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COL Eric Fletcher
Project Manager,
Force Projection

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The LAGCC is a rapidly deployable/retrievable family of bridging assets and provides the capability to maintain freedom of maneuver through high tactical mobility.

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<table>
<thead>
<tr>
<th>a. REPORT</th>
<th>b. ABSTRACT</th>
<th>c. THIS PAGE</th>
</tr>
</thead>
<tbody>
<tr>
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<td>unclassified</td>
<td>unclassified</td>
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</tbody>
</table>

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PdD Non Standard Vehicles
LTC Paul Shuler

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~350 Systems
<table>
<thead>
<tr>
<th>Force Projection</th>
<th>Joint Combat Support Systems</th>
<th>Mine Resistant Ambush Protected Vehicles</th>
<th>Tactical Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bridging</strong></td>
<td><strong>Sets, Kits, Outfits &amp; Tools</strong></td>
<td><strong>Assured Mobility Systems</strong> (Army Program)</td>
<td><strong>Joint Light Tactical Vehicles</strong></td>
</tr>
<tr>
<td>• Bridges / Bridge Erection Boat</td>
<td>• Sets, Kits &amp; Outfits</td>
<td>• Buffalo (MPCV)</td>
<td><strong>Medium Tactical Vehicles</strong></td>
</tr>
<tr>
<td>• Bridge Transporters</td>
<td>• Engineer Combat Support Eq</td>
<td>• JERRV/Cougar</td>
<td>• HMMWV Family of Vehicles</td>
</tr>
<tr>
<td>• M9 Armored Combat Earthmover / Assault Breacher Vehicle / Joint Assault Bridge</td>
<td>• Diving Equipment</td>
<td>• Husky (Vehicle Mounted Mine Detector (VMMD)</td>
<td>• UAH Safety Enhancements</td>
</tr>
<tr>
<td></td>
<td>• Shelter Mounted Sets, Kits &amp; Outfits</td>
<td>• RG31</td>
<td>• HEAT Trainer</td>
</tr>
<tr>
<td></td>
<td>• Shop Set Equipment</td>
<td>• RG-33/Panther (MMPV)</td>
<td><strong>Heavy Tactical Vehicles</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Test, Measurement, &amp; Diagnostic Equipment</strong></td>
<td><strong>MRAP All Terrain Vehicle</strong> (Joint Program)</td>
<td><strong>MRAP/M-ATV Logistics</strong></td>
</tr>
<tr>
<td>• Integrated Family of Test Equipment (IFTE) At Platform Test Systems</td>
<td>• M-ATV</td>
<td><strong>Non-Standard Vehicles</strong></td>
<td></td>
</tr>
<tr>
<td>• Common Embedded Diag. &amp; Calibration Sets (CALSETS)</td>
<td><strong>MRAP Vehicle Systems</strong> (Joint Program)</td>
<td><strong>Light Tactical Vehicles</strong></td>
<td></td>
</tr>
<tr>
<td>• IFTE Off Platform Automatic Test Systems</td>
<td>• Navistar MaxxPro</td>
<td>• HMMWV Family of Vehicles</td>
<td></td>
</tr>
<tr>
<td>• General Purpose Electronic Test Equipment (GPETE)</td>
<td>• GDLS RG-31</td>
<td>• UAH Safety Enhancements</td>
<td></td>
</tr>
<tr>
<td>• Maintenance Support Device (MSD-V3)</td>
<td>• BAE-TVSCaiman</td>
<td>• HEAT Trainer</td>
<td></td>
</tr>
<tr>
<td>• Next Generation Automatic Test Station (NGATS)</td>
<td>• BAE RG-33 SOCOM</td>
<td><strong>Medium Tactical Vehicles</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Non-Standard Vehicles</strong></td>
<td>• BAE RG-33 SOCOM AUV</td>
<td></td>
<td>• Family of Medium Tactical Vehicles (FMTV)</td>
</tr>
<tr>
<td>• Light Tactical Vehicles (LTV)</td>
<td>• BAE HAGA</td>
<td>• Tractor Trailer</td>
<td></td>
</tr>
<tr>
<td>• Medium Tactical Vehicles (MTV)</td>
<td>• BAE RG-33L</td>
<td><strong>Heavy Tactical Vehicles</strong></td>
<td></td>
</tr>
<tr>
<td>• Sport-Utility Vehicles (SUV)</td>
<td>• FPI Cougar (Cat I &amp; II)</td>
<td>• Heavy Expanded Mobility Tactical Truck (HEMTT)</td>
<td></td>
</tr>
<tr>
<td>• Buses</td>
<td>• FPI Buffalo</td>
<td>• M915 Family of Vehicles &amp; Trailers</td>
<td></td>
</tr>
<tr>
<td>• Trailers</td>
<td></td>
<td>• Heavy Equipment Transport (HETS)</td>
<td></td>
</tr>
<tr>
<td><strong>Joint Logistics &amp; Sustainment</strong> (Joint Program)</td>
<td></td>
<td>• Container Handling Unit (CHU)</td>
<td></td>
</tr>
<tr>
<td>• MRAP/M-ATV Logistics</td>
<td></td>
<td>• Palletized Load System (PLS)</td>
<td></td>
</tr>
<tr>
<td><strong>Armored Security Vehicles</strong></td>
<td></td>
<td></td>
<td>• Joint Recovery And Distribution System (JRADS)</td>
</tr>
<tr>
<td>• Armored Security Vehicle</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PM Force Projection Support to MSCoE

PdM CE/MHE

PdM SKOT

PdM Bridging
Product Manager Bridging
PM – LTC Benny Shepard
DPM – Don Paskulovich
The PM Bridging Team is committed to develop, acquire, field, and sustain, gap crossing solutions that meet the Warfighters requirements.

The recognized world class leader in providing innovative cap crossing capability to the Warfighter.

**SYSTEMS**

- Assault Brecher Vehicle (ABV)
- Armored Vehicle Launched Bridge (AVLB)
- Bailey Bridge
- Bridge Adapter Pallet (BAP)
- Bridge Erection Boat (BEB)
- Common Bridge Transporter (CBT)
- Dry Support Bridge (DSB)
- Improved Boat Cradle (IBC)
- Improved Ribbon Bridge (IRB)
- Joint Assault Bridge (JAB)
- Line of Communication Bridging (LOCB)
- Medium Girder Bridge (MGB)
- M9 Armored Combat Earthmover (ACE)
- Rapidly Emplaced Bridging System (REBS)
- Standard Ribbon Bridge (SRB)
- Wolverine Heavy Assault Bridge
## Assault Bridging Systems

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Joint Assault Bridge (JAB)</strong></td>
<td>Provide the Army Heavy Brigade Combat Team with a survivable, deployable and sustainable heavy assault bridging capability.</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>Mobility, transportability, survivability and force protection similar to M1A1 Abrams tank. Utilizes the 19 meter, MLC70 Armored Vehicle Launched Bridge (AVLB) scissor bridge. Crew: 2 Soldiers.</td>
</tr>
<tr>
<td><strong>Assault Breacher Vehicle (ABV)</strong></td>
<td>Provide an in-stride breaching capability to the HBCT that can keep pace with the armored maneuver force and provide force protection for a 2-man crew. Breach complex and explosive minefields and obstacle belts to allow follow-on of all HBCT assets through the breach. New capability in HBCT 2nd Generation Engineer Companies.</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>M1A1 chassis, with Tiger Engines, Linear Demolition Charge systems (capable of firing two MCLICs), Lane Marking Systems (LMS), Front End Equipment (Full Width Mine Plow, Combat Dozer Blade), Integrated Vision System (IVS) for day/night. Crew: 2 Soldiers.</td>
</tr>
<tr>
<td><strong>Rapidly Emplaced Bridge System (REBS)</strong></td>
<td>Provide expedient, highly mobile gap-crossing capabilities to Stryker Brigade Combat Teams (SBCT) in theater, supporting strategic military assault and tactical traffic.</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>Has a 4.3 meter roadway width and requires little or no site preparation. 13 meter gap span. Supports up to MLC 50 caution wheeled/tracked vehicles. Launch Time: 10 minutes (daylight). Crew: 2 Soldiers (Build or Retrieve).</td>
</tr>
<tr>
<td><strong>M104 Wolverine Heavy Assault Bridge</strong></td>
<td>The M104 Wolverine is an armored vehicle designed to carry, emplace, and retrieve an assault bridge capable of crossing 24 meter gaps and supporting loads up to the M1A2 SEP main battle tank.</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>Wolverine is an M1A2 SEP tank chassis with a bridge launch mechanism instead of a turret, it shares virtually all of the parent vehicle's speed, mobility and survivability. Launch time: &lt; 5 minutes, retrieval time &lt; 10 minutes. Crew: 2 Soldiers</td>
</tr>
<tr>
<td><strong>Armored Vehicle Launched Bridge (AVLB)</strong></td>
<td>Provides the heavy armor maneuver force an in-stride assault bridging capability for natural and man-made gaps of up to 18 meters.</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>M48A5 or M60A1 chassis, 19 meter scissors launched bridge (MLC 60 and MLC 70 versions), MLC 70 bridge being upgraded to MLC 85. Chassis with the Hydraulic and Electrical Upgrade (HEU) provide faster launch and retrieve times, increased reliability &amp; maintainability, eliminates hydraulic system obsolescence problems. Crew: 2 Soldiers.</td>
</tr>
<tr>
<td><strong>M9 Armored Combat Earthmover (ACE)</strong></td>
<td>Mobility, Counter mobility, Survivability digs fighting positions, breaches berms, prepares anti-tank ditches, prepares combat roads and access routes, removes roadblocks.</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td>Highly mobile, fully tracked armored earthmover. Hull is welded aluminum. Front of vehicle features an 8.7 cubic yard bowl, apron, and dozer blade. Utilizes hydro-pneumatic suspension. Crew: 1 Soldier.</td>
</tr>
</tbody>
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# Tactical Bridging Systems

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M1977A2 Common Bridge Transporter (CBT):</strong></td>
<td>The CBT is used to transport, launch and retrieve all float bridge equipment and transport all dry spanned bridging equipment. Also transports the Rapidly Emplaced Bridge System (REBS).</td>
<td><strong>Performance:</strong> HEMTT mobility and C-130 Transportable. Launch time for float bridge &lt; 1 minute. Launch time for bridge erection boat &lt; 5 minutes. Interfaces with the Palletized Load System Trailer (PLST) with Draw bar extension, Bridge Adapter Pallet (BAP), Improved Boat Cradle (IBC) and the M3 Container Roll-in/Out Platform (CROP) for multi-mission flexibility.</td>
</tr>
<tr>
<td><strong>Bridge Erection Boat (BEB):</strong></td>
<td>Provides propulsion and maneuver capability during wet gap crossings. Assembles and propels ribbon bridge rafts. It also provides short-term anchorage, (holding full-closure bridges in position for maneuver force crossings), soldier transport, diving and river patrol operations.</td>
<td><strong>Performance:</strong> 27 foot aluminum hull boat (new design dependent), twin engine, twin jet propulsion. Launched and retrieved from CBT using an improved boat cradle. Launch time &lt; 5 minutes. Provide temporary anchorage using IRB and/or SRB. Crew: 2 Soldiers (operator and crewman)</td>
</tr>
<tr>
<td><strong>Improved Ribbon Bridge (IRB):</strong></td>
<td>Provide a continuous roadway of up 210 meters or raft capable of crossing assault or tactical vehicles within the maneuver force over non-fordable wet gaps. The bridge bays (interior and ramp) are the major components of the IRB System.</td>
<td><strong>Performance:</strong> The IRB system is a modular, aluminum alloy, continuous floating raft/bridge system consisting of Interior &amp; Ramp Bays that are transported, launched and retrieved by a CBT with a Bridge Adapter Pallet. ~ One bay is 22-foot section of bridge</td>
</tr>
<tr>
<td><strong>Dry Support Bridge (DSB):</strong></td>
<td>The DSB system provides a highly mobile, truck-mounted (CBT), horizontally launched bridge system that supports up to MLC 100 (wheeled) or MLC 80 (tracked) vehicles over gaps up to 40 meters.</td>
<td><strong>Performance:</strong> Requires little or no site preparation. Has a 4.3 meter roadway width. Launch time is under 90 minutes. Crew: 8 Soldiers (build or retrieve)</td>
</tr>
<tr>
<td><strong>Line of Communication Bridge (LOCB):</strong></td>
<td>Restore and Maintain Line of Communication routes in theater, supporting both civilian and military traffic.</td>
<td><strong>Performance:</strong> 0 – 300 meter (m) gap span, both dry gap and float configurations and a 4.2 meter roadway width. MLC 85(track)/100(wheel) capacity, launch time is 50 m/8 hours and requires MHE or power tools to construct. Transportable by land, sea or air, including US military cargo aircraft. Crew: 29 Soldiers</td>
</tr>
</tbody>
</table>
Bridging Future Opportunities
Mission
The LAGCC is a rapidly deployable/retrievable family of bridging assets and provides the capability to maintain freedom of maneuver through high tactical mobility.

General: The LAGCC enhances the performance of all vehicles in the IBCTs and the MACs by providing the only tactical employed gap crossing capabilities. Supports decisive actions in terrain ranging from open to urban and complex. There are no current systems organic to the BCTs or MACs that would provide these capabilities.

• **Type I: (infantry foot bridge)**
  - Dry span: 20m(T) – 50m(O); Wet span: 30m(T) - 50m(O)
  - Load capacity to support the crossing of 3ea Soldiers (1,200 lbs)
  - Launched/retrieved with a crew of 6ea soldiers within 30 minutes

• **Type II (vehicle launched, light assault bridge)**
  - Span 1.5m – 8m (T); 1.5m – 16m (O)
  - Load capacity of MLC 50(T) – 70(O)
  - Launched/retrieved with a crew of 3ea Soldiers within 15 minutes

• **Type III (amphibious bridge and raft system)**
  - Span gaps up to 18 meters as single system and 100m with no more than six vehicles
  - Load capacity of MLC 85 Tracked / 120 Wheeled (T); MLC 95 Track/130 Wheel (O)
  - Raft vehicles in currents up to 6 feet per second (T); 8 feet per second (O)

Status
- 2QFY12: Released 2nd round of Market Survey Questionnaires.
- 3QFY12: MSCoE revise CPD in coordination with PM-Bridging based on MSQ results
- Future: CPD approved through HQDA
Benefits of Composites

- Lightweight
- Reduced burden on transport vehicles (highway/air/sea)
- Improved Launcher Durability
- High Strength-to-Weight/Stiffness-to-Weight Ratio
- Lighter than metallic bridge of same design while maintaining a potentially greater MLC
- Higher “Fatigue Life” than metallic’s

MLC-100 Assault Configuration:

MLC-100 Tactical Configuration:
QUESTIONS?

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