



Product Manager
Soldier Clothing and Individual Equipment

The Soldier

Our Strength and Purpose

On the Move Hydration

Joint Advance Planning Brief for Industry

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Program Purpose



The On-the-Move Hydration (OTMH) System will provide a hands-free, on-the-move hydration capability to warfighters conducting missions of all types in all environments



OTMH Description: Overview



- On the Move Hydration is a Product Manager Soldier Clothing & Individual Equipment (PM-SCIE) designation that covers two distinct programs:
 - Multi-purpose Personal Hydration System (MPHS)
 - Proponent: Maneuver Support Center of Excellence (MSCoE), U.S. Army Chemical, Biological, Radiological, and Nuclear (CBRN) School
 - Purpose: Provide a hands free personal hydration system for use in a CBRN environment
 - Individual Water Treatment Device (IWTD)
 - Proponent: Maneuver Center of Excellence (MCoE),
 - Purpose: Provide Water Filtration/Purification capability at the individual level
- The systems will be based on commercially available CBRN resistant materials, reservoirs, and water purification/filtration devices



CENTER OF OUR STRENGTH

Program Executive Office Soldier



On the Move Hydration

Advance Planning Brief for Industry

12 May 2011



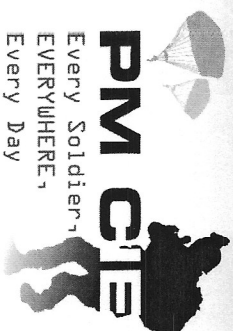
OTMH Description: Overview



- On the Move Hydration is a Product Manager Soldier Clothing & Individual Equipment (PM-SCIE) designation that covers two distinct programs, each with staged delivery of capabilities:
 - Program 1: Multi-purpose Personal Hydration System (MPHS)
 - Proponent: U.S. Army Chemical School
 - Purpose: Provide a personal hydration system for use in a Chemical, Biological, Radiological, Nuclear (CBRN) environment
 - Program 2: Individual Water Treatment Device (IWTD)
 - Proponent: U.S. Army Infantry Center
 - Purpose: Provide Water Filtration/Purification capability at the individual level
- The systems will be based on commercially available CBRN resistant materials, reservoirs, and water purification/filtration devices



The Soldier: America's Most Deployed Combat System



On-The-Move Hydration

Advanced Planning Brief for Industry

10-11 May 2007

Sarah Morgan-Clyborne
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NBC Hydration Capability



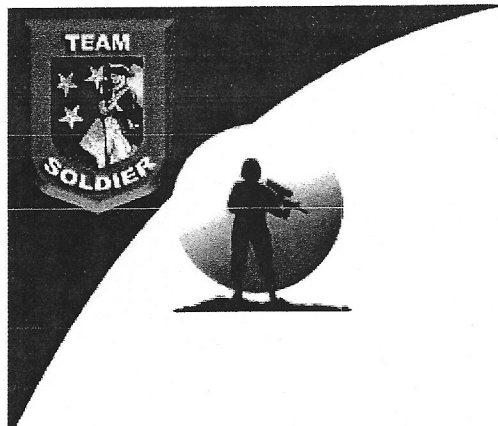
- As the initial component of the On-The-Move-Hydration System, the NBC Compatible Hydration System will replace the canteen as the primary method of water carriage by the Individual Soldier in all battlefield environments, including CBRN/TIM environments
- The NBC Hydration System will provide a steady flow of water on demand during the performance of mission essential duties
- The system will function both independently and while integrated with the protective mask

- 2003 - pm soldier (Bruce)



NBC Compatible Drinking System

Project Manager Soldier Equipment



Overview:

Program with the Infantry School as the lead component. The current Camelback provided with the MOLLE has no NBC resistance, nor can it be used with the Mask. This program is designed to provide the Drinking Bag with limited NBC resistance and provide attachments for the M-40 Mask, while also providing a separate training device.

☒ NBC Compatible Drinking System

Description:

TBD

Component Materials:

The current market survey has identified three potential materials (EVA, Butyl, and Rolamit) and a fourth candidate has been mentioned called HSF by WL Gore. Once tested and selected, the best material should be used to procure a quantity of Contingency bladders that would be used when the NBC threat dictates.

Color: TBD

Weight: TBD

Size: Standard

Basis of Issue: one to two per soldier

Price:

\$45-65 range

NSN: TBD

Status: CBD was completed at the end of 4Q01 and the market research results have provided seven potential candidates that offer limited NBC resistance. There currently is a low cost Protective Mask Adaptor Kit (Camelback) that can be bought and either provided as GFE to the current MOLLE fieldings or CTA/GSA authorized and purchased. This will provide an immediate fix to allow the current MOLLE Camelback to be used with the M40 mask in a training environment that would simulate actual use in NBC scenarios.

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Last updated: 10/31/03

Note: We do not sell retail or wholesale to private industry or individuals. The items shown on all the fact sheets are for military use and Basis of Issue authorization is subject to DCSOPS approval.

2003



Objective Force Warrior Advanced Technology Demonstration Presentation to: Department of Defense Human Factors Engineering Technical Advisory Group



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Army's 2003 Plan - Mission First Knock-off Programs



Technologies Pursued



Rechargeable Batteries and Chargers

- Li Ion Polymer –160 Wh/Kg
- FCS Compatible
- Team Smart Recharger
- Conformal Designs

Hybrid Power Sources

- High Energy Density Fuel Cell
- Centralized Recharger 400 Wh/Kg
- Metal Air/Carbon Air systems
- 1000 Wh/Kg
- Distributed body worn power architectures for 1-2 W DMFC modules

Power Management

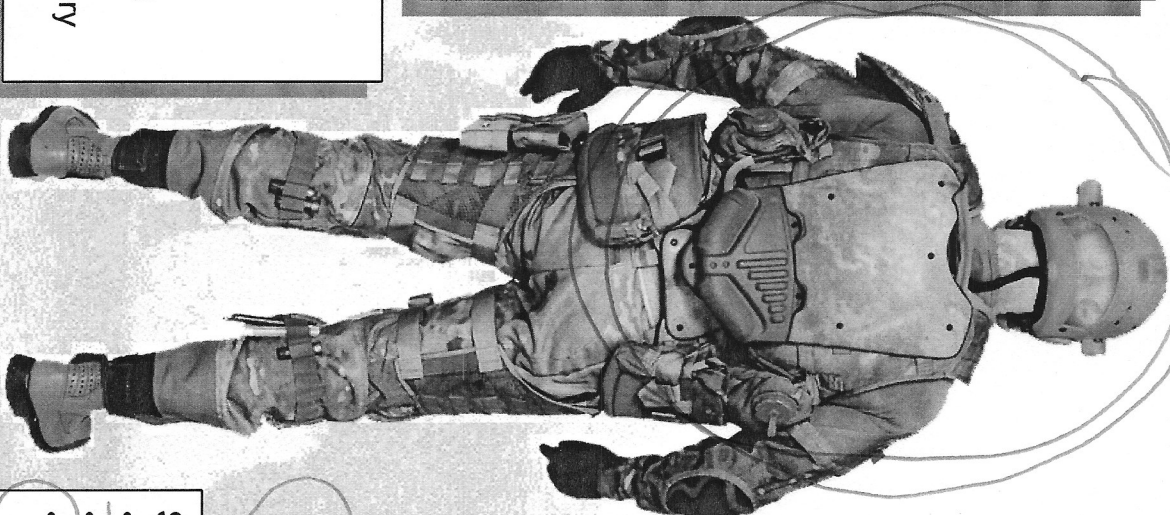
- Low power processing
- Efficient SW architectures
- Automated/selective device powering

Training

- Embedded
- TTP Recall; Leader Development
- Enroute Mission Rehearsal

Human Performance

- System Fightability (physical, cognitive)
- Performance Enhancement
- Customized voice, tactile, visual, auditory human interfaces



Integrated Combat Suit

- Modular Design
- Integrated body armor/load carriage chassis; joint protection
- Multifunctional Materials including:
 - SPM for CB/Met Protection
 - Electro-Textile Power/Data Body LAN
 - Novel Signature Mgmt (Near/Far IR)
- Spacer materials
- Highly wicking, FR materials

Physiological Status Monitoring

- Sensor Suite for PSM
- Remote Triage (life sign detection)

Prompt Casualty Care

- Integrated Tourniquets

Thermal Balance

- Passive design features with mini blower for evaporative cooling

Hydration

- On the Move Hydration w/CB filtration and purification

Sustainability

- Water Generation/Purification
- Nutritional Supplements
- Compressed and "eat on the move" rations