



US DEPARTMENT OF DEFENSE

BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

Vehicle Improvement Studies

Force Protection Enhancements to the Joint Assault Bridge

Researchers at the Product Manager Bridging (Warren, Michigan) are increasing the survivability of the occupants through force protection enhancements to the Joint Assault Bridge (JAB) program. The JAB system includes a launcher integrated onto a M1A1 Abrams Chassis, where it launches the Armored Vehicle Launch Bridge (AVLB). The team designed, modeled and simulated, built, and integrated Force Protection enhancements to the JAB system (Figure 1). The current enhancements are based on selected armor from the Abrams Tank Next Evolution Armor. These enhancements include updated crew protection; they were assessed in modeling and simulation of the crew basket, blast-mitigating seats, footrests, and blast mats. Indicators are positive for a reduction in crew injury severity and a future hardware test will identify the specific reduction in injury severity. The Force Protections enhancements are scheduled to enter JAB production in FY18.

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FIGURE 1: An AVLB launcher integrated onto a M1A1 Abrams Chassis (Figure used with permission of the authors)

