Department of the Navy SBIR/STTR Transition Program

Pending SYSCOM Review

Topic # NSWC-1 industrial Human Augmentation Telemetry (iHAT) Device Naval Surface Warfare Center Carderock Division

WHO

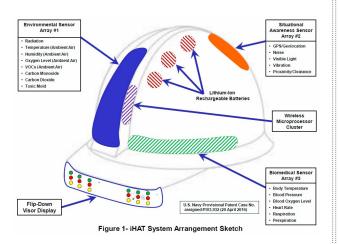
SYSCOM: NAVSEA

Sponsoring Program:

Transition Target:

TPOC:

Other transition opportunities:



WHAT

Operational Need and Improvement:

Specifications Required:

Technology Developed: Integration of a novel micro-sensor system into a standard industrial hard hat. Industrial

Human Augmentation Telemetry (iHAT) is a self-contained system including: nineteen individual microelectro-mechanical systems (MEMS) sensors grouped into three appliques, microcontrollers, microprocessors, RAM data storage, a flip-down visual display screen and a rechargeable battery pack that is linked together via wireless sensor network (WSN) technology.

Warfighter Value: Adapting for use in armbands, wristbands, head bands & clothing panel inserts.

- Modifying for use with enhanced safety glasses/goggles & face shields.
- Interfacing with power tools and machinery health usage monitoring systems.
- Incorporating into industrial clothing that augments the human user with additional proactive safety enhancements i.e., work gloves with sensor-activated pneumatic bladders for vibration damping.
- Merging cognitive and physical augmentation to allow the user to have 'on demand' capabilities i.e., user controls 'when' and 'how much' augmentation is required for a task

WHEN Contract Number: T2-ORTA-NSWC-1

Milestone	Risk Level	Measure of Success	Ending TRL	Date

HOW

Projected Business Model:

Company Objectives:

Potential Commercial Applications:

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