

### SYSTEM INTEGRATION

The Individual Protection Directorate (IPD) is a major player in both Future Force Warrior and the National Protection Center by providing technical program support and the necessary individual protection technologies to modernize the Warrior and First Responders.

### JOINT SHIELD CELL (JSC)

IPD's initiative to provide superior technical support to the Joint Program Management Office-Individual Protection (JPMO-IP) Team on business that is relevant to Chemical and Biological Protective Clothing and Equipment. JSC's goal is to ensure improved responsiveness, enhanced integration, and increased communication in all JPMO-IP supporting activities, including: basic research, systems development, demonstrations of technology development, and sustainment.



### UNIQUE CAPABILITIES AND FACILITIES

- ISO Certified Textile Performance Testing and Color Measurements Laboratory
- ISO Certified Fiber Research and Production Facility
- Camouflage Evaluation Facility
- Design and Prototype Facility
- Computer Aided Design and Rapid Prototyping Laboratory
- Digital Inkjet Design and Printing System
- Raincourt Facility
- Footwear Performance Laboratory
- Man-in-Simulant Test (MIST) Chamber
- Clothing and Individual Equipment Facility



### US ARMY NSRDEC WARFIGHTER PROTECTION & AERIAL DELIVERY DIRECTORATE

15 Kansas Street  
Natick, MA 01760-5017  
COMM: 508-233-4495, DSN: 256-4495  
FAX: 508-233-6976  
EMAIL: amsrd-nsc-ad-b@us.army.mil

#### ON THE WEB:

[nsrdec.natick.army.mil](http://nsrdec.natick.army.mil)

#### MEDIA INQUIRIES:

(508) 233-4300  
[nati-amsrd-nsc-ad-b@conus.army.mil](mailto:nati-amsrd-nsc-ad-b@conus.army.mil)



# WARFIGHTER EQUIPMENT SYSTEMS (WES)

## Global Threat Protection for the Warfighter



# WARFIGHTER EQUIPMENT SYSTEMS (WES)

## MISSION

To plan, execute and rapidly transition research, development, and engineering support of protective clothing and individual equipment technology.

## VISION

To be the leader and preferred source for individual protection technology.

## STRATEGIC INITIATIVES

- Rapidly Execute and Transition Technology
- Customer Satisfaction
- Joint Focus
- Partnering and Collaboration
- Rapidly Solve Field Problems



## SCIENCE AND TECHNOLOGY

**Advanced Technology Team:** Reviews and analyzes the potential value of advanced technologies for insertion into Soldier systems.

**Ballistic Technology Team:** Provides state-of-the-art advancements in lightweight ballistic protective materials and systems to protect individual warfighters from multiple ballistic threats (e.g. fragmentation, bullets and blast).

**Materials and Systems Integration Team:** Conducts research and systems engineering to develop multifunctional material systems that are durable, cost effective and protect against a variety of hazards, such as flame, environmental and surveillance.

**Chemical Technology Team:** Provides state-of-the-art advancements in chemical and biological protective materials and ensembles as well as microclimate conditioning systems that provide protection in nuclear, biological, chemical (NBC) environments.

**Fiber Processing & Technology Team:** Supports research and development, a fiber processing pilot plant and full-scale production capabilities in single and multi-component fiber extrusion.

*(from left to right) SOF Protective Combat Uniform; Air Warrior Microclimate Cooling Vest; Advanced Combat Uniform; Future Force Warrior Ensemble; Extremity Body Armor and Small Arms Protective Insert Plate; USMC Battle Dress Uniform; Semipermeable Membrane CB Protective Suit*

## ENGINEERING DESIGN, TESTING AND PERFORMANCE EVALUATIONS

**Engineering, Prototype and Performance Evaluation Team:** Provides ISO certified technical support for multiple customers in engineering design, testing and performance evaluations of textile-based materials for functional properties. The team establishes digital color acceptability criteria for use in procuring military items. They produce quality prototypes for textile-based items and pursue stitchless and other novel technologies for end-item fabrication. Computer aided design and rapid prototyping support is also provided for evaluating component and system design issues prior to actual fabrication.

## JOINT SERVICE PRODUCT DEVELOPMENT

**Army Soldier Systems Engineering Team:** Supports the Program Executive Officer Soldier in design and fielding individual combat clothing, equipment, footwear and load carriage gear that integrates technology to make a more mobile, more survivable, and more lethal Warfighter. Supports the Program Manager - Infantry Combat Equipment by providing technical, programmatic and acquisition support to the US Marine Corps in the development of materials and methods for clothing and individual combat equipment.

**Special Operations Forces (SOF) Special Projects Team:** Supports Program Executive Officer Special Projects and is responsible for joint SOF (Army, Navy, USMC and Air Force) development and fielding of personal clothing and equipment.

