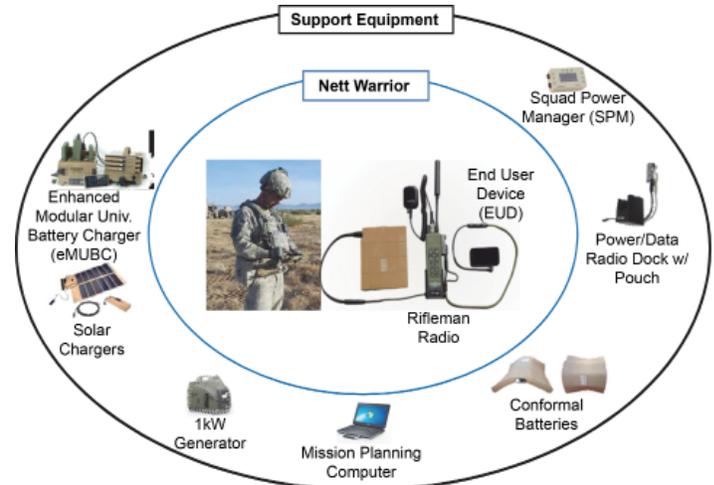
Nett Warrior

Executive Summary

- The Army Test and Evaluation Command conducted the Nett Warrior IOT&E in two phases:
 - A mounted cavalry troop conducted Phase 1 during Network Integration Evaluation 14.2 at Fort Bliss, Texas (May 2014).
 - A dismounted rifle company conducted Phase 2 at Fort Polk, Louisiana (November 2014).
- DOT&E published an IOT&E report in May 2015 to support an Army Full-Rate Production (FRP) Decision Review in June 2015. Nett Warrior is operationally effective in mounted formations at the platoon and troop levels. It improved situational awareness, pre-mission planning, land navigation, and command and control.
- In dismounted infantry units, Nett Warrior is effective at the platoon level, but not effective at the company level due to the Manpack radio's low message completion rate of position location information, which prevented the Company Commander from having full situational awareness of subordinate units during operations.
- Nett Warrior is operationally suitable and reliable.
- The Army Acquisition Executive (AAE) authorized a fourth low-rate initial production to procure up to 9,636 Nett Warrior systems.

System

- Nett Warrior is a dismounted leader situational awareness system for use during combat operations. Nett Warrior consists of the following:
 - End User Device, a commercial off-the-shelf Samsung smartphone
 - Government-furnished Rifleman Radio (AN/PRC-154A) (Rifleman Radio is a separate program of record, with a separate article later in this Annual Report.)
 - Conformal battery
 - Connecting cables
 - Supporting charging equipment
- Periodic Nett Warrior enhancements integrate improved commercial smartphone technologies.
- Nett Warrior graphically displays the location of an individual leader, other leaders, friendly vehicles, battlefield messages,



and enemy activity on a digital geo-referenced map image. Nett Warrior is connected through a secure radio to the Soldier Radio Waveform network to communicate among different echelons using voice, data, and position location information messages.

Mission

- Combatant Commanders employ Nett Warrior-equipped mounted and dismounted leaders as part of a Brigade Combat Team to conduct operations (offensive, defensive, stability, and defense support of civil authorities) against conventional or unconventional enemy forces in all types of terrain and climate conditions.
- Leaders within the Brigade Combat Team use Nett Warrior to provide improved situational awareness, command and control, and enhanced communications.

Major Contractors

AN/PRC-154A Rifleman Radio:

- General Dynamics C4 Systems – Scottsdale, Arizona
- Thales Communications Inc. – Clarksburg, Maryland

Activity

- The Army Test and Evaluation Command conducted the Nett Warrior IOT&E in two phases:
 - Phase 1, conducted by a mounted cavalry troop during Network Integration Evaluation 14.2 at Fort Bliss, Texas, in May 2014.

- Phase 2, conducted by a dismounted rifle company at Fort Polk, Louisiana, in November 2014.
- DOT&E published an IOT&E report in May 2015 to support the FRP Decision Review in June 2015.

FY15 ARMY PROGRAMS

- The AAE deferred the FRP decision pending validation of interoperability of Nett Warrior with the FRP Manpack radio. The Army and DOT&E will validate interoperability during the Manpack radio's operational test in FY17.
- The AAE authorized a fourth low-rate initial production decision to procure up to 9,636 Nett Warrior systems totaling 20,503, which accounts for 33 percent of the Approved Acquisition Objective.
- The Army conducted all testing in accordance with the DOT&E-approved Test and Evaluation Master Plan and test plans.
- Nett Warrior is operationally suitable and reliable.
- Nett Warrior demonstrated a reliability of 226 hours Mean Time Between Essential Function Failure. There is a 90 percent probability of operating for 24 hours without incurring an Essential Function Failure.
- Recharging batteries to support Nett Warrior is an increased logistical burden. The process to operate four to five generators and associated battery chargers to charge all batteries to equip a light infantry company takes three to four Soldiers, 12 to 15 hours a day.

Assessment

- Nett Warrior is operationally effective in mounted formations at the platoon and troop levels. It improved situational awareness, pre-mission planning, land navigation, and command and control.
- In dismounted infantry units, Nett Warrior is effective at the platoon level, but not effective at the company level due to the Manpack radio's low message completion rate for position location information, which prevented the Company Commander from having full situational awareness of subordinate units during operations.

Recommendations

- Status of Previous Recommendations. The Army addressed all previous recommendations.
- FY15 Recommendations. The Army should:
 1. Improve the Soldier Radio Waveform network and associated radios to increase the range at which Soldiers and leaders can use Nett Warrior.
 2. Conduct all future Rifleman Radio and Manpack radio operational testing with the Nett Warrior system.