U.S. Army Research Institute for the Behavioral & Social Sciences

FACT SHEET

Evaluating and Developing New System Training for the Land Warrior System

- *Assessment of LW training prior to JCF AWE.*
- *Assessments of soldier performance with sights and optics on LW weapon subsystem.*
- *Analysis of potential impact of integrating the LW in Infantry courses.*
- *Trend analysis of soldiers' computer skills and their impact on LW training and soldier expertise.*
- *Computer-based-training experiments on digital skills for the future LW soldier --- the private, the NCO, the officer.*
- *Recommendations for enhancing individual and collective training forLW operational test, new equipment training, and institutional and unit training.*

The Infantry Forces Research Unit at Fort Benning, GA is supporting the Project Manager–Soldier Systems (PM-SS), the TRADOC Systems Manager–Soldier (TSM-S), and the US Army Infantry School (USAIS) in developing and evaluating training for the LW system. The work includes training assessments, recommended enhancements to future LW training, and support to Army agencies in developing future training.

The LW system brings the digital world to the individual soldier. In addition, it will significantly impact how each soldier shoots, navigates, and communicates. New training approaches are required that will give the soldier the fundamental skills and confidence to operate the digital system. Soldiers and leaders must also be trained how to use the advanced system intelligently and creatively as a combat multiplier in the full spectrum environments. ARI's assessments of LW training, and research and development on prototype training techniques will support attainment of these goals.

In the summer of 2000, a LW-equipped platoon was trained to use the LW system in preparation for the Joint Contingency Force Advanced Warfighting Experiment (JCF AWE) held in September at the Joint Readiness Training Center. The platoon received an Operator Course, a Leader Course, and a Tactics Course plus several weeks of additional field exercises. With support from the PM-Soldier Systems, ARI scientists formally observed all training for the JCF AWE, documented soldier performance during training, and examined how training could be improved. Findings from this assessment will be provided to the PM-SS, TSM-S and USAIS, not only to help interpret JCF AWE results, but to also guide future training in preparation for the LW operational test, training, and eventual institutional and unit training.

As a follow-on to the training assessment, ARI scientists will work to develop and evaluate building block techniques needed to ensure effective and efficient acquisition of individual and collective LW skills. A major part of this effort will focus on procedures and tools needed to prepare leaders to become effective LW trainers.

ARI is also currently conducting experiments that compare alternative computer-based approaches for training LW digital skills. The experiments are designed to determine whether all soldiers, regardless of military experience and computer skills, should receive the same type of individual skills training. The research addresses fundamental questions about degree of training guidance required by different soldier populations and the amount of new information that soldiers can readily absorb at any one time. Future plans are to expand these experiments to cover other critical LW digital training issues. The results will provide decision-makers guidance on how to design final LW training packages.

ARI's involvement with LW began in 1998 with an assessment of boresight training and overall performance with the LW weapon subsystem, including use of the close combat optic, thermal weapon sight, and aiming lights. The results have been used in the development of proposed Army-wide standard for qualification with aiming lights. ARI has also examined the potential impact of integrating the LW system into Infantry courses, specifically One Station Unit Training, the Officer Basic Course, and the Basic Noncommissioned Officer Course. In addition, we are midway through a three-year trend analysis on soldier computer background and skills.

Because of our Land Warrior work, ARI has a solid understanding of the computer skills of soldiers, from the private to the NCO to the officer, and how these computer skills and background relate to LW expertise. Also, while the research has focused on the LW system, the results have clear implications about training and leader development issues as related to the Army's other emerging digital systems.

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