



Joint Assault Bridge (JAB)



Joint Assault Bridge

Replaces M48/M60 chassis based Armored Vehicle Launched Bridge (AVLB)

Major components:

- M1A1 Abrams Chassis
 - with A2 heavy suspension
- Military Load Classification (MLC)-85 AVLB bridge,
- **New Bridge Launch Mechanism**

JAB will provide:

- Supportability: System availability/unit readiness improved commonality of parts with Abrams tank chassis.
- Maneuverability: Keep pace with ABCT
- Survivability: Crew protection equal to M1A1 Abrams chassis
- Integrates current suite of communications and situational awareness capabilities (FBCB2, BFT2, DAGR, SINCGARS)

AAO: 337

Milestones:

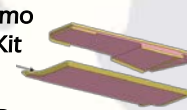
- MS C: 5 May 2016
- FRP Decision: 3QFY19

Bridge Launcher Mechanism (BLM)

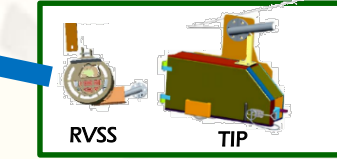


Operations & Sustainment Improvements

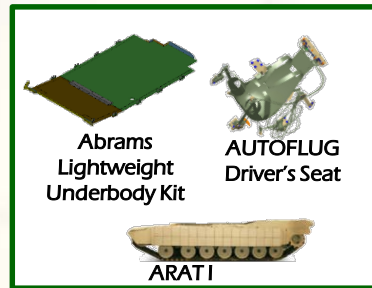
JAB IPT Hull Ammo Compartment Kit (HACK)



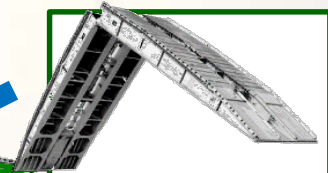
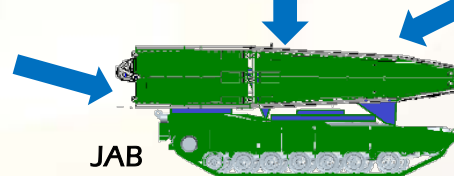
M1A1 w/ED Chassis



Capability to add Tank Urban Survival Kit (TUSK) Force Protection – For Situational Use



New JAB Chassis



JAB

BLM – Bridge Launcher Mechanism
 NDI – Non Developmental Item
 TUSK – Tank Urban Survivability Kit
 ARAT – Abrams Reactive Armor Tile
 JAB – Joint Assault Bridge
 MLC – Military Load Classification
 FBCB2 – Force XXI Battle Command, Brigade-and-Below
 SINCGARS – Single Channel Ground to Air Radio System

RVSS – Rear Viewer Sensor System
 TIP – Tank-Infantry Phone
 TIGER – Total InteGrated Engine Revitalization
 AIM – Abrams Integrated Management
 ED – Embedded Diagnostics
 O&S – Operations and Sustainment
 HACK – Hull Ammo Compartment Kit
 DAGR – Defense Advanced GPS Receiver
 BFT2 – Blue Force Tracker v2





Armored Vehicle Launched Bridge (AVLB)



Upgrade to
MLC 85 Bridge
Production On-
going at ANAD

2017 – 2018:
Reclassification
testing - ongoing
final rating beyond
MLC-92

M60A1
Chassis



Hydraulic and
Electrical
Upgrade –
replaces older
obsolete systems

Two Soldier Crew

Launchers – Authorized: 719
MLC 85 Bridges – 337 +

Procuring: 0
Procuring: 16 (FY17)

On Hand: 510
On Hand: 217

MLC 85 Bridge Notes / Status:

- Initially the AVLB Scissors Bridge was fielded as an MLC-60.
- 1990's: Conversion program adds stronger materials and design changes resulting in an MLC-70 classification. 2012: MLC 70 reclassified to MLC 85 after a series of successful structural and durability testing was completed to see if the bridge could be rated at MLC 85.
- Current: TARDEC conducting testing to determine if the bridge can be reclassified to MLC 95 'Normal' and MLC 100+ 'Caution' or higher. This will allow for crossings by future Abrams variants.
- Next Milestone: In Post Production and Deployment Phase: Bridge Upgrade on-going



Bridge Erection Boat (BEB)



IMPROVED RELIABILITY/MAINTAINABILITY WITH EMBEDDED DIAGNOSTICS

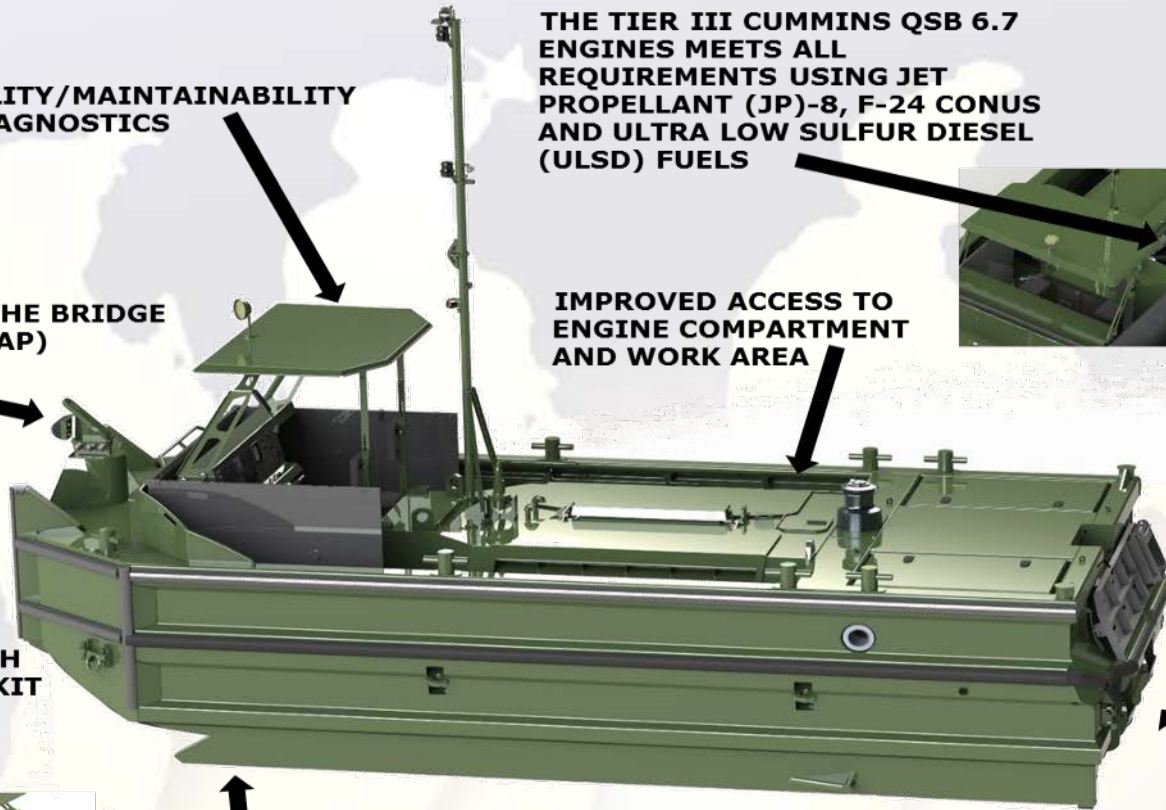
THE TIER III CUMMINS QSB 6.7 ENGINES MEETS ALL REQUIREMENTS USING JET PROPELLANT (JP)-8, F-24 CONUS AND ULTRA LOW SULFUR DIESEL (ULSD) FUELS

INTERFACES WITH THE BRIDGE ADAPTOR PALLET (BAP)

IMPROVED ACCESS TO ENGINE COMPARTMENT AND WORK AREA



IMPROVED SURVIVABILITY WITH CREW PROTECTION KIT (CPK)



WIDE BEAM HULL WITH GENEROUS FREEBOARD PROVIDING EXCELLENT LOAD CARRYING CAPACITY AND STABILITY

USES NAMJET FOR PROPULSION, 25 KNOTS IN FULL LOAD CONDITION IN WATER DEEPER THAN 23 FEET

20 YEAR LIFE EXPECTANCY

AAO = 407

Next Milestone: Full Rate Production/ Type Classification Standard, Full Material Release 1QFY18



Dry Support Bridge



Dry Support Bridge(DSB)

Replaces Medium Girder Bridge(MGB) 1 DSB system consist of 1 DSB Launcher Vehicle and 7 flat-rack loads of bridge components.

AAO = 112

Phase: Production & Deployment

Milestone: NA

Next ECP: 40-46m

Major components:

- M1075 PLS bear Chassis
- Bridge components
- DSB Launcher mounted on PLS
- Military Load Classification (MLC)-96(W) Normal,120(W) Caution 80(T)

DSB improves:

- The DSB provides the maneuver force with a capability to span obstacles of up to a 46 meter gap.
- A DSB company set consists of 4 DSB Systems that include 4 Launch Vehicles and 28 flat-rack loads of bridge components.
- The 40 Meter DSB provides a capability to span four 40 meter or eight 20 meter gaps and the 46 Meter DSB provides a capability to span four 46 meter or eight 28 meter gaps.

DSB LAUNCHER



DSB Launch Beams

M1075 AO PLS

DSB in Action

DSB Bridge Modules





Future Bridging System Initiatives



Joint Assault Bridge (JAB) :

- 4QFY17 - Program Management Review
- 4QFY17 - Force Protection Mod: Installation effort on LFTE systems
- 4QFY17 - Start of 3 LFTE Asset Deliveries
- Late 1QFY18 LFTE Shots: Tentative



Armored Vehicle Launched Bridge (AVLB) Chassis and Bridge Uprate

- On-going - Replace M48A5 chassis with M60A1 launchers to APS, NGB, USAR - pending funding decisions
- 4QFY17- Testing to assess an increase to the AVLB Bridge to a higher MLC rating to support Abrams weight growth. Structural testing successful at MLC 95 and a "Caution Crossing" of MLC 100.
- 4QFY17 – 3QFY18 - Durability Test being planned and executed



Dry Support Bridge (DSB):

- 4QFY17 - RRAD PLS Rebuild Start-up for European Deterrence Initiative
- 4QFY17 – Final Fieldings for 40m DSB Variant
- 1QFY18 - Proof of Concept for ECP 182 – Hydraulic Kit
- 2QFY18 46m Retrofit at 2225th, Marrero, LA
- On-going - PLS A0 Obsolescence: Working with RRAD on rebuilding components



Bridge Erection Boat (BEB):

- 4QFY17 - Full Rate Production Decision, Type Classification- Standard, Full Materiel Release
- 1QFY18 - First Unit Equipped (FUE)

