



MARINE CORPS SYSTEMS COMMAND

Combat Equipment & Support Systems (CESS)
Program Manager, Infantry Combat Equipment



Flame Resistant Organizational Gear (FROG)



Combat, Cold Weather and Dress Clothing Team
Infantry Combat Equipment, Marine Corps Systems Command
PMICE@usmc.mil



MARINE CORPS SYSTEMS COMMAND

**Combat Equipment & Support Systems (CESS)
Program Manager, Infantry Combat Equipment**





MARINE CORPS SYSTEMS COMMAND

Combat Equipment & Support Systems (CESS)
Program Manager, Infantry Combat Equipment



Video

http://www.youtube.com/watch?v=XXX_yIPvotc&feature=fvsr



MARINE CORPS SYSTEMS COMMAND

Combat Equipment & Support Systems (CESS)
Program Manager, Infantry Combat Equipment



Flame Resistant Organizational Gear (FROG)





MARINE CORPS SYSTEMS COMMAND

Combat Equipment & Support Systems (CESS)
Program Manager, Infantry Combat Equipment



Current OPS

- **Afghanistan**

- January 2009 (276 IEDs) 14 killed, 64 injured
- January 2010 (727 IEDs) 31 killed, 137 injured

- **Conditions**

- Terrain (austere environment)
- Lack of laundering/limited support/services infrastructure on FOBs
- Marines often lose footing resulting in more tears, and constant wetness/sweat while patrolling through poppy fields contributing to fabric breakdown.



MARINE CORPS SYSTEMS COMMAND

Combat Equipment & Support Systems (CESS)
Program Manager, Infantry Combat Equipment



Flame Resistant Organizational Gear (FROG)

Description

- FROG provides increased protection against flash/flame exposure.
- FROG I – Base Layers: balaclava, gloves, long sleeve t-shirt.
- FROG II – Outer Layers: FR combat ensemble and Inclement Weather Combat Shirt (IWCS).



1 ea. light weight
1 ea. mid weight



2 per



3 per



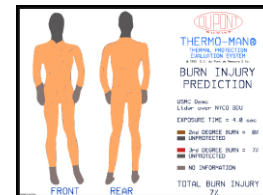
4 per



1 per

Future Acquisition Strategy

- R&D on fabrics/designs.
- Lab tests, including Pyroman testing
- Items selected will offer optimal level of protection, comfort and **durability**.



Fielding

- OCO Annual Requirement – 100,450 sets/year
- Baseline Requirement – 15,000 sets/year
 - Six MEU's at 2,500 per MEU

Sustainment Concept

- PM ICE will POM for and provide sustainment for FROG for the foreseeable future. We will improve our present system from user feedback, lessons learned and technological advancements.



MARINE CORPS SYSTEMS COMMAND

**Combat Equipment & Support Systems (CESS)
Program Manager, Infantry Combat Equipment**



FROG Short Term

- Quantities depend on forces in theater and replenishment demand
- Improved FR protection, durability, comfort and design
- RFI fabric results (prioritized efforts)
- Combat shirt and trouser (Improved FR, durability and permethrin)
- Gloves (water repellent, quick drying, improved tactility)



MARINE CORPS SYSTEMS COMMAND

Combat Equipment & Support Systems (CESS)
Program Manager, Infantry Combat Equipment



FROG Long Term

- FR material with same/similar attributes as non-FR materials (cost, comfort, and durability); incorporated into all uniforms
- Improved durability in all FR components
- Thermal protection in several FR components for colder climates
- Weather (moisture) protection in FR outer layers
- Improved anti-microbial protection in all FR components



MARINE CORPS SYSTEMS COMMAND

Combat Equipment & Support Systems (CESS)
Program Manager, Infantry Combat Equipment



FROG Future R&D Efforts

Current SBIR effort - to develop a nonwoven FROG fabric

- Better FR performance
- Better comfort (i.e. air perm, MVTR)
- Better durability (i.e. wash, abrasion)



MARINE CORPS SYSTEMS COMMAND

Combat Equipment & Support Systems (CESS)
Program Manager, Infantry Combat Equipment



PM ICE Website

<http://www.marcorsyscom.usmc.mil/sites/pmice/>



MARINE CORPS SYSTEMS COMMAND

Combat Equipment & Support Systems (CESS)
Program Manager, Infantry Combat Equipment



PROGRAM MANAGER INFANTRY COMBAT EQUIPMENT FIELDS, SUSTAINS, AND ASSESSES CLOTHING AND EQUIPMENT WHILE ANTICIPATING THE NEEDS OF AND MAINTAINING CONTACT WITH THE OPERATING FORCES IN ORDER TO ENHANCE THE PERFORMANCE, CAPABILITY, SURVIVABILITY, MOBILITY, AND SUSTAINABILITY OF MARINES.

[HOME](#) | [ARMOR & LOAD BEARING EQUIPMENT](#) | [COMBAT & DRESS CLOTHING](#) | [SUPPORT EQUIPMENT](#) | [OPERATIONS](#)
| [EQUIPMENT COMING SOON](#) | [INDUSTRY INFORMATION](#) | [LINKS](#) | [NEW EQUIPMENT TRAINING TEAM](#) | [POINTS OF CONTACT](#)

ITEMS OF INTEREST:

[MTV TRAINING GUIDES: PERIOD OF INSTRUCTION](#) | [INSTRUCTION CARD](#) | [COMMERCIAL MANUAL](#) | [REQUEST TRAINING](#) | [COMPONENT LIST](#)
| [REFERENCE INFORMATION](#) | [MARINE ENHANCEMENT PROGRAM](#) | [STAP CATALOG](#) (ITEMS IN RED FONT ARE OBSOLETE) | [BATTLEBOOK](#) | [TRIFOLD](#)