Joint Service Lightweight Integrated Suit Technology (JSLIST)
Multipurpose Protective Sock (MPS)

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Outline

- Program Overview
- Employment, Requirements, Acquisition Objectives
- Schedule
- Technology Barriers
- Industry Opportunities
- Summary / Challenges
MPS Overview

- The Multipurpose Protective Sock (MPS) will be part of the Joint Service Lightweight Integrated Suit Technology (JSLIST) ensemble. The JSLIST is an integrated ensemble consisting of a protective suit garment (with/without a hood), footwear (boots, socks) and protective gloves that will provide the wearer with protection from the effects of NBC contaminants and Toxic Industrial Materials (TIMs) in any form or state.

- The MPS project is currently in the research and development (R&D) phase.

- The MPS will meet requirements for JSLIST and the Joint Protective Aircrew Ensemble (JPACE) program.

- Primary users will be Special Operations Forces initially.
The MPS will provide chemical/biological (CB) protection and friction protection to areas of the foot when worn inside current combat footwear.

When worn with the protective ensemble, MPS will allow the warfighter to perform the full range of missions in chemical, biological, radiological and nuclear (CBRN) environments worldwide.

The MPS is required to fully integrate with all forms of combat and protective footwear, as well as to fully integrate with the trousers of the JSLIST and JPACE ensembles.
Cost savings are anticipated when compared to the purchase of current protective overboots. Additional cost savings to the program will be realized via reduced logistics burden.

The MPS will provide survivability, mobility and lethality enhancements to the JSLIST ensemble.
Requirements

- Specifically, the MPS will:
  - Be capable of withstanding sustained foot movement for all operational scenarios;
  - Provide at least 12 hours (T) of protection after exposure to a liquid challenge of 10g/m² or a vapor challenge of 5,000 ct, and;
  - Be launderable.
Joint Acquisition Objective (AO) is To Be Determined. (Procurement potential of tens of thousand of units per FY.)

MPS Funding as part of JSLIST Procurement (based on FY 04 President’s Budget)
- Research and Development funds programmed for FY03
- Procurement funds programmed for FY04-09
Schedule

- Release RFP: 3rd Qtr 03
- Phase I: 3rd Qtr 03
  - Suitability/Initial Chem Screening
- Phase II & III: 4th Qtr 03 - 1st Qtr 04
  - Field Durability Test
  - Follow-On Chem Test
  - Worn/Swatch/System/MIST
  - Air Compatibility
- Final Test Reports: 2nd Qtr 04
- SSTEB Recommendation: 2nd Qtr 04
- Procurement Decisions: 3rd Qtr 04
Technology Barriers

- CB protective footwear solutions that incorporate operational effectiveness by way of superior chemical agent protection are often at odds with human factors and logistics considerations aimed at improved operational suitability.
Industry Opportunities

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<th>Request For Proposal (RFP)</th>
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The MPS will address requirements from both JSLIST and JPACE.

The MPS is a Joint Service supported effort with Foreign Comparative Test (FCT) R&D funding.

The MPS will provide CB protection and friction protection to areas of the foot when worn inside current combat footwear.
The MPS program schedule is on track and will leverage off of ongoing JPACI test events.

Past efforts in the area of CB protective footwear have focused primarily on overboot solutions. The future challenge is to investigate footwear protection solutions that will meet both operational effectiveness and suitability requirements within a single system. The MPS may be a part of that solution.