

Joint Assault Bridge (JAB)



The Army redesigned several sub-systems and armor kits to mitigate vulnerabilities found in earlier live fire testing. The improvements do increase vehicle survivability over the previous design. The Joint Assault Bridge (JAB) mission-essential equipment is not survivable in a contested environment.

SYSTEM DESCRIPTION

The JAB is an armored-vehicle-launched bridge system intended to provide Armored Brigade Combat Teams (ABCT) with a wet or dry gap-crossing capability to enable freedom of maneuver on the battlefield. The JAB replaces the M104 Wolverine and M48/M60 Armored Vehicle Launch Bridge in the ABCT Brigade Engineer Battalions and Mobility Augmentation Companies. The

Army intends for JAB, based on the M1A1 Abrams chassis with M1A2 heavy suspension, heavy assault scissor hydraulic bridge, and additional armor kits, to provide enhanced mobility, supportability, crew survivability, and the use of common battlefield communication suites.

MISSION

Commanders employ JAB to enable the ABCT to close with and destroy the enemy by fires and

maneuvering freely over natural and man-made obstacles on the battlefield.

PROGRAM

JAB is an Acquisition Category II program. The Army delegated the acquisition decision authority to the Program Executive Officer, Combat Support and Combat Service Support. The Army entered full-rate production in FY21, and is scheduled to make a materiel release decision in December

2022 to build in the redesign and upgraded armor kits.

» MAJOR CONTRACTOR

- DRS Sustainment Systems Inc.
– Bridgeton, Missouri

TEST ADEQUACY

Based on the vulnerabilities discovered during the LFT&E conducted from November 2017 to March 2018, the Army redesigned several sub-systems and added or upgraded armor kits to reduce the JAB's vulnerability to direct and indirect fires.

The Army conducted follow-on live fire testing from October 2021 to November 2021 at Aberdeen Test Center in Maryland to assess those improvements. Testing was adequate to evaluate the survivability of JAB against kinetic threats. The test was conducted in accordance with the DOT&E-approved test plan and DOT&E observed the test.

PERFORMANCE

» EFFECTIVENESS

The Army did not conduct any test events in FY22 to change the assessment of it being operationally effective.

» SUITABILITY

The Army did not conduct any test events in FY22 to change the assessment of it being operationally suitable.

» SURVIVABILITY

The JAB mission-essential equipment is not survivable in a contested environment. The sub-systems' redesign and additional armor to the JAB improve vehicle survivability over the previous design by reducing the sub-systems' exposed areas. The unit equipped with JAB may not be able to complete the mission after engagements with direct and indirect fire due to a loss or degradation of bridging capability.

The JAB crew will need maintenance support to conduct Battle Damage Assessment and Repair/Recovery (BDAR/R) to make the JAB mission-capable. The crew and maintainer, using the BDAR/R kit, could restore mission-essential equipment to operate at less-than-full mission capability. The JAB's weight exceeds the current heavy-duty tow bar and the tow provision lug-eyes' limits, which may impact safe vehicle recovery.

RECOMMENDATIONS

The Army should:

1. Improve tow provision lug-eyes to meet established weight requirements for the vehicle.
2. Provide the crew with BDAR/R solutions to restore full bridging capability.
3. Refine the armor coverings and attachments to make them easier for the crew to remove and operate.