INDUSTRY DAY
19 JULY 2011

Product Manager, David W. Marck
Deputy Product Manager, Don Paskulovich
Assistant Product Manager, Donna Morgan

JOINT ASSAULT BRIDGE

http://contracting.tacom.army.mil/majorsys/jab/jab.htm
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**Title:** Joint Assault Bridge

**Authors:** Donna Morgan

**Performing Organization:** US Army RDECOM-TARDEC 6501 E 11 Mile Rd Warren, MI 48397-5000, USA

**Performing Organization Report Number:** 22008

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Prescribed by ANSI Std Z39-18
AGENDA

- Welcome
- Administrative Guidelines
- Program Management
- Acquisition Strategy and Approach
- Contract Strategy
- Proposal Submission Procedures
- Purchase Description and Technical Review
- Scope of Work for EMD
- Small Business Participation
- Government Responses to Questions

Ms. Morgan
Mr. Morrow
Mr. Marck
Ms. Morgan
Mr. Victor
Mr. Victor
Mr. Knapp
Ms. Morgan
Mr. Fiorani
Mr. Morrow
CONFERENCE GUIDANCE AND ADMINISTRATION

Tom Morrow
TACOM Acquisition Center
Contract Specialist

http://contracting.tacom.army.mil/majorsys/jab/jab.htm
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CONFERENCE GUIDANCE

• Purpose
  – To provide potential offerors program related information
  – To improve the development of a formal solicitation
  – To promote a Small Business subcontracting network
• Conference is for informational purposes only
  – Our intent is to clearly communicate our strategy
  – Respond to your questions regarding the solicitation
• Proposal shall be based on final RFP posted to TACOM website, including amendments
• Government cannot reimburse costs of solicitation preparation (FAR 31.205-18)
JAB PROCUREMENT WEBPAGE

• Provides planning information and announcements
• Interested parties are responsible for monitoring updates:
  
  http://contracting.tacom.army.mil/majorsys/jab/jab.htm

• All communications shall be through the Contracting Officer and/or Contract Specialist.
• James Victor, Contracting Officer, james.g.victor2.civ@mail.mil
• Tom Morrow, Contract Specialist, winslow.t.morrow.civ@mail.mil
CONFERENCE ADMINISTRATION

• Questions are encouraged and expected
  – Submit all questions on 3X5 index cards provided
  – Government will answer as much as possible during the Q&A session today
  – All questions and answers will be posted to the website. They will serve as the official responses.
• This is a non-smoking facility
• Restrooms located in the Joint Dining Facility
• Turn off BB and cell phones
• One and one-half hour break for lunch
• Foreign visitors will require an escort at all times
FOREIGN EXPORT CONTROL

David Kuhn
TACOM  Warren Legal Office
Chief, Intellectual Property Law Division

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BACKGROUND - 2 MAIN AUTHORITIES

• **Arms Export Control Act**
  – Directorate of Defense Trade Controls
  – US Munitions List (USML)(State/DoD Generated)
  – International Traffic in Arms Regulations

• **Export Administration Act**
  – Bureau of Industry and Security
  – Commerce Control List (CCL)(Dept of Commerce)
  – Export Administration Regulations

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DoD RESPONSIBILITIES

• No Statutory Export Control Jurisdiction
• Other agencies have statutory jurisdiction
  – Department of State
  – Department of Commerce
  – Others (Department of Treasury) w/smaller roles
• Note: The Army (including the JAB Program) can not interpret ITAR or give rulings on it.
• The Deputy Assistant Secretary of the Army for Defense Export and Cooperation (DASA-DE&C) is the Army’s highest authority on export control.
DoD MUST FOLLOW EXPORT CONTROL LAWS

• DoD Instruction 2030.08 - Implementation of Trade Security Controls for Transfers of DoD U.S. Munitions List and Commerce Control List Personal Property.

• All DoD USML and CCL personal property, whether located within or outside the United States, shall be transferred according to Section 2778 of 22 United States Code (U.S.C.), 22 Code of Federal Regulations (CFR) parts 120-130, Chapter 35 of 50 U.S.C., 15 CFR parts 730-799, and 31 CFR parts 500-598. DoD USML or CCL personal property will not be transferred to any person or entity that is ineligible to obtain an export license.

• Enclosure E2.1.4. DoD Personal Property defined: DoD property, including technical data, but not including real property (buildings/lands).
KEY ASPECTS OF “EXPORT” DEFINITION

– ITAR §120.17

• (1) Sending or taking a defense article out of the US in any manner except by mere travel outside the US by a person whose personal knowledge includes technical data.

  – The exception is telling
  – What about a lap top computer?
“EXPORT” DEFINITION (continued)

• (2) Disclosing (including oral or visual disclosure) or transferring tech data in the US to an embassy, any agency or subdivision of a foreign government

• (3) Disclosing (including oral or visual disclosure) or transferring tech data to a foreign person, whether in the US or abroad
  — Question: What about showing a new HMMVW engine at an SAE show?

  Note: Publication of tech data is deemed an export
ANOTHER KEY DEFINITION

- Foreign person: a non US citizen without permanent resident status, a foreign government or a foreign corporation.

- What about a US citizen representing a foreign corporation?
• Bridging vehicles and tanks are both listed in Category VII of the US Munitions List
  – The US Munitions List describes all defense articles that are export controlled under ITAR
  – Includes the articles listed, their components *and related technical data*
  – The JAB is a bridging vehicle and will use an Abrams chassis

• Since bridging vehicle and tanks are “*significant military equipment*” under ITAR, tech data on the JAB will be strictly controlled.
• Abrams tank chassis will be supplied as GFP

• No Army certifiable exemption applies for exporting chassis

• Compliance with ITAR is MANDATORY

  – For example, obtaining export licensing, or technical assistance agreements.
CONSERVATISM IN EXPORT CONTROL

• Rules applied strictly

• Army policy is to be extremely careful, per DASA-DE&C

• Congress: willing to live with roadblocks in order to prevent harmful exports

• Department of State takes a conservative approach as well.
David W. Marck
Product Manager
PdM Bridging

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PdM BRIDGING PROGRAM

• Mission and Vision
• Government Team
• Assault Bridging
• Capability Requirements from the Army
• History
MISSION
To develop, acquire, field, and sustain, gap crossing solutions that meet the warfighter’s requirements

VISION
Be the recognized world class leader in providing innovative gap crossing capability to the warfighter.

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

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MANAGEMENT TEAM

• All communication between Government and Industry shall be through the Contracting Officer and his representative:
  – James G. Victor, email: james.g.victor2.civ@mail.mil (PCO)
  – Tom Morrow, email: winslow.t.morrow.civ@mail.mil (Contract Specialist)

• Requirements – User Representative
  – Maneuver Support Center of Excellence (MSCoE)

• Materiel Developer – Program Manager
  – PEO CS-CSS
  – PM Force Projection
  – PdM Bridging

• Science and Technology
  – Tank-automotive and Armaments Research, Development, Engineering Center (with support from PM Abrams Engineering)

• Test Community
  – Aberdeen Test Center

• Life Cycle Support and Sustainment
  – TACOM Integrated Logistics Support Center
ASSAULT BRIDGING

Legacy Systems

AVLB

M9 ACE

Future Force Systems

Wolverine

Future Joint Assault Bridge

REBS

ABV
ARMY NEEDS AND CAPABILITY

Needs

- The Armored Vehicle Launched Bridge is at the end of its life cycle and suffering from obsolescence issues. The U.S. Army requires a heavy assault bridge to replace the AVLB and to support the Abrams’ based maneuver force.
- Assault gap crossing requires the ability to cross wet or dry gaps and ensure forward movement on the battlefield.
- The joint force requires a system to be sustainable, capable of moving with the Abrams fleet, and providing the Soldier with a high level of survivability.
- The system should provide an effective and efficient means to cross natural and man made gaps up to 18.3 meters (60 feet) long.
- The system should provide sufficient MLC crossing capability for the Main Battle Tank.

System

- The JAB is the assault bridge for the heavy maneuver force. It is capable of keeping pace with current Abrams Legacy Fleet. The JAB will be assigned to the Mobility Augmentation Companies to support Heavy Brigade Combat Teams (HBCTs). Current allocation of JAB is 6 per MAC. The AVLB bridge has recently been successfully tested up to MLC-85.
  - Abrams M1A1 Chassis
  - New Launcher
  - MLC-85 AVLB

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HEAVY ASSAULT BRIDGE HISTORY

• Mid-1990’s Wolverine
  – Affordability factor

• Mid-2000-2010’s USMC JAB
  – USMC Prime Integrator
  – Test issues closed configuration

• 2010
  – Transfer to Army

• Lessons Learned

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JAB ACQUISITION OBJECTIVES

• Technology insertion
• Best of industry design efforts for hydraulics, field of vision
• Maintainability and Reliability
• Open communication with contractors regarding test
• System integration into a Mobility Augmentation Company (MAC) environment

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ACQUISITION STRATEGY

• **Past experience, industry progress,** led to 2 phased approach

**Phase 1: EMD**

Intent: To Design, Develop, Integrate, and Test Prototypes to Achieve Performance Requirements

• Two Prototypes Per Contract

**Phase 2: Production**

Intent: To Conduct Low Rate Initial Production Verification Test/Operational Test, Refine Design, Develop Integrated Logistics Support Products and Deliver Production JABs

• Army Authorized Objective - 168 JAB Systems
• USMC - 29 JAB Systems
ANNISTON ARMY DEPOT (ANAD)

- Provides Government Furnished Property to Contractor
- A refurbished chassis and AVLB will be available for viewing at Anniston Army Depot at the end of Aug 2011
- Contractors must request access through ANAD Contracting and adhere to all requirements
- Contractors will be escorted at all times
- Details will be posted on the JAB website as they become available

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PROGRAM SCHEDULE
PRODUCTION PHASE (NOTIONAL)

Major Contract Events and Production Deliveries

Oct-14 LRIP/Production Award
Oct-15 - Aug-17 LRIP Production Deliveries
Oct-16 Full Rate Production (FRP)
Feb-17 First Unit Equipped (FUE)
Oct-18 Initial Operation Capability (IOC)
Nov-14 - Nov-16 LRIP Ordering Years - 24QTY
Nov-16 - Jun-22 Production Ordering Years - 144QTY

Test Events

Nov-13 Test Vehicle Deliveries
Nov-15 - Apr-16 PVT RAM
Apr-16 - Jun-16 Operational Testing
Jul-16 Final Test Report

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OBJECTIVES OF PROGRAM REVIEWS

• Schedule
  – Development of launcher within schedule design time
  – Conduct Pre-Production Qualification Test with minimum disruptions

• Cost
  – Minimize changes to the contract, live within your budget

• Performance
  – Achieve requirements thresholds
  – Build in reliability

• Supportability
  – Available long lead items during design and test is critical

• Risk identification, mitigation, assessments

• Entrance, exit criteria driving the gateways to the next design review

• Open communication with each contractor

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JAB WEBSITE

• Website
  http://contracting.tacom.army.mil/majorsys/jab/jab.htm

• Website will be continually updated with RFP information such as:
  – Draft Purchase Description (posted)
  – Draft sections of RFP (posted)
  – Q&A (when released)
  – Supplemental Technical Data (posted)
  – Email:
    • Tom Morrow, email: winslow.t.morrow.civ@mail.mil (Contract Specialist)
    • James G. Victor, email: james.g.victor2.civ@mail.mil (PCO)

• This will be managed by Contracting. This is the only permissible means of communication with the Government

*It is the responsibility of Industry to check the website regularly!*
THE FOLLOWING INFORMATION IS FOR PLANNING PURPOSES ONLY

• Estimated Draft RFP release: TBD

• Estimated RFP Release: 19 Sep 11

• Estimated Proposals Due: 18 Nov 11

• Estimated Date of Award: Jun 12
REQUEST FOR PROPOSAL

• A draft Request For Proposal (RFP) W56HZV-11-R-0322 will be issued for comment at a later date. No proposals are to be submitted in response to the draft RFP.

• The Government will issue a final RFP at a later date for the submission of proposals.

• The RFP will contain the requirements for the Joint Assault Bridge.
CONTRACT STRATEGY

• Full and Open Competition for the Request for Proposal
  – Proposals must be comprehensive, fully responsive and stand-alone or risk being rejected
  – Best Value Source Selection; Evaluation Criteria: TBD

• Issue up to two Multiple Award Task Order (MATO) Contracts
  – Delivery Order 0001 for the development and testing of JAB prototypes will be awarded with the contracts
  – Delivery Order 0002 for JAB production will be awarded based on a fair opportunity competition between only the two MATO contractors after testing is completed
DELIVERY ORDER 0001
(EMD PHASE)

• Awarded with the contract
• Contract Type: Fixed price incentive firm
• Requirements
  – Design, develop, and test prototypes
  – Provide test support for PPQT
  – Deliver a TDP in Contractor format
FIXED PRICE INCENTIVE (FIRM) CONTRACT

- FPIF (FAR 16.403-1) requires contractors to deliver goods and services under an objective incentive to control costs
- Elements of FPIF:
  - Target Cost
  - Target Profit
  - Target Price (Sum of Target Cost + Target Profit)
  - Contract will specify price ceiling (maximum amount paid to the contractor) and share ratio
- Parties negotiate the final cost when the contractor completes performance
- More information can be found at FAR 52.216-16, Incentive Price Revision – Firm Target
## FPIF Example

### Contract Terms
- Target Cost: $100
- Target Profit: $10
- Target Price: $110
- Ceiling Price: $130
- Share Ratio: 70/30

### Underrun
- Actual Cost: $90
- Actual Profit: $13
- Final Price: $103
- Actual Profit % Earned: 14.44%

### Overrun
- Actual Cost: $110
- Actual Profit: $7
- Final Price: $117
- Actual Profit % Earned: 6.36%
DELIVERY ORDER 0002
(PRODUCTION PHASE)

• Competition is limited to the two MATO contractors
• RFP will be issued after PPQT
  – Evaluation: Best Value; Criteria: TBD
  – Proposals must be comprehensive, fully responsive and stand alone
• A Delivery Order will be awarded to one Contractor
DELIVERY ORDER 0002
(PRODUCTION PHASE)

• Contract Type: Firm Fixed Price
• Base Year and seven pre-priced option years
• Options will be incrementally exercised via Delivery Order Order modifications

• Requirements Year (Base Year)
  – Low Rate Initial Production of 12 JAB Systems
  – Support First Article Test
  – Refine Design through engineering change proposals
  – Develop Integrated Logistics Support Products

• Requirements (Option Years)
  – Remaining LRIP 12 JAB Systems
  – Full Rate Production
  – Provide Fielding Support

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PROPOSAL SUBMISSION

• Proposals to be submitted only after Final RFP release
  – Proposals due 60 days after submission
  – Electronic submission of proposals via Army Single Face to Industry (ASFI) Bid Response System
  – Section L of the Final RFP will provide the submission requirements

• Final RFP posting locations:
  – Army Single Face to Industry – https://acquisition.army.mil/asfi/
PURCHASE DESCRIPTION AND TECHNICAL REVIEW FOR EMD

Jesse Knapp
TARDEC
Lead Systems Engineer

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Requirements

- Thresholds are required
- Objectives are desired

**M1A1 Hull:** M1A1 tank with turret removed that will be provided as Government Furnished Property (GFP) for development of the Joint Assault Bridge (JAB) system

**JAB Chassis:** M1A1 hull and launch mechanism installed

**JAB System:** M1A1 hull, launch mechanism and MLC-85 Armored Vehicle Launched Bridge (AVLB) loaded on top of the M1A1 hull
GOVERNMENT FURNISHED PROPERTY (GFP) DESCRIPTION

M1A1 Hull:
• M1A1 tank with the turret removed, and the M1A2 suspension added
• The M1A1 GFP will come from the Anniston Army Depot (ANAD) RESET line
• The turret will be replaced by an aluminum plate with temporary mounting of required turret related components for shipping purposes
• The design of the JAB System will require the contractor to place these turret related components as well as JAB System components in the crew compartment

MLC-85 AVLB:
• MLC-70 AVLB is currently being reclassified to MLC-85 with no hardware changes. It will be referenced as MLC-85 AVLB throughout this briefing.
• **NO MODIFICATIONS are permitted to the MLC-85 AVLB**
**PD DESIGN REQUIREMENTS**
(Not All Inclusive)

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**Operating Environment (PD section 3.7)**

- **Altitude**
  - 8,000 ft. (T) or (2,438 m)
  - 12,000 ft. (O) or (3,658 m)

- **Temperature range**
  - -25°F to 125°F (T) or (-32°C to 52°C)
  - -50°F to 125°F (O) or (-46°C to 52°C)
  - with cold weather kit if required

- **Storage Temperature**
  - -50°F to 160°F (-46°C to 70°C)

- **Wind**
  - 29.9 Knots (15 m/s)

- **Mud Load**
  - 2,438 lbs (1,106 kg) of mud on the roadway surface

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PD DESIGN REQUIREMENTS
(Not All Inclusive)

Vision (Driver and Commander) (PD section 3.7.7)

• 165 degrees (+/- 82.5 degrees of the centerline) to the front and 35 degrees to the rear for the Driver and Commander

• Vision system to meet the vision requirements during day and night, in smoke, and all weather conditions as defined throughout PD section 3.7

• The view through the three (3) driver’s hatch and six (6) commander’s hatch vision periscopes shall be unobstructed by placement of JAB system components
Hydraulic Power (PD section 3.7.8)

- If a hydraulic power unit (HPU) is used to launch the MLC-85 AVLB it shall operate on both JP-8 and diesel fuel
- Backup hydraulic power can be either an onboard backup hydraulic pump (T), or the capability to be hydraulically slaved by another JAB system (O)

<table>
<thead>
<tr>
<th>Action</th>
<th>Threshold(min)</th>
<th>Objective(min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Hydraulic Power Launch</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Backup Hydraulic Power Launch</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Primary Hydraulic Power Retrieval</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Backup Hydraulic Power Retrieval</td>
<td>30</td>
<td>12</td>
</tr>
</tbody>
</table>

- The MLC-85 AVLB will be launched and retrieved in any combination of bank conditions defined in PD section 3.7.9
Survivability (PD section 3.8)

- Ballistic requirements are detailed in Annex C (FOUO export controlled)
  - Survivability of the JAB chassis shall not be degraded from the protection level of the M1A1
  - If any hydraulic launcher components are placed on or attached to the outside of the JAB chassis, these components shall have ballistic protection as defined in Annex C

- Fire survivability (PD section 3.8.7)
  - The JAB shall utilize the M1A1 Automatic Fire Extinguishing System (AFES)
  - If an HPU is used there shall be an AFES provided
PD DESIGN REQUIREMENTS
(Not All Inclusive)

Reliability and Maintainability (PD section 3.10)

• Mean Cycles Between Operational Mission Failure (MCBOMF)
  – 120 launch and retrieve cycles tested to 80 percent confidence level

• Mean Miles Between Operational Mission Failure (MMBOMF)
  – No less than 157 miles (253 km) of operation (21 launch and retrieve cycles per 157 miles (253 km)) tested to 80 percent confidence level

• Maintenance Ratio
  – Not to exceed 0.10 Maintenance Man Hours per Operating Hour (MMH/OH)
Physical Dimensions (PD section 3.11.1)

• The JAB system shall be no longer than 42 ft. (12.8 m), no wider than 13.6 ft. (4.15 m), and no higher than 13.1 ft. (4 m)

• When combat-loaded the JAB system shall weigh less than 70 tons with ground clearance of at least 19 inches (48.3 cm)
  – Combat loaded JAB system (PD section 6.3.1): M1A1 hull + MLC-85 AVLB + launcher mechanism + full fuel and hydraulics + 2 crew members
Transportability (PD section 3.11.2)

- Transportable worldwide via commercial rail (JAB Chassis)

- Highway transportable in accordance with U.S. and NATO standards (JAB Chassis)

- Commercial shipping, all U.S. Navy amphibious shipping, and military Maritime Prepositioned Forces (MPF) ships [JAB Chassis (T), JAB System (O)]
  - The JAB chassis shall traverse a 17-degree ramp and clear the door to enter the ship without disassembly or dunnage

- Transportable on C-5 and C-17 aircraft (JAB Chassis)

- If integration of the launcher interferes with the M1A1 lifting or tie down provisions, provisions shall be added in accordance with MIL-STD-209
Automotive Performance (PD section 3.11.3)

• Range (Table 4)
• Vertical Step
  – 18 inches (46 cm) high in forward and reverse
• Grade (slope)
  – 40% (T), 60% (O) in forward and reverse
• Side Slope
  – 25% in forward and reverse
• Trench crossing
  – 7 feet (2.1 m) in width in forward and reverse
Human Factors (PD section 3.12)

- Design with the Soldier in mind (MOPP and Arctic Clothing)
  - Operator – 5\(^{th}\) to 95\(^{th}\) percentile male
  - Maintainer – 5\(^{th}\) percentile female to 95\(^{th}\) percentile male

- Ingress / egress
  - Component placement so as not to impede crew ingress / egress
  - Commander Hatch location above the commanders seat
  - Autoflug seat brackets are installed in driver’s area and shall remain unobstructed

- Alarms and warning devices
  - To warn operator when approaching design limits

- Hazardous materials
  - See PD section 3.12.13 for details
PD SUMMARY

• PD Definitions
• GFP description
• Operating Environment
• Vision (Driver and Commander)
• Hydraulic Power
• Survivability
• Reliability and Maintainability
• Physical Dimensions
• Transportability
• Automotive Performance
• Human Factors
SCOPE

Donna Morgan
PdM Bridging
APM, JAB

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EMD SCOPE OVERVIEW

• New design effort to meet requirements
• Hardware requirements are fully described in the purchase description
• All sections of the contract are relational documents requiring cross-referencing
• Military documents and industry standards are referenced but not provided
C.1 GENERAL SCOPE

- Design, build, integrate a mechanism on the M1A1 Chassis to launch and retrieve the MLC-85 AVLB.

- The Government will furnish the M1A1 Chassis and MLC-85 AVLB. The M1A1 Chassis is subject to export control laws and regulations.

- Overall component selection, integration, design, development, fabrication, Contractor testing, Government test support, logistics product development, and configuration management to meet the requirements of this contract.

- Deliver data in accordance with Data Item Descriptions (DID) and Contract Data Requirements List (CDRL).
C.2 MEETINGS, REVIEWS AND PROGRAM STRUCTURE

– The Contractor shall submit the following:
  • Agenda and read-ahead package/briefing charts for all meetings
  • Master Integrated Program Schedule (MIPS)
  • Meeting/Conference/Review Minutes

– The Contractor shall conduct the following:
  • Start of Work Meeting (SOWM) within 30 days after contract award
  • Quarterly Program Management Reviews (PMR)

• Contractor shall identify how they will manage all design, integration, production, supportability and risk throughout the EMD phase.
C.3.1 ENGINEERING

- Developmental Drawings for Preliminary Design Review and Critical Design Review
- Full Size Physical Mockup for User Jury
- System Requirements Compliance Matrix
  - Tracks the initial and current compliance with all ATPD 2402 requirements
  - Developed as estimates and shall be updated to reflect actual performance as development and test progress
C.3.5 ENGINEERING

- Technical Reviews
  - Preliminary Design Review (PDR) - 90 days after SOWM
  - User Jury Review - 60 days prior to CDR
  - Critical Design Review (CDR) - 270 days after SOWM
  - Pre-Test Readiness Review (Pre-TRR) - 30 days prior to test
  - TRR – 5 days after test asset delivery
  - Production Readiness Review (PRR) - 45 days after PPQT completion
  - System Verification Review (SVR) - concurrent with PRR
  - Functional Configuration Audit (FCA) – concurrent with PRR

- The Contractor shall provide evidence that all entrance criteria has been met. The technical reviews will not be considered complete until all exit criteria has been met.

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C.4 CONFIGURATION MANAGEMENT (CM). Contractor shall establish a CM program for Configuration identification, control, status accounting, verification, audit, and data management of the JAB System.

- Engineering Change Proposals provide detailed data, cost changes, and requirements changes. After CDR, provide notice of Class I ECPs
- As Built Configuration List (ABCL)
- Manage Data, control versions, provide documentation of company standards
- Interface Control Documents between Chassis/Launcher/Bridge

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• C.4.5 CONFIGURATION MANAGEMENT
  – The Contractor shall develop, deliver, manage and maintain the JAB TDP throughout the EMD phase.
  – The TDP delivered to the Government at the conclusion of PPQT shall reflect the as-built or assembled and tested baseline configuration, incorporating all approved changes to date.
  – The TDP delivered will be in Contractor format
  – The Contractor shall comply with DFARS data rights clauses
C.5 RELIABILITY

- Reliability Scorecard Self-Assessment
- Reliability and Maintainability (R&M) Program Management – to assess and influence the JAB design's ability to achieve the R&M requirements
- R&M Predictions – compare predictions to RAM requirements
- Design Failure Mode and Effect Analysis (DFMEA)
  DFMEA for launcher, launcher sub-systems, launcher to M1A1 hull interfaces, and launcher to MLC-85 AVLB interfaces

C.6 RISK MANAGEMENT

- Identify, monitor, and mitigate all program risks and track risk elements to completion/closure in a Risk Management Status Report. Resolved risks are closed only after Government approval.
• C.7 SAFETY

– System Safety Program Plan

– System Safety Program Progress Report
  • **Hazard Tracking System (HTS)** The Contractor shall develop and maintain a method or procedure to document and track hazards for identification until the hazard is eliminated or the associated risk is reduced to a level acceptable.

– **Safety Assessment Report (SAR)**
  The Contractor shall perform and document a safety and health hazard assessment and update the SAR to reflect changes. The SAR will identify/include hazardous and radioactive materials.
ENVIRONMENTAL
(Not all inclusive)

• C.7 ENVIRONMENTAL
  – Hazardous Materials Management Program (HMMP) Report. The Contractor shall prepare a HMMP Report which shall identify all hazardous materials required for system manufacture, assembly, operation and sustainment, including the parts/processes that require them.
  • The report shall include:
    – Listing of prioritized hazardous materials for minimization/elimination
    – Specify which phase (manufacture, operation, and/or sustainment) that each material is required for
WELDING
(Not all inclusive)

• C.8 WELDING

– Welding Procedures. The Contractor shall develop Procedure Qualification Records (PQRs) and Welding Procedure Specifications (WPS).

– Previously Qualified Procedures. Contractor shall submit a written request to the PCO prior to prototyping or build.

– Welding Repair Procedures. Contractor shall provide written repair procedure(s) identifying proper technique and approach.

– Weld Equipment and Certified Weld Inspectors. The Contractor shall ensure that all welding equipment have been certified and calibrated annually. Contractor shall verify weld quality and workmanship using qualified inspectors trained to perform these inspection functions.
• **C.9 INTEGRATED LOGISTICS SUPPORT**
  
  – Publications for Pre-Production Qualification Test (PPQT)
    • IAW tailored MIL-STD-40051-2
    • Publication for the full system
    • Complete, accurate, usable by Soldiers
  
  – Training for PPQT
    • 40 hours training at Army Test Center for qualified Abrams operators
    • Preventive Maintenance, operator training, training materials
  
  – Contractor Trainer Requirements for PPQT. Technically qualified/certified instructors.
    • Instructor's Training Course
    • Civilian certification program through public or private certification process
    • Contractor certification program that will be verified by the TACOM Training Manager

http://contracting.tacom.army.mil/majorsys/jab/jab.htm
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• **C.10 HUMAN FACTORS ENGINEERING (HFE)**
  
  – The Contractor shall assure that the system design is consistent with the capabilities and limitations of the fully equipped Soldier to operate, maintain, supply, and transport it in its operational environment, consistent with tactical requirements and logistical capabilities.

  – **Human Factors Engineering Analysis (HFEA).** The Contractor shall perform and deliver an HFEA.
    
    • Describe the status of the system’s HFE program
    • Contain adequate data to support the Contractor’s assertions
C.11 GOVERNMENT FURNISHED PROPERTY (GFP)

- GFP
  - M1A1 Abrams Chassis
  - MLC-85 AVLB
  - BII/COEI for each system

- The Contractor shall ensure they have trained and licensed Abrams chassis operators. The Contractor shall ensure they have operators that are qualified to operate the MLC-85 AVLB. (at time of chassis delivery)

- Government will provide technical support and supplemental operator training with operator training materials for Abrams Chassis.

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C.12 TEST AND INSPECTION

- Quality Program Plan – software and hardware
- Contractor shall conduct prototype inspection IAW ATPD 2402
- Government shall have access to Contractor facility to perform in-process inspection of prototype
- Contractor shall conduct PPUI IAW ATPD 2402
- The Contractor shall perform 100% final inspection of the end item in accordance with the requirements of ATPD 2402 utilizing the Government approved Final Inspection Record.
- Contractor shall provide certifications specified by ATPD 2402
• C.12.5 GOVERNMENT TEST OVERVIEW

– The Government will perform PPQT for no more than 180 days.

– Test support package for Launch Mechanism
  • Spares, Repair Parts, Special Tools, Basic Issue Items, Items with High Failure Rate and Long Lead Items
  • Contractor shall resupply items consumed during test to ensure test continuity

– Test Support Representative (on-call)
  • Response Time: 2 business days for major/critical failures; 3 business days for minor failures
  • Troubleshooting/correcting failures; coordinate vendors to fix failures; ship/track items for off post repairs

– Maintenance
  • Contractor shall perform all maintenance of the JAB Launcher System and Contractor modifications to the chassis
C.12.5 TEST DEFICIENCIES
(Not all inclusive)

• C.12.5.3 TEST DEFICIENCIES
  – Failure Analysis and Corrective Action Reporting System (FACARs)
    • Contractor shall assess the failure, and shall furnish a Failure Analysis and Corrective Action Report with the proposed corrective action
  – Retest
    • Government reserves the right to retest.
    • The Contractor shall be responsible for delays in the program test period resulting from JAB System component defects for failure to adequately or untimely furnish parts support, and the Government shall have the right to extend the specified program test period accordingly.
    • The Contractor shall continue to provide technical support for the extended test period.
12.5 SCORING CONFERENCES
(Not all inclusive)

• C.12.5.3.4 SCORING CONFERENCES
  – Scoring Conferences will be held to review and independently score Test Incident Reports (TIRs). The Contractor shall not attend.
  – Corrective Action Review Boards (CARB) meetings will be held to review the functional/performance failure data and corrective action status of TIRs. The Contractor shall attend.
  – After PPQT, the Government will conduct a Final Assessment Conference to review all TIRs, Scoring, and associated FACARs. The Government will provide the results of the Assessment Conference to the Contractor. The Contractor shall not attend.

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SMALL BUSINESS PARTICIPATION

Ronald Fiorani
TACOM LCMC
Office of Small Business

http://contracting.tacom.army.mil/majorsys/jab/jab.htm
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SMALL BUSINESS ACT

“It is the declared policy of the Congress that the Government should aid, counsel, assist, and protect, insofar as is possible, the interests of small business concerns in order to preserve free competitive enterprise [and] to maintain and strengthen the overall economy of the Nation.”

“It is the policy of the United States that small business concerns [of every socioeconomic category] shall have the maximum practicable opportunity to participate in the performance of contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems.”
### SMALL BUSINESS PARTICIPATION

#### TACOM LCMC Subcontracting Goals for FY 2011

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage of Total Subcontract Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Businesses</td>
<td>31.7%</td>
</tr>
<tr>
<td>Small Disadvantaged Businesses</td>
<td>5%</td>
</tr>
<tr>
<td>Woman-Owned Small Businesses</td>
<td>5%</td>
</tr>
<tr>
<td>HUBZone Small Businesses</td>
<td>3%</td>
</tr>
<tr>
<td>Veteran-Owned Small Businesses</td>
<td>3%</td>
</tr>
<tr>
<td>Service Disabled Veteran-Owned SBs</td>
<td>3%</td>
</tr>
</tbody>
</table>

#### Proposal Evaluation Considerations (Section M)

- Extent that the offeror’s proposed subcontracting goals correspond to the Government’s evaluation standards as stated in Section M
- Assessment of the probability that the offeror will achieve the levels of Small Business participation identified in its proposal based on evaluations of:
  - The offeror’s list of anticipated SB subcontractors, including clear-cut descriptions of what they would do and what they would likely earn under the prime contract
  - The offeror’s prior performance against its Government subcontracting goals

http://contracting.tacom.army.mil/majorsys/jab/jab.htm
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SMALL BUSINESS REFERENCES

• Confirm each anticipated SB subcontractor’s socioeconomic status by checking its Central Contractor Registry (CCR) entry at www.ccr.gov

• Locate prospective small business sources by way of:
  – Available Subcontractor List at the TACOM LCMC Small Business Website
    • http://contracting.tacom.army.mil/sbo/sbo.htm
  – Central Contractor Registry (CCR) Website
    • www.ccr.gov
  – SBA’s Dynamic Small Business Search (DSBS) Website
    • http://dsbs.sba.gov/dsbs/search/dsp_dsbs.cfm
  – National Network of Procurement Technical Assistance Centers (PTACs)
    • www.aptac-us.org
  – Federal Business Opportunities (FedBizOpps) Website - for SB award recipients, SB events
    • www.fbo.gov