



Flame Resistant Clothing Overview



Advance Planning Brief for Industry

19 May 2010

Office of the Product Manager
Soldier Clothing and Individual Equipment



Briefing Topics



- Flame Resistant Products
 - Army Aviation Combat Uniform (A2CU)
 - Improved Combat Vehicle Crewmen's Coverall (iCVC)
 - Flame Resistant Army Combat Uniform (FR ACU)
 - Army Combat Shirt (ACS)
 - Ghillie Suit Accessory Kit Upgrade (GSAK)
 - Lightweight Performance Hood (LPH)
 - Army Combat Pants (ACP)
 - Fuel Handlers' Coverall (FHC)
 - Integrated Flame Resistant Patch Kit
 - Alternate Flame Resistant Fabric Qualification

- Summary



Fire Resistant Clothing



**Flame Resistant
Army Combat
Uniform (FR-ACU)**



**Army
Aviation
Combat
Uniform
(A2CU)**



**Improved
Combat Vehicle
Crewman's
Coverall (iCVC)**



**Army
Combat Shirt
(ACS)**



**Lightweight
Performance
Hood (LPH)**



Ghillie Suit Base-Layer



**Ghillie Suite Accessory
Kit (GSAK)**



**Army Combat
Pants**





Army Aircrew Combat Uniform (A2CU)



SYSTEM DESCRIPTION:

- The A2CU is the current Aviation Combat Uniform, designed to improve operational effectiveness, fit, suitability, and durability, addressing near-term Air Warrior requirements.
- Meets Air Warrior requirements

OBJECTIVE: Provide a two piece flame resistant flight suit for Army Aviators and Aircrew Members

BOI: 4 per Aviator and aircrew member:

NSNs: Coat: 8415-01-526-9177 (s)
Trousers: 8415-01-526-9728 (s)

ACTIONS:

- Deploying units. Fielding 4 per deploying Aviator and Aircrew Members through the FR Clothing Fielding Team
- Sustainment. Units requisition through Army Direct Ordering (ADO) IAW instructions posted on the Air Warrior Extranet, Forum section



Improved Combat Vehicle Crewman's Coverall (iCVC)



SYSTEM DESCRIPTION:

- The Improved Combat Vehicle Crewman's Coverall (ICVC) is designed to improve operational effectiveness, fit, suitability, and durability, addressing near-term Mounted Warrior requirements. All materials offer superior fire resistance, comfort and durability
- Meets Mounted Warrior requirements, pattern (UCP)

ACTIONS:

- Deploying units. Fielding 4 per deployer through the FR Clothing Fielding Team
- Alternative fabrics and anti-abrasion technologies are under evaluation
- Sustainment. Planned availability through Army Direct Ordering (ADO) in FY10

OBJECTIVE: Provide a one piece flame resistant coverall to combat vehicle crews

BOI: 4 per 19D and 19K serving as CVC

NSNs: 8415-01-560-4719 (xs-short)



Fire Resistant Army Combat Uniform (FR ACU)



SYSTEM DESCRIPTION:

- The FR ACU is similar in design to the ACU but made from flame resistant material. One inch green FR Tabs on the left sleeve cuff and left pants cargo pocket flap help differentiate the FR ACU from the ACU
- Advanced fabrics provide enhanced FR protection without sacrificing other performance factors critical to the ground Soldier such as durability, breathability, and moisture management

ACTIONS:

- Deploying units. Fielding 4 per deployer through the FR Clothing Fielding Team
- Sustainment. Units can requisition through Army Direct Ordering (ADO)
- Durability enhancements integrated in FY10 procurements
- Permethrin treatment being implemented

OBJECTIVE: Provide flame protection without increasing Soldier heat-stress or sacrificing other performance attributes of the current ACU

BOI: 4 per deploying Soldier

NSN Coat: 8415-01-548-3172 M-R
Trousers: 8415-01-548-4695 M-R



Modular Ghillie Suit and Ghillie Suit Accessory Kit (GSAK) Upgrade (SEP)



SYSTEM DESCRIPTION:

- 17 item kit and stand alone flame resistant uniform that together provide improved counter-surveillance protection, protection from flame and thermal threats, increased mobility and agility, increased multi-system operability, and anti-odor/anti-microbial properties

OBJECTIVE: Provide the Army Sniper with a more useable flame resistant Ghillie suit ensemble, consisting of a uniform base layer and accessory kit that more readily meets the needs of the individual sniper

BOI: Base Layer and GSAK- one per Soldier attending USAIC Sniper Course/ Deploying; additionally one per Soldier WABCO

NSNs: TBD

ACTIONS:

- 2010 RFI Item
- Available through GSA



Army Combat Shirt (ACS)



SYSTEM DESCRIPTION:

- The ACS enhances and maximizes Soldier capabilities of extended mission duration by reducing heat stress and burn injury, coupled with bulk and weight reduction when wearing body armor. The shirt's features include superior moisture wicking ability, anti-microbial treatment, flame resistance (FR), and anti-abrasion elbow pads

OBJECTIVE: Provide deployed Soldiers a FR shirt that reduces heat stress and increases comfort in a hot weather environment while providing protection from flame and thermal threats, when wearing body armor

ACTIONS:

- Fielding BOI of 4 per deploying Soldier
- ACS is an Rapid Fielding Initiative item
- ACS on ADO FY 10

BOI: 4 per deploying Soldier

NSNs: 8415-01-548-7206 M-R



Lightweight Performance Hood



SYSTEM DESCRIPTION:

- The Lightweight Performance Hood (LPH) replaces the legacy Anti-Flash Hood. The LPH enhances and maximizes Soldier capabilities of extended mission duration, reducing heat stress and burn injury to the neck, ears, and face. The hood's features include superior moisture wicking ability, increased comfort, anti-microbial capabilities, and flame resistance (FR)
- When coupled with FR Combat Uniforms, burn injury is greatly reduced

OBJECTIVE: Provide deploying Soldiers an FR hood that protects the Soldier's face, ears, and neck during a flash flame or thermal incident

BOI: 2 per deploying Soldier

MCN: 8415-01-F00-3869

ACTIONS:

- Fielding to deploying Soldiers through the FR Clothing Fielding Team
- On the Federal Procurement List (FPL) 1 May 2009



FR ACU Trouser Product Improvement (PIP)



SYSTEM DESCRIPTION:

- The FR ACU Trouser - PIP is designed to provide Soldiers protection from harsh terrain while deployed in theater. Features include reinforced crotch, flame resistance (FR) material, anti-abrasion seat, adjustable knee pads and stretch material

OBJECTIVE: Provide Soldiers an Army Combat Pant that dramatically reduces seat, knee, and stress area failures, increase durability and range of motion, and provide Soldiers flash flame and thermal protection

BOI: TBD

NSNs: TBD

ACTIONS:

- Final User Evaluation data being collected in Afghanistan



FR Fuel Handlers' Coverall



SYSTEM DESCRIPTION:

- Liquid-penetration-resistant for JP8 and water, static dissipative materials inherent
- Coveralls can be worn over the ACU/ FR ACU or by themselves, and offer a high degree of protection from POLs
- FR solution in FY 10

ACTIONS:

- In Solicitation for FR variant in UCP Pattern and color

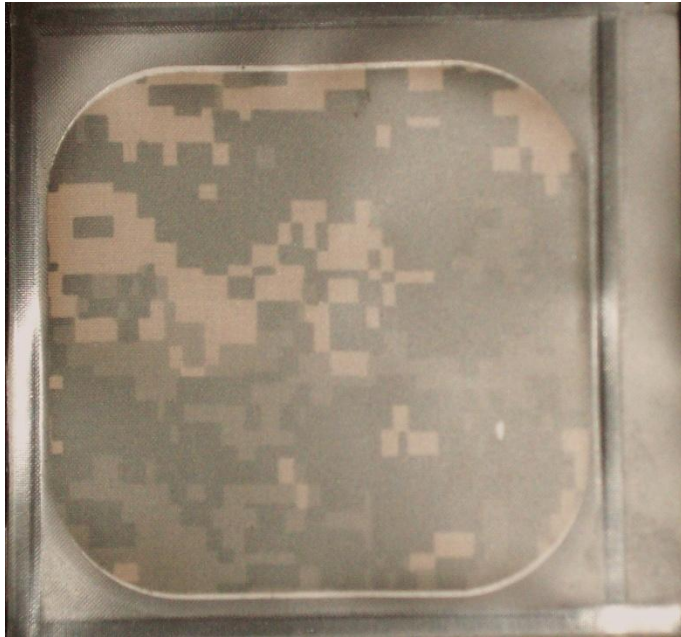
OBJECTIVE: Provide Flame Resistance, Environmental and Electrostatic protection for Soldiers handling fuel and petroleum products

BOI: 2 pair per 92F/L

NSNs: TBD



FR Integrated Patch Kit



SYSTEM DESCRIPTION:

- FR patch in sealed launder able rubber sleeve with pressure sensitive adhesive that rapidly adheres to uniforms and equipment
- Can be utilized to repair all current uniforms and equipment

ACTIONS:

- Individual patch will be included in each uniform item in FY 11

OBJECTIVE: Provide Soldiers with a field expedient means for uniform and equipment repair without sewing

BOI: One 8-pack per team through RFI, inclusion in uniform FY-11

NSNs: 8415-01-579-3107



Alternate FR Fabric Qualification



SYSTEM DESCRIPTION:

- Multiple FR Woven materials for use in uniform production

ACTIONS:

- Qualify and evaluate alternate FR fabrics to allow for performance based purchase descriptions for combat uniforms

OBJECTIVE: Evaluate and qualify alternate FR materials that can be used in the production of flame resistant uniforms, to provide improved protection, durability and comfort.

BOI: N/A



Path Forward



FR Product	Projected Contract Actions
FR-ACU, ICVC, A2CU	Multi-Cam, 3/4 FY 10
Ghille, Ghillie Base Layer	On GSA, FY 10 RFI Item
Army Combat Shirt (ACS)	Multi-Cam, 3/4 FY 10,
LPH	
FR-ACU Trouser (PIP)	Data Collection- Afghanistan 3 FY 10
Fuel Handlers Coverall	FR Version 4 FY 10
Integrated Patch Kit	8 Pack Kit- RFI, IPK- individual Uniforms FY 11
Alternate FR Fabric Qualification	Alternate Fabrics chosen 4 FY 10



Summary



- Joint Coordination sharing of uniform/equipment information with sister service and SOF
- Continued Data Exchange with Brooke Army Medical Center (BAMC) Burn Center/ Institute of Surgical Research