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PRODUCT MANAGER FORCE SUSTAINMENT SYSTEMS



JOINT PROJECT MANAGER COLLECTIVE PROTECTION



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**FABRIC STRUCTURES PROTOTYPE SHOP**





# FABRIC STRUCTURES PROTOTYPE SHOP

## INTRODUCTION

The Fabric Structures Prototype Shop is a fully staffed design and fabrication facility located at the U.S. Army Natick Soldier RD&E Center. The shop is a division of the Special Projects Team (SPT), and a member of the Shelters Technology, Engineering and Fabrication Directorate.



The shop designs and produces shelter prototypes, and has the capacity for small production runs for a large DoD customer base.

The shop couples the knowledge of fabrics, non-wovens, high performance insulations, flexible photovoltaics, closures, stealth and barrier materials with cutting-edge design and modeling capabilities.

## OPERATIONS, RESOURCES & EQUIPMENT

- Mobile track sealer
- Automated cutting machine
- Thermal hot air and hot wedge heat/tape sealing
- Industry standard sewing capabilities
  - Medium to Heavy weight machines
- Vast inventory of tent materials and accessories
- Augmentation provided by a metal prototyping shop, RF heat sealing, rain room, environmental chambers, camouflage detection room and fabric testing facilities, including Instron® testing for evaluation of materials and components
- Over 50 years of combined experience in military shelters
- Senior Equipment Specialists with vast and unique fabric experience and knowledge



- Knowledgeable field support team to train users or set up shelter systems in remote locations
- AutoCAD® capabilities to provide Level I documentation of designs and ability to guide in-house Task Order Contracting service to document designs at Level III
- Small production facility to meet the individual customers requirements with minimal paperwork and time sensitivity
- Full prototype capabilities from design through finished drawings



## SHELTER PROJECTS

### Repair of Soft Wall Shelters

Repaired vestibules and fabric walls



### 50'x50' Solar Shade Fabrication

Provides shade for equipment and personnel and reduces heat load



### Combat Observation Lazing Teams (COLTs) Small Unit Solar Shade (SUSS)

Designed for solar and surveillance protection using Ultra Light-Weight Camouflage Net System (ULCANS) material



### Marine Mammals Cover

A chemical protection liner made for the specific purpose of protecting trained dolphins



### 16' x 16' Fabric Shelter Hub

Ability to connect to other tents (i.e. TEMPER) from all sides



### Chem/Bio Resistant Liners and Accessory Equipment Fabrication

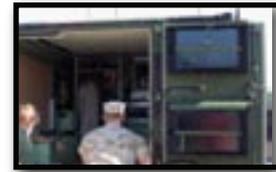
Constructed cell walls for tents, blank walls and tracked C/B resistant liners for inside the cells to test for agent permeability between cells



### NON-SHELTER PROJECTS

#### Monitor Covers

Used to protect equipment in the field



#### HMMWV Turret Cover Design

Used to minimize Soldier detection



#### Portable Arm Immersion Cooling System (AICS)

Used by Soldiers for heat stress prevention by cooling the body's core temperature



#### Fabric Plenum

Designed and fabricated a fabric duct work system

