

Land Warrior

Executive Summary

- The Army deployed the Land Warrior system with the 4th Battalion, 9th Infantry to Operation Iraqi Freedom in FY07 prior to completion of IOT&E and the full-rate production decision.
- DOT&E submitted an Early Fielding Report in April 2007.
- Land Warrior enhanced unit operational effectiveness especially at night.

System

- Land Warrior is an integrated combat fighting system used by dismounted combat Soldiers on the modern networked battlefield. It includes a laser rangefinder, visual displays, integrated load carrying equipment with ballistic protection, protective clothing, a helmet, a speaker, a microphone, a computer, navigation tools, a radio, mission data support products, and a Stryker vehicle installation kit.
- The system is modular to permit tailoring for mission requirements and will interface with the M4 Carbine, M203 40 mm Grenade Launcher, and M249 Squad Automatic Weapon.
- The Army plans to field Land Warrior from Stryker Infantry Company to fire team level.

Mission

- Dismounted infantry units will use Land Warrior to provide increased situational awareness and enhanced



communications to increase the effectiveness of dismounted units in their ability to close with and engage the enemy to defeat or capture him, or to repel his assault by fire, close combat, and counter-attack.

- Infantry units will use Land Warrior to:
 - Enhance small unit leaders' situational awareness through Blue Force Tracking
 - Provide voice communications between companies, platoons, and squads
 - Enhance collaborative mission planning

Activity

- The Army deployed the Land Warrior system with the 4th Battalion, 9th Infantry to Operation Iraqi Freedom in FY07 prior to completion of the IOT&E and the full-rate production decision.
- In April 2007, DOT&E submitted an Early Fielding Report to Congress.
- In December 2006, the Army withdrew future Land Warrior funding.

Assessment

- Land Warrior enhanced unit operational effectiveness. In theater, the Land Warrior system assisted the unit in accomplishing its assigned tactical missions in the following areas:
 - Enhanced unit mission performance especially at night
 - Enhanced speed and accuracy of dismounted night tactical movement
 - Enhanced the situational awareness of squad, platoons, companies, and the battalion

- Although the system does not meet some Army user-specified requirements, the Land Warrior's performance in theater indicates:
 - The Land Warrior ensemble has been effectively maintained in theater
 - Contractors working out of a Forward Operating Base can maintain and support the Land Warrior system in accordance with the Army's support concept
- Although the system enhanced unit mission accomplishment, performance issues from theater indicate that:
 - Land Warrior provided enhanced situational awareness for the platoon leader and above, but squad leaders and below found limited improvements.
 - Land Warrior voice communications continue to be problematic and less effective than desired. Within squads and platoons, the Land Warrior Enhanced Position Location Reporting System radio is not used as the primary means of voice communications because of range limitations and the transmission quality is not consistent.

ARMY PROGRAMS

- Land Warrior-generated enemy situational awareness is not automatically sent to the Army Battle Command System network.
- Land Warrior radios are not interoperable with FM radios (Single-Channel Ground and Airborne Radio System) and have limited interoperability with Force XXI Battle Command Brigade-and-Below (FBCB2). This degrades Land Warrior mission planning capabilities.
- Soldiers do not rely on the Land Warrior system during close-in combat operations (Military Operations in Urban Terrain, actions on the objective), while riding on Stryker vehicles, or once enemy contact is made.
- Soldiers reported that system reliability was poor due to a high number of system failures, lock-ups, and freezes that require system reboots.
- Soldiers consistently reported that the Land Warrior ensemble was too heavy and too bulky which hindered task performance.
- The average single life of battery power varies from 8 to 16 hours. Soldiers reported that the battery operates too hot and is too heavy.
- The Global Positioning System loses signal when entering buildings.
- Increased preparation time for Pre-Combat Checks and Pre-Combat Inspections is required in order to maintain system readiness.
- Unit leaders are concerned that the high level of contractor logistics support may not be available in the future.

Recommendations

- Status of Previous Recommendations. The three recommendations from FY06 remain valid.
- FY07 Recommendations. If funding is restored, the Army should consider the following to improve Land Warrior effectiveness and suitability:
 1. Enable the fully automated exchange of all Land Warrior-generated friendly and enemy situational awareness messages.
 2. Expand interoperability between Land Warrior and FBCB2.
 3. Increase battery performance.
 4. Reconfigure the Daylight Video Sight as a handheld device so that Land Warrior-equipped leaders are able to see and shoot around corners or over walls.
 5. Configure the Helmet Mounted Display so that it provides a combination of near real-time video, pictures of persons of interest, targeting aiming points, graphics, and digital mapping in order to provide leaders and soldiers' movement routes that could be safer.
 6. Integrate Land Warrior requirements into Ground Soldier System requirements currently under development.