Program Manager
Armor & Fire Support Systems

Advanced Planning Briefing to Industry
30-April – 2 May 2012
Program Manager: Colonel Joe Shrader
Deputy Program Manager: Mr. Dominic Foster

Tier-1 IPTs

Product Manager, Fire Support Systems: Mr. Keith Davis
Product Manager, Tank Systems: Lieutenant Colonel John Smith

Assistant Program Managers

Contracts Manager: Ms. Dorinne Rivoal
Lead Engineer: Mr. Craig Melton
Lead Financial Manager: Mr. Jeffrey Speer
Lead Logistician: Mr. Jeffrey Gibbs
Program Management: Mr. Jeffrey Speer (Acting)
FYDP Focus of Effort:
Reset, Sustain, and Enhance
Armor and Fire Support Systems

- **M1A1 Tank**
  - Abrams suspension upgrade
  - Stabilized Commander’s Weapon System
  - Improved Loader’s Weapon Station
  - Ammunition compartment safety
  - Integrated display and targeting

- **HIMARS**
  - Fire control system upgrade
  - Maintain rocket inventory

- **EFSS**
  - Complete fielding and establish logistics /maintenance infrastructure
  - Develop precision and extended range suite of ammunition

- **Assume management of USMC M777A2 (LW155)**

- **Target Acquisition**
  - GCFS Net-ready
  - Improve Laser targeting capability
  - Improve Survey/Met capability

- **AVLB hydraulic electrical system**

- **SLEP**
Abrams Suspension Upgrade (ASU)

**Description:**
- Provides improved gross vehicle suspension weight capacity to 77 tons.
- Provides decreased shock to internal LRU tank components and extends their service life.
- Improves mobility performance of the vehicle.
- Improves maintainability and reliability of the suspension system.

**Status**
- Proof of Principle field installations complete
- ASU being installed on Rebuild Line
- Preparing for Super Mod Line Start

**Schedule**
- ASU cut into Rebuild Line Jul 10
- ANAD Super Mod Line Start Aug 12

**Fielding Plan**
- ASU fielding will be conducted thru the normal tank rotation process.
- Tanks are currently receiving ASU on the rebuild line.
- Tanks rotating off of MPF will receive ASU at ANAD (super mod line) prior to moving to the fleet.
Stabilized Commander’s Weapon Station (SCWS)

Description:

- SCWS is an upgrade to the current CWS that provides weapon stabilization in azimuth and elevation, while also providing a permanent mounting location for the BFT.

Fielding Plan:

- SCWS installs will be cut into the production line and super mod line summer FY 2012. Field installs will be conducted across all CONUS units using a GDLS fielding team, commencing in July 2012.

Cost to Complete

- $1.8M for installs

Status:

- Currently in Full Rate Production
- Receiving Deliveries
- Preparing for Fielding to Operating Forces
**Improved Loader’s Weapon Station (ILWS)**

**Description:**
Upgrade to current Loader’s Weapon Station that allows the loader to remotely engage targets under armor.

Key elements include:
- Thermal Sight (640 x 480)
- Integrated Display Control Module
- Color Day TV Sight

**Status**

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Key tested features:
- 600 ammo rd max ammo capacity
- 1x, 2x, 4x zooms
- Sectors of fire: 7 – 12 o’clock
- Accuracy vs. 2m x 3m tgt: 250m (100%)
  500m (100%)
  800m (77%)
- Image pumped to TC’s .50 cal DCM

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Improved Turret Ammo Rack

**Description:**
- 36 Rounds in Turret/24 Tubes for HE Rounds
- Extended protection for longer HE Rounds
- Racks alone increase tank weight by 182 lbs
- Titanium Blowoff Panels result in no tank weight change
- Gen III Racks can be upgraded (77 of 400 tanks)
  - All other tanks will require new racks

**Status:**
- U. S. Army modification work order
- Acquisition Strategy in development
- Determining procurement options for titanium blowoff panels

**Safety Improvements:**
- Tube coating/ Grounding straps dissipate static electricity
- New Round Stopper adhesive prevents stuck rounds

**Fielding Plan:**
- 10 year program if applied solely during rebuild
- Begin during FY14 Rebuild Production
**Abrams Integrated Display and Targeting System (AIDATS)**

**Description:**
- The AIDATS program is designed to reduce the number of displays in the TC’s position, decrease the TC’s workload, and improve the capability of the SCWS.
- This system is made up of three principle components: a multi-function display, a high resolution color day camera, and an improved Thermal Sight Module (TSM).
- AIDATS will combine the functionality of the BFT display and DCM into a single screen
- Current day camera and TSM will be replaced with improved versions that will double current performance.

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<td>• Executing NVL Prototyping Effort</td>
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<td>• Building performance specification</td>
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<td>• Procurement Contract Award 2nd Qtr 15</td>
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<td>• Fielding Begins 1st Qtr 16</td>
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**Armored Vehicle Launched Bridge (AVLB)**

**Description:**
- Designated Abbreviated Acquisition Program
- Provides the MAGTF’s only assault gap crossing capability.
- Bridge upgraded to an MLC 70 in the 1990s
- Was expected to be replaced by the Joint Assault Bridge
- Modification is an obsolescence mitigation issue
- Modern electrical harnesses
- Modern, supportable hydraulic system
- Depot level modification which has to be done in conjunction with overhaul or IROAN

**Milestones and Key Events**
- Program designation                  Apr 2012
- IROAN proof of principle (MCLB Albany)     Sept 2012
- First complete rebuilds             Aug 2012
- MS C and Fielding Decision            Dec 2012
- Initial Operational Capability (IOC)    Jan 2013
- Full Operational Capability          Jul 2015

**Delivery Schedule**

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To be accomplished through a combination of scheduled IROANs supplemented by out-of-cycle Depot Rebuilds

Total AAO: 30

Bridges themselves planned to be hosted on the JAB

**Cost to Complete**
- $21M
The HIMARS is a C-130 transportable, wheeled, indirect fire, rocket / missile system capable of firing all rockets / missiles in the current and future Multiple Launch Rocket System Family of Munitions (MFOM). HIMARS provides the Fleet Marine Force with 24 hour, all weather, ground-based, responsive General Support / General Support Reinforcing (GS/GSR) fires.

As a result of the 2010 Force Structure Review Group the Approved Acquisition Objective (AAO) for Marine Corps HIMARS was increased from 46 HIMARS to 52 HIMARS, therefore the Marine Corps has a requirement for 6 additional HIMARS launchers, associated Re-Supply Systems, and ancillary equipment.

**Schedule**

- GMLRS contract award – 3rd Qtr FY12
- Fielding of Quebec Battery – 4th Qtr FY13
- GMLRS AWP contract award – 3rd Qtr FY15

**Budget**

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Expeditionary Fire Support System (EFSS)

Description
The Expeditionary Fire Support System (EFSS) is a fire support system that is designated to accompany the MAGTF in any expeditionary mode of operations. It is the primary indirect fire support system for the vertical assault element of the ship-to-objective maneuver (STOM) force.

Schedule
- Fielding to 10th Marines – 3rd Qtr FY12
- Fielding to 12th Marines – 4th Qtr FY12
- Fielding to 31st MEU – 3rd Qtr FY12
- Fielding to Ft. Sill – 4th Qtr FY12
- Fielding to 11th Marines – 4th Qtr FY13
- Fielding to DMFA Quantities – 4th Qtr FY13

Budget

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* Includes PERM funding
Precision Extended Range Munition (PERM)

**Description**

- PERM is a 120mm mortar round consisting of a tail charge assembly, rocket motor, warhead, and fuze; PERM will also include a guidance system.
- Designed to be fired from the EFSS 120mm RTM
  - Range: 16 (T) km; 20 (O) km
  - Accuracy: CEP <20 (T) m; CEP <10 (O) m
  - Lethality: PERM NLT 80% of current HE round (T); same as current HE round (O)
- Full Rate Production Decision: 1st Qtr FY17

**Schedule**

- E&MD RFP Released – 1st Qtr FY12
- E&MD contract award – 4th Qtr FY12
- E&MD Demo begins – 4th Qtr FY14
- MS C – 4th Qtr FY15
- Production RFP Release – 4th Qtr FY15
- Production contract award – 2nd Qtr FY16
- FRP Decision – 2nd Qtr FY17

**Budget**

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High Explosive Rocket Assisted Projectile (HE RAP)

Description
- HE RAP is a 120mm mortar round consisting of a tail charge assembly, rocket motor, warhead, and fuze.
- Designed to be fired from the EFSS 120mm RTM
  - Range: 12 km
  - Accuracy: HE RAP same as current HE round
  - Lethality: HE RAP same as current HE round
- Full Rate Production Decision: 3rd Qtr FY14

Schedule
- MS C – 3rd Qtr FY13
- Receipt of 310 test articles – 2nd Qtr FY13
- FRP Decision – 1st Qtr FY15

Budget

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Total: 0.0
Ground Counter Fire Sensor (GCFS)

**Description**

The Ground Counter Fire Sensor (GCFS) is an acoustic weapons locating system that provides the Marine Corps all-weather, 24-hour passive indirect fire (IDF) weapons location capability. The GCFS can be used as a stand alone system to provide enemy weapons locations or in coordination with other IDF detection assets to collaborate detection information as a cueing agent. The GCFS also provides intelligence to supported units by providing the location of acoustic events such as Improvised Explosive Devices (IED).

**Schedule**

- Acoustic Detection Accuracy Testing: June-September 2012
- Conduct Modernization to maintain ATO: June 2012

**Funding**

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*GCFS procurement was funded with OCO PMC in 2005

GCFS modernization effort consisting of OS migration and integration with Marine Corps Common Hardware Suite (MCHS) hardware *only* is funded from the FS Mods Line.
Common Laser Range Finder-Integrated Capability (CLRF-IC)

Description
CLRF IC is a replacement to the existing CLRF Suite of Equipment. The CLRF IC will assist the operator with target/object detection, recognition, identification, and will determine accurate target/object location. Change 1 to the AEROS ORD directed replacement of the current CLRF system with 2 variants: *light* and *medium*. Both systems will significantly reduce the overall carrying weight of the current system while improving accuracy along with providing a night target recognition capability. The anticipated AAO is currently 1757 CLRF IC *Light* systems and 586 CLRF IC *Medium* systems. Currently funding only exists for the Light variant, the schedule and funding profile below reflect the effort to procure only this variant.

Schedule

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Funding

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JTAC Laser Target Designator

Description

JTAC LTD is a lightweight, easily portable system that will provide Forward Air Controllers (FAC), JTACs, and reconnaissance teams the ability to hand off targets via laser designation when troops are in contact and during routine patrols. The JTAC LTD can be used for terminal guidance of Laser Guided Munitions, reducing likelihood of collateral damage. The JTAC LTD weighs approximately 4.5 lbs and is capable of being stored in a utility pouch worn on the standard Marine Tactical Vest.

Schedule

IOC: November 2011
FOC: May 30, 2012

Funding

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Procurement funding was $13,200,000 FY09 OCO PMC
Sustainment funding is provided through the FS Mods line.
Laser Target Designator (LTD)

**Description**

The LTD consists of the Portable Lightweight Designator Rangefinder (PLDR) and the Thermal Laser Spot Imager (TLSI). PLDR is used to designate targets for Laser Spot Trackers (LSTs) and laser guided munitions. TLSI is a thermal sight, that when bore sighted to PLDR provides operators a 24 hour targeting capability, and allows operators to view the laser spot created by the PLDR.

**Schedule**

Sustainment only since October 2009

**Funding**

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Currently there are no fiscal obligations or expenditures occurring for the LTD.

LTD sustainment is funded from the FS Mods Line.
Modeled Meteorological Information Manager (MMIM)

**Description**

MMIM will provide the capability to create, receive, manage, and transmit meteorological information supporting artillery and target acquisition systems. It will be the primary artillery meteorological capability at the artillery battalion and regiment providing near real time meteorological information. MMIM will replace the AN/TMQ-41 Meteorological Station Group eliminating the requirement for 63 HMMW’s & 21 Generators resulting in significant savings in fuel and Operations & Maintenance costs.

**Schedule**

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Global Positioning System-Survey (GPS-S)

Description

GPS-S provides sub-centimeter, geodetic level survey accuracy allowing the creation of a high order network of Survey Control Points in terrain inaccessible to IPADS.

The GPS-S Replacement will address obsolescence issues, comply with Selective Availability Anti-Spoofing Module requirements, and provide Marine Artillery Sensor Sections with an enhanced man-portable capability to provide survey support.

Schedule

- **Milestone B**: January 3, 2012
- **Contract Award**: June 29, 2012
- **FUE**: April 2, 2013
- **Milestone C/LRIP**: May 21, 2013
- **IOC**: October 1, 2013
- **FOC**: June 30, 2014

Funding

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*GPS-S Replacement procurement is funded with OCO PMC

Initial Spares for GPS-S Replacement are funded from the FS Mods Line PMC
## MARINE CORPS SYSTEMS COMMAND
### PROGRAM EXECUTIVE OFFICER LAND SYSTEMS

### FYDP Investments

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<th>Weapon Systems</th>
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### Specific Projects
- **HIMARS Fire Control Upgrade Dev**
- **HIMARS GMLRS (Unitary and AWP) Proc**
- **PERM Dev Proc**
- **GCFS Net-Ready Dev Proc & Fielding**
- **CLRF IC Dev CLRF IC Proc**
- **GPS-S Proc**
- **Abrams Suspension Upgrade**
- **Stabilized Commander's Weapon Station**
- **AVLB Hydraulic Electric Upgrade**
- **Abrams Integrated Display and Targeting System**
- **Ammunition Compartment Safety Upgrade**
Opportunities

- Precision Extended Range Munition (PERM)
- Common Laser Range Finder – IC (CLRF – IC)
- Abrams Integrated Display & Targeting System
- Enduring / Unsolicited
  - Decrease fuel and power consumption
  - Lightening the load
  - Increase maintenance and sustainment efficiency
  - Cost reduction initiatives