Combat Equipment & Support Systems
Product Group 16

Overview

Colonel Shawn Reinwald, Product Group Director
Product Group 16
Combat Equipment & Support Systems

Acquire and manage the life cycle of the combat equipment and support systems that optimize the individual Marine’s ability to survive and sustain himself on the battlefield and look good doing it.

- Automatic Test Equipment
- General Purpose Tools & Test Sets
- Visual Information Systems
- Vehicle Diagnostic & Reporting Sys
- Combat, Service, & Dress Clothing
- Field Food Service Equipment
- Infantry Combat Equipment
- Tents and Shelters
- CBRN Incident Response
- CBRN Individual Protective Equip
- General Purpose Support Equip
- Medical Equipment

Abbreviated acquisition cycle of most systems demands immediate solutions; many times from readily available commercial sources.
Product Group 16 Principals:

Program Managers

PM TMDE:  \text{LtCol (s) Charles Parton} (703) 432-3235
PM ICE:  \text{Mr. Dan Fitzgerald} (703) 432-3334
PM CBRNE:  \text{Mr. Jim Nelson} (703) 432-3194

Strategic Business Team (SBT)

- Lead Financial Mgr:  \text{Ms. Sherry Davis}
- Lead Engineer:  \text{Ms. Susan Torfin}
- Lead Logistician:  \text{Mr. Charles Hall}
- Operations Mgr:  \text{Ms Jean Klinger}
Product Group Total Funding: $200M Annual Program Funding
Supplemental GWOT Funding: As Required

<table>
<thead>
<tr>
<th>Appropriations</th>
<th>FY 06</th>
<th>FY 06 Supplemental</th>
<th>FY 07</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDT&amp;E</td>
<td>$20.7M</td>
<td>$0</td>
<td>$20.3M</td>
</tr>
<tr>
<td>O&amp;MMC</td>
<td>$108M</td>
<td>$644M</td>
<td>$101.4M</td>
</tr>
<tr>
<td>PMC</td>
<td>$50M</td>
<td>$285.5M</td>
<td>$150M</td>
</tr>
</tbody>
</table>
Product Group 16
Combat Equipment & Support Systems

PM 161
TMDE
LtCol (s) Parton

PM 162
ICE
Mr. Dan Fitzgerald

PM 163
CBRN
Mr. Jim Nelson

Strategic Business Team

PG 16
CESS
Col Shawn Reinwald
Product Group 16
Combat Equipment & Support Systems

• Excellence & Performance over Meeting Specifications
• Spiral Development to remain current
• Encourage competition, reward commitment to excellence
• Transition from “items” to “integrated systems”
• Eliminate the legacy or redundant systems
Closing Remarks

• Program Manager for Infantry Combat Equipment
• Program Manager for Chemical, Biological, Radiological, and Nuclear Systems
• Program Manager for Test, Measurement, and Diagnostic Equipment
Introduce the next Program Manager:

Mr. James Nelson Chemical, Biological, Radiological, and Nuclear (CBRN) Systems
Combat Equipment & Support Systems
Product Group 16
Chemical, Biological, Radiological, and Nuclear (CBRN) Systems

Mr. Jim Nelson - Program Manager
Description: The PM CBRN Systems portfolio contains programs supporting Family of Field Medical Equipment (FFME), Family of Tactical Soft Shelters (FTSS), Family of Incident Response Systems (FIRS), and the Strategic Logistics Asset Management (SLAM) Initiative, and participation in all Joint CBRN Defense programs associated with the Joint Program Executive Office for Chemical Biological Defense.

- Family of Field Medical Equipment (FFME) - Responsible for the life cycle management of all medical systems. FFME develops and fields every medical system ensuring that the system is safe, battle tested, deployable and that proper personnel are trained in order to address the urgent medical needs of the warfighter in the field.

  – The Medical Team depends on industry to point us towards the most advanced medical enhancements that are safe and ideal for field use so we can continue to save the lives of our Marines and Sailors in harm's way.
• Family of Tactical Soft Shelters (FTSS) – Provides materiel solutions (including rigid wall shelters, soft wall shelters, collective protection, camouflage and respective supporting equipment) to protect the operating forces from observation, environments and combat hazards.

  – The FTSS Team will leverage industry through GSA and DLA to evaluate commercially available tent systems with advanced technologies that can provide a more expeditionary, quick erect and rapid deploying shelter systems.
• Family of Incident Response Systems (FIRS) – Extensive market research is conducted to identify potential manufacturers who have a proven product that will satisfy the FIRS equipment requirements for full and open competition.

– Relies primarily on COTS/NDI equipment and systems that meet the particular mission requirements of Consequence Management.

– Mission Area requirements include: CBRNE Reconnaissance, Decontamination, Force Protection, Search and Rescue, General Support, C4I2, and Medical.
• Strategic Logistics Asset Management (SLAM) Initiative - Established to “Set the Force” for future Chem-Bio threats by upgrading CBRN equipment management and to improve equipment readiness for the Marine Corps Operating Forces.

  – This initiative includes central asset visibility, automated shelf life management, equipment storage and warehousing using Automated Identification Technology (AIT).
## PM Chemical, Biological, Radiological, and Nuclear (CBRN) Systems

Mr. Jim Nelson

<table>
<thead>
<tr>
<th>Appropriations</th>
<th>FY 06</th>
<th>FY 06 Proposed Supplemental Funding</th>
<th>FY 07</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDT&amp;E</td>
<td>$10,345</td>
<td>0</td>
<td>$6,718</td>
</tr>
<tr>
<td>O&amp;MMC</td>
<td>$54,609</td>
<td>$200,270</td>
<td>$57,698</td>
</tr>
<tr>
<td>PMC</td>
<td>$7,491</td>
<td>$8,500</td>
<td>$5,134</td>
</tr>
</tbody>
</table>
Near-Term Program Initiatives

• FFME
  – Forward Resuscitative Surgery System (FRSS)
  – En Route Care System (ERCS)
• FTSS - Marine Corps Expeditionary Soft Shelter System (MCESSS)
  – R&D FY06
  – Proc FY06-13
• FIRS
  – Technologies that detect, identify, and quantify hazards at both acute and lethal exposure limits are mission essential. The enhanced capabilities embedded in this task encompasses the ability to detect (point and stand-off), identify, catalog, assess, and monitor.
  – Technologies required to neutralize or remove hazardous materials including CWAs, TICs, TIMs, BWAs, and radiological contamination with minimal impact on the environment.
• SLAM
  – Transition day-to-day management to MarCorLogCom.
  – Continue to improve equipment readiness and asset visibility.
Future Program Initiatives

- **FFME**
  - Selection of COTS solutions
  - Modernize existing 4 Authorized Medical Allowance Lists (AMAL) sets
- **FTSS**
  - Replace current Modular General Purpose Tent System (MGPTS)
  - Replace Modular Command Post System (MCPS)
  - Add Large Command Post Shelter
- **FIRS**
  - Improve filter capability for CWA and TIC/TIM
  - Improve drinking tube capability for all face blanks
  - Capability for detecting victims through rubble/walls
- **SLAM**
  - Facilitate centralized management of other individual type equipment, shelters, and specialized training equipment.
Near and Future Joint Program Initiatives

- PM, CBRN Systems

Continued Marine Corps Interface with the JPEO and other JPMs

- Masks
- Suits
- Boot
- Glove
- Decon
- CP
- CB Medical
- Bio Defense
- CB Battle Mgmt
Open Discussion Topics

• Life cycle management solutions

• Advanced medical enhancements

• Materiel solutions (shelters)

• Detection capabilities

• Asset visibility
Introduce the next Program Manager

Mr. Fitzgerald, Program Manager
Combat Equipment and Support Systems
Product Group 16
Infantry Combat Equipment

Mr. Fitzgerald, Program Manager
Mission: Research, develop, and procure clothing, individual and organizational equipment to improve survivability, mobility, sustainability, and quality of life for the individual Marine. 

Portfolio Description: Uniform clothing items; individual body armor; load carriage systems; mountain and cold weather equipment; and field food service systems.

Why are we soliciting help from industry: To improve our items through a combination of emerging technologies and commercial off-the-shelf solutions.
### Appropriations

<table>
<thead>
<tr>
<th></th>
<th>FY 06</th>
<th>FY 06 Supplemental</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDT&amp;E</td>
<td>$5,798,128</td>
<td>0</td>
</tr>
<tr>
<td>O&amp;MMC/O&amp;MMCR</td>
<td>$61,778,534</td>
<td>$136,947,763*</td>
</tr>
<tr>
<td>PMC</td>
<td>$8,953,000</td>
<td>0</td>
</tr>
</tbody>
</table>

*Additional supplemental funding is anticipated during the May/June timeframe.*
Near-Term Program Initiatives

- Flame retardant materials and treatments – Defeat flash burn injuries from IEDs. Undergarments, uniform items, and individual armor systems.
- Individual Armor Integration
  - Headborne Systems
  - Body armor and load carriage integration/improvements
    - Improved vest closure design
    - Quick release/cut-away capability
    - Increased area of coverage
    - Improved side-SAPI integration
    - Plate adjustment capability
    - Wiring integration for routing radio cables
Future Program Initiatives

- Ballistic Protection – Spiral development effort to leverage:
  - Lighter, stronger, more flexible body armor
  - Redesigned shell that allows for assault load carriage on the vest
  - Better load distribution over the torso
- Mountain and Cold Weather Equipment – Improvements sought to leverage the generational leap in technologies for mountain and cold weather equipment.
Open Discussion Topics:

Rapid Fielding

Spiral Development

Teaming
Introduce the next Program Manager

Major Charles Parton
Combat Equipment & Support Systems

Product Group 16

Test, Measurement & Diagnostic Equipment (TMDE)

Visual Information Systems (VIS)

Major Charles Parton - Program Manager
Description: The PM TMDE-VIS portfolio contains Visual Information Systems, Calibrations Facilities, and Autonomic Logistics.

• **Visual Information Systems** – is interested in potential convergence of acquisition and transmission technologies to more easily and economically acquire, edit and transmit information and imagery -- locally, regionally and globally. FY06 and beyond (driven by technology obsolescence).

• **Calibrations Facilities** – through non-developmental efforts, integrate and configure COTS calibration standards and multifunction workstations to support 26 measurement area parameters. FY06 – FY12.

• **Autonomic Logistics (AL)** - including the Electronic Maintenance Support System (EMSS), is looking to industry to implement an AL capability on selected systems/platforms and to procure a portable, ruggedized multi-functional electronic test and diagnostic device. FY06 - FY15.
**Visual Information Systems**

<table>
<thead>
<tr>
<th>Appropriations</th>
<th>FY 06</th>
<th>FY 06 Supplemental</th>
<th>FY 07</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDT&amp;E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O&amp;MMC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PMC</td>
<td>$1.5M</td>
<td>$2.3M</td>
<td>$3.5M</td>
</tr>
</tbody>
</table>
## Calibration Facility

<table>
<thead>
<tr>
<th>Appropriations</th>
<th>FY 06</th>
<th>FY 06 Supplemental</th>
<th>FY 07</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDT&amp;E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O&amp;MMC</td>
<td>$2.0M</td>
<td>$200K</td>
<td></td>
</tr>
<tr>
<td>PMC</td>
<td>$9.6M</td>
<td>$1.9M</td>
<td></td>
</tr>
</tbody>
</table>
### Autonomic Logistics/EMSS

<table>
<thead>
<tr>
<th>Appropriations</th>
<th>FY 06</th>
<th>FY 06 Supplemental</th>
<th>FY 07</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDT&amp;E</td>
<td>$2.7M</td>
<td></td>
<td>$9M</td>
</tr>
<tr>
<td>O&amp;MMC</td>
<td></td>
<td>$9.4M</td>
<td></td>
</tr>
<tr>
<td>PMC</td>
<td></td>
<td>$124M</td>
<td>$6M</td>
</tr>
</tbody>
</table>
Near-Term Program Initiatives

- **Visual Information Systems**
  - FY07 - Adoption of Digital Video Information Distribution System (DVIDS) as baseline for Public Affairs information distribution capability (Mobile Information Bureau [MIB])

- **Calibrations**
  - FY06 Integration of one downsized and improved Calibration Facility
  - FY08 Upgrade existing workstations in the remaining 10 calibration facilities

- **Autonomic Logistics/EMSS**
  - Enable LAV/MTVR/M1A1/AAV to be AL ready
    - 3Q/06 - RFP
  - Based on emerging joint requirements, develop and field a Portable Maintenance Aid (PMA) to support USMC Ground Maintenance needs
    - 3Q/06 - RFP
  - Establish EMSS as POR in POM 08
Future Program Initiatives

- **R&D Investment**
  - 2Q/08 - AL Data integration into GCCS/GCSS
  - 2Q/08 - Develop technologies to expand EMSS capabilities

- **PMC Investment**
  - 4Q/08 - Procure remaining AL production units
  - 4Q/09 - Begin EMSS refresh development
  - 2Q/10 - Procure 10 calibration facilities

- **O&MMC Investment**
  - 4Q/08 - Support all fielded systems
Open Discussion Topics

- *Improved imagery storage and transmission technologies and techniques*
- *Compression/Decompression of imagery files*

- *Emergent COTS technologies in multifunction calibration standards and test equipment*
- *Innovation in deployable shelter designs*

- *Industry trends in Autonomic Logistics and Portable Maintenance Devices*
- *Technology migration strategies*
Questions ?