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

FACT SHEET

Training and Soldier System Research for the M2/M3 A3 Bradley Fighting Vehicle

The Army Research Institute (ARI) has actively supported the design and fielding of the Bradley Fighting Vehicle (BFV) from the vehicle's inception. ARI continues to conduct training and soldier system research on the M2/M3 A3, the newest variant in the series of Infantry and Cavalry vehicles.

The first Bradley, fielded in late 1982, represented a huge change from the popular M113 armored personnel carrier. The BFV was noteworthy for the fact that it could carry personnel, and also defeat lightly armored vehicles, personnel targets, and tanks. The original Bradley was also noteworthy for the difficulties encountered in the effort to get it accepted. The Bradley has lasted, however, and its success during Operation Desert Storm brought renewed prominence and public praise. Now barely 10 years later, a new Bradley is being introduced. Unlike the previous upgrades, the M2/M3 A3 vehicle is radically different from those that preceded it. As with the previous vehicles, there are apparent problems. And as before, ARI is helping to identify and remedy training and soldier-related problems.

Throughout the lifecycle of the Bradley, ARI, and in particular the Infantry Forces Research unit at Fort Benning, has been a key player in addressing Bradley soldier-oriented research and development issues. ARI was instrumental in early assessments of personnel load and gunnery, and has consistently been a participant in evaluations of Bradley training and training devices.

ARI's institutional memory and continuity within the Bradley Program has again resulted in our being asked by the TRADOC Systems Manager for the Bradley and the Infantry School to assist with A3 soldier-oriented issues. In support, ARI has recently spent time inside the A3, measuring heat, firing the weapons, manipulating new turret components, and examining the squad leader's display. We have also observed and critiqued the full gamut of new M2A3 training to include that given to Infantry School cadre, the new equipment training (NET) team and soldiers at Fort Hood (the first to receive the new vehicle).

ARI has also recently observed and participated in the preliminary assessments of two prototype training devices. These are the Bradley Desktop Trainer (BDT) which teaches new turret components, and the Bradley Advanced Training System (BATS) which is the new precision gunnery and maneuver trainer. ARI was instrumental in development of training materials for the BATS instructor/operator and senior instructor/operator. ARI observed soldier on-vehicle and device usage by NET and unit personnel. Fort Hood observations included some of the training provided for the NET team, and some given by the NET team. These classes included, for example, turret familiarization and manipulation, where the soldiers began to learn to use the A3's new fire control system. ARI interviewed personnel from both NET teams, and

conducted surveys and follow-up interviews with them and with the Fort Benning-based Bradley Crew Evaluator team. Throughout, ARI watched – and talked to – and listened to – the soldiers at Fort Benning and at Fort Hood, as they commented on their training, their concerns, and ways to improve the Bradley A3 vehicle even more.

Some aspects of the A3 fielding process are new, and some are reminiscent of earlier times. ARI research and training observations should help alleviate certain current fielding difficulties, as well as to make future upgrades less troublesome. In part, the results of the ARI research will describe the impact of the digitized A3 on institutional and unit training, and training devices. The results will also provide a historical context and a summary of key training and soldier-related lessons learned.

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