Program Manager
Infantry Combat Combat Equipment

JAPBI

6 Nov 19
Areas Where Industry Can Help

- Lighter & flexible body armor/plates
- Integrated helmet solution
  - Improved suspension system for helmets
  - Hearing protection/enhancement
- Extreme cold weather improvements
- Flame resistant fabrics
- SWIR mitigation
- Maternity uniform improvements
- Sensors - biometrics
  - Networked & wireless sensors
  - Controlled sensor emissions through cueing
  - Sensor data fusion
**Program Fielding Status/ Updates**

- Infantry Helmet D-UNS, 1 Feb 2018
- RFI Released 4 June 2019
- Send Invitation Letters Nov 2019
- Award OTAs Jan 2020
- Final Prototypes Due January 2021
- Initial Fielding FY22

**Program Concerns/ Important Topics**

- D-UNS states fielding to Infantry/Infantry-like (27,499)
- Fielding focus: Infantry, Recon, Combat Engineers, LAR, ANGLICO
- Artillery may be added in the future.
- Additional $17.8M in FY20-21 OMMC being requested through CCLTF and POM-21 to procure AAO

**Integrated Helmet System (IHS)**

(TOPIC ID #TBD)

- IHS will have an increase in ballistic protection
- Provides improved integration with hearing protection/enhancement and Binocular Night Vision Goggles
- Increased comfort and stability

**Configuration/ Integration Information**

- Infantry Helmet D-UNS, 1 Feb 2018
- RFI Released 4 June 2019
- Send Invitation Letters Nov 2019
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**Hearing Enhancement**

- **Program Fielding Status/ Updates**
  - DLA TLSP purchase July 2019
  - Estimated Delivery Date: Begin November 2019 and Complete March 2020
  - Distribution to Artillery and Recon units
  - Artillery: 2,244 Non-Comm Headsets and 627 Comm-Enabled Headsets with Push-To-Talk
  - Recon Units: 1,336 Comm-Enabled Headsets with Push-To-Talk

- **Program Concerns/ Important Topics**
  - Synchronize NET with PC Gen 3 NET
  - Releasing AMHS Distribution message

- **Configuration/ Integration Information**
  - Shipped with a single comm cable to connect to Squad Radio and dual comm cable for connection to AN/PRC-117/117G/119/148/152
  - Compatible with Combat Arms Earplugs IV for double-hearing protection requirements
Program Description

- The MCWCP is a family of cold weather clothing items. The cold weather clothing is designed to support Marines operating in wet/cold and dry/cold or mountainous environments with a threshold temperature range from 4.4 to -31.6 °C (40 to -25 °F) when used as a system. The objective temperature range extends down to -37.2°C
- Submitted SRP modification for secondary closure for APECS parka. Contract modified and new version available in Aug 2019
- Common efforts with Army: Snow Overwhites, Happy Suit, and LWES
- Planning underway for User Evaluations on improvements to Layer 1, Layer 3, ICW boots, handwear and headwear at MWTC and Norway Jan-Mar 2020

Program Status

- AAO: Required/Fielded
  - Cold Weather Undergarments, Silk Weight: 972,000
  - Cold Weather Undergarments, Grid Fleece: 486,000
  - Extreme Cold Weather Set: 140,000/140,000
  - Hardface Fleece Caps: 168,833/168,833
- Special Issues: System review underway – completed comparison evaluation against Norwegian cold weather clothing
  - Examine wool for base layers and level 3 insulation layer
  - Wool/waterproofing for Caps and balaclavas
- Follow-On Strategy: Update and refine products based on user evaluations and after action reports

Key Milestones

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<tr>
<td>FOC Attainment</td>
<td>FY12</td>
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<tr>
<td>Next ILA</td>
<td>FY20</td>
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<td>Next In-Service Review</td>
<td>FY19</td>
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<td>Winter evaluations</td>
<td>Jan-Mar 2020</td>
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<td>Item Exit Date</td>
<td>Various</td>
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CWC Layers:
- Product improvements to Level 1 and 3 to improve wicking/moisture transport and drying time
  - Explore mesh underwear for level 1.
  - Improved level 3 that improves moisture transport (wicking), dry time, and insulation – wool or synthetic
- Soft shell uniform solution for insulation and quick drying
  - from sweat and precipitation
  - in a wet-cold environment.
  - More breathable than APECS
  - Reduces sweat build up and condensation inside the garment.

Headwear
- Balaclava - open face balaclava design to improve drying time, warmth, and wind protection
- ECW Cap - capability gap of an insulated, wind resistant, and highly water resistant headwear item
Contact/Combat Glove
- Touch Screen
- FR
- Water repellent
- Evaluated candidates at MWTC and Norway during FY2019 winter User Evaluations – durability suffered

Intermediate Cold Weather Gloves
- Procurement complete
- Reworked entire stock to repair faulty thumb crotch
- Final delivery order executed June 18 for 10,982 additional ICWGs

ECW Mittens
- Looking at Army requirement.
- Joint requirement will result in better sustainment and economy of scale.
- Addition of trigger finger
- Generate joint mitten specification for DLA.

 Inserts
- Looking to develop Type II Wool Insert in addition to FR Light Duty Glove Insert (use with black leather shell or mitten)
FR
- Low-Cost and Durable FR Treatment to the Marine Corps Combat Utility Uniform (MCCUU)
- USMC & Army – Natick R&D
  - Maintain current MCCUU attributes, including 50 wash cycles
- SBIR – FR MCCUU
  - Cost increase: < 5% (objective) / < 10% (threshold)
  - FR durability: 100 (objective) / 50 (threshold) laundering cycles
  - Minimal impact on non-FR performance

SWIR
- USMC and Army effort with CCDC Soldier Center & NSWC Dahlgren
  - Objective: Reduce/eliminate SWIR detection from uniforms and equipment
  - Solution: Passive Modifications to Existing PPE (paint/pigment)
- SWIR signature mitigation of deployed warfighter (USMC and US Army) combat kit (uniforms and 500D nylon load carriage)
- Apparent Reflectivity signature measurement reduction

Intent is to merge SWIR Mitigation and FR into the NexGen MCCUU

Where We Are Going:
- FY 20 – Publish Changes to Fabric Specifications & Item Purchase Descriptions
- FY 21 – User Evaluations on changes – refine Fabric Specifications & Item Purchase Descriptions
- FY 21 – Transition to production with final changes to Fabric Specifications & Item Purchase Descriptions
  - Phased approach encompassing ICE items (uniforms, load carriage)
  - Prioritization on combat uniforms and load carriage items pending contract renewal
Modify exiting Service Green Tunic and maternity shirt
- Add color (Black)
- Add adjustable side tabs
- Add elastic bunching

Certify Nursing T-Shirt for optional purchase in MCX
Certify Maternity T-Shirt for optional purchase in MCX
- Follow on pattern change for DLA support

Using existing Maternity Service Green trousers and skirt as baseline.
- Add colors: Black (Skirt) and Sky Blue (Slacks) (Dress Uniform)
- Modify all designs to include 360° belly panels on Service and Dress skirt/slacks
Questions?

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