



MARINE CORPS SYSTEMS COMMAND

EQUIPPING THE WARFIGHTER TO WIN



Helmets and Accessories



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Enhanced Combat Helmet (ECH)



Program Description

PM ICE received a USON on 2 Mar 2009 to produce a helmet with enhanced ballistic protection from selected small arms ammunition and fragmentation, yet maintain all other characteristics of the Light Weight Helmet (LWH)/Advanced Combat Helmet (ACH).

The ECH is a protective helmet consisting of a ballistic protective shell, pad suspension system, and 4-point chinstrap/nape strap retention system. The ECH is compatible with, and is typically worn in conjunction with other components of infantry combat equipment such as Body Armor Systems, protective eyewear, night vision equipment, and a camouflage fabric helmet cover.

Requirements

Urgent Statement of Need (USON) dtd 2 Mar 09	
2 MEB and 2 MEU	35,000
Tariff/spares 10%	3,500
TOTAL	38,500
Army Requirements Memorandum dtd 20 Mar 09	
TOTAL	200,000
Navy Requirement Memorandum dtd 16 Feb 10	
TOTAL	6,700
GRAND TOTAL	245,200

Current Status

- 23 Dec 10 - MS C decision
- 7 Feb 11 - 28 Feb 11 - FAT
- Apr 11- Program will be re-baselined (schedule)
- 1 Jun - 31 July - Proposed FAT II
- Sep 11 - Full Rate Production Decision



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Simple Facts about ECH

- The ECH is only for those units deploying into overseas contingency operations
- The ECH is not a replacement for the LWH or ACH

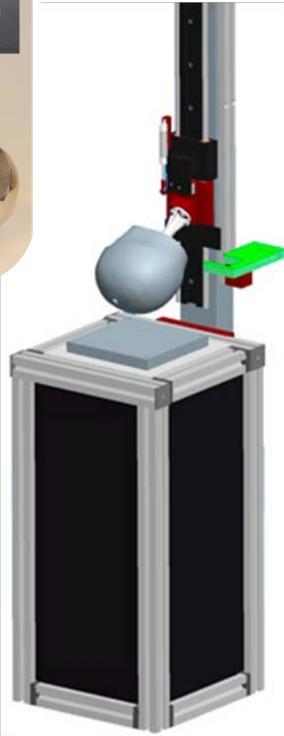
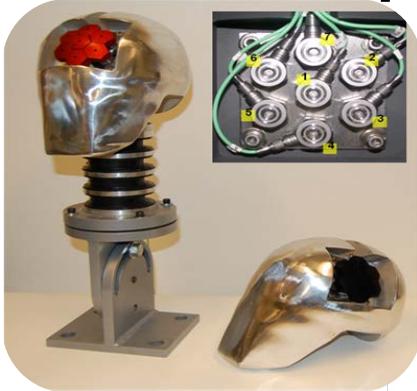


Next Generation Helmet

- NG Helmet will be made of UHMWPE but shaped to optimize ballistic protection, coverage, integrate with suspension system/retention system, provide rail mounting, and permanently mounted NVG bracket.
- Same weight or less than ECH
- Boltless design
- Better blunt trauma and blast protection through improved suspension system
- Integrated/Detachable Face shield
- Integrated/Detachable Mandible protection
- Reduced cost



Suspension Material and Retention Technology Test and Evaluation (SMART-TE)



R&D effort to establish test protocols and evaluate performance metrics of suspensions systems within the commercial industry, with respect to blunt impact, ballistic, blast protection, stability and comfort.

Program is working to provide performance and human factors improvements over existing retention and suspension systems. John Hopkins University Applied Physics Lab (JHU/APL) is the independent technical agent tasked with testing and evaluating these novel solutions.

Phase 1 (Completed 4Q FY10):

- Developing a methodology to test and evaluate all suspension and retentions systems available.

Phase 2 (Completed 1Q FY11):

- Establish the SMART-TE performance baseline using the ACH and current Team Wendy 7 pad suspension system and H-back retention system.

Phase 3 (Current Phase):

- Select production ready industry designs in a full and open competition
- Compare them against updated test protocols
- Evaluate them against performance baseline

Data comparing each industry partner's results to the performance baseline (SMART-TE) will be used to assist CD&I and the acquisition community in developing a strategy for potential adoption of alternate suspension and retention systems for use in existing, planned, or future USMC helmet system.



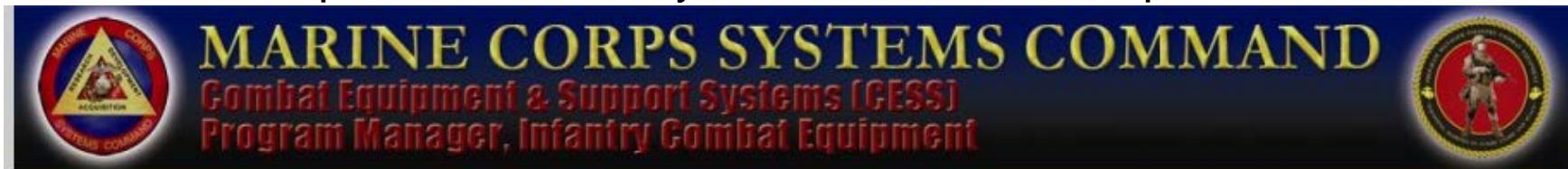
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PM ICE Website

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



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