



The Soldier: America's Most Deployed Combat System



Fire Resistant Clothing Overview

Advanced Planning Brief for Industry

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MAJ Clay Williamson
Assistant Product Manager
Clothing and Individual Equipment
www.peosoldier.army.mil



Briefing Topics



- Fire Resistant Products
 - Army Aviation Combat Uniform (A2CU)
 - Army RFI Fire Resistant Fleece
 - Fire Resistant Army Combat Uniform (FR ACU)
 - Army Combat Shirt (ACS)
 - Improved Combat Vehicle Crewmen's Coverall (iCVC)
 - Ghillie Suit Accessory Kit Upgrade (GSAK)
 - Fuel Handlers' Coverall (FHC)
 - Fire Resistant Environmental Ensemble (FREE)
- Summary



Fire Resistant Clothing



**Army Aviation
Combat Uniform
(A2CU)**



Army RFI FR Fleece



FR ACU



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



Fire Resistant Clothing



Army Combat Shirt (ACS)



Improved Ghillie Suite Accessory Kit (iGSAK)



Block II Fuel Handler's Coverall



Fire Resistant Environmental Ensemble (FREE)





Army Aircrew Combat Uniform (A2CU)



OBJECTIVE: To provide an improved two piece flight suit for Army aircrew members

BOI: 3 per aircrew member: Additional uniforms when authorized by commanding officer (WABCO)

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

SYSTEM DESCRIPTION:

- Version 1: added UCP to the IABDU and DCD directed design improvements
- Version 2: implemented pattern changes based on user evaluation (currently fielding)
- Version 3: additional design changes are currently underway
- Meets Air Warrior requirements

FIELDING STRATEGY:

- Fielding plan. Modernization through spares
- Sustainment. Units requisition through DSCP IAW instructions posted on the Air Warrior Extranet, Forum section
- Deploying units. Due to competing Operational Needs Statement (ONS) requirements, initial availability is limited to units with deploying priority codes
- Army Wide. No centrally funded Army-wide fielding is planned



Army RFI FR Fleece



SYSTEM DESCRIPTION:

- Improved fire resistant integrated NOMEX fleece soft shell coat and trousers designed for aviators
- Provides enhanced insulative water and wind resistance over standard RFI issue fleece in a stretchy, fire resistant garment, in the universal camouflage pattern

ACTIONS:

- FY 07 RFI requirement
- Fielding began through RFI in March 2007
- This is an interim item and will be replaced by the FREE system mid 2008
- No further contracting actions are anticipated

OBJECTIVE: Rapid Fielding Initiative provides enhanced fire resistant clothing to aviators

BOI: 1 set per aircrew member

MCNs: 8415-01-F00-1291(s) Coat
8415-01-F00-1296(s) Trouser



Fire Resistant Army Combat Uniform (FR ACU)



SYSTEM DESCRIPTION:

- Soldier FR survivability will be addressed through a systems approach including undergarments, the Army Combat Shirt, IBA, and standard organizational gear
- Advanced fabrics provide enhanced FR protection without sacrificing other performance factors critical to the ground Soldier such as durability, breathability, and moisture wicking

ACTIONS:

- ONS 2 FR ACUs will be procured through DSCP
- FR ACUs will begin arriving in theatre 3FY07
- PM CIE continues to seek better performing FR ACU fabrics
- Solicitation anticipated to be published by end of May

OBJECTIVE: To provide measurable FR improvement over existing ACU without increasing Soldier heat-stress or sacrificing other performance attributes of the current NY/CO ACU

BOI: 2-4 per deploying Soldier (TBD)

NSN / MCNs:

Coat: 8415-01-548-2925 (s) XS-S
Trouser: 8415-01-548-4580 (s) XS-S

Abrams Coat: 8415-A1-519-8501 (s) S-R
Trouser: 8415-A1-519-8423 (s) S-R

Defender Coat: 8415-D1-519-8491 (s) XS-S
Trouser: 8415-D1-519-8404 (s) XS-S

XAP Trouser: 8415-C1-519-8416 (s) XS-S



Army Combat Shirt (ACS)



SYSTEM DESCRIPTION:

- The ACS is significantly more comfortable than the existing ACU blouse. Features include superior moisture wicking ability, anti-microbial treatment, fire resistance (FR), anti-abrasion elbow pads, and integrated FR balaclava
- When coupled with an FR ACU pant, this system will greatly reduce risk of burn injury

ACTIONS:

- 100 ACS w/FR Pants in Theater for evaluation April - June
- Initial fielding requirement (TBD) will be procured through a set aside and will only be an interim solution
- R&D effort underway for a more advanced version of the ACS with solicitation expected by 2FY08

OBJECTIVE: To develop, evaluate, and field the Army Combat Shirt (ACS) in order to dramatically reduce heat stress and increase Soldier comfort in a hot weather environment while providing protection from flame and thermal threats. The ACS will only be worn when wearing IBA

BOI: 2-4 per deploying Soldier (TBD)

NSNs: 8415-01-548-7206(s) M/R



Improved Combat Vehicle Coveralls (iCVC)



SYSTEM DESCRIPTION:

- The Improved Combat Vehicle Crew Coverall (iCVC) is an upgrade to current issue coverall while also meeting Mounted Warrior requirements for improved fit, function, durability in the universal camouflage pattern (UCP). Alternative fabrics and anti-abrasion technologies are under evaluation

Actions:

- LUE underway with 2ID, 3ID and Fort Knox: January–May
- Joint effort with USMC underway to develop a more advanced version with superfabric anti-abrasion seat patches and version 2 advanced iCVC design
- DSCP is currently contracting for the established CVC coverall in UCP
- When iCVC LUE is complete and final design changes are made DSCP will convert from UCP CVC to iCVC for sustainment
- Fielding plan: Modernization through spares. Units will order the iCVC through DSCP

OBJECTIVE: The **Improved Combat Vehicle Coveralls (iCVC)** will upgrade the current issue coverall

BOI: 3 per 19D and 19K serving as CVC

MCNs:

8415-A1-535-0053(s) (s/r) (Abrams)
8415-G1-535-0038 (s) (xs-s) (Nomex)



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



SYSTEM DESCRIPTION:

- Improved counter-surveillance protection, increased multi-climate protection, comfort, protection from flame and thermal threats, increased mobility and agility, increased multi-system operability, and anti-odor/anti-microbial properties
- Greatly enhanced kit that will reduce out of pocket expenses for base uniforms, etc.

ACTIONS:

- Performed initial requirements assessment with Sniper School at Fort Benning 1FY07-2FY07
- Assembling upgraded components and optional items based on Sniper Course input
- USAIC will downselect components for the kit upgrade 3FY07
- The Army will modify the existing GSAK specification to include the new components 4FY07
- Upgraded GSAK SRP will be provided to DSCP NLT 1FY08 for sustainment

OBJECTIVE: The GSAK upgrade will provide US Army Snipers with an improved camouflage system that provides protection to meet unique mission, safety and environmental requirements.

BOI: Flame Resistant Garment – one per Soldier attending USAIC Sniper Course; GSAK – one per Soldier attending USAIC Sniper Course; additionally one per Soldier WABCO

NSNs: TBD



FR Fuel Handlers Coveralls



SYSTEM DESCRIPTION:

- Liquid-penetration-resistant for JP8 and Water and static dissipative protection made from FR material
- Coveralls can be worn over the ACU or by themselves and offer a high degree of protection from POLs
- Potential Block II solutions include innovative materials, fabric structures, advanced coatings, etc.

ACTIONS:

- Block II sources sought notice identified only one potential manufacturer
- Additional Block II solutions will be evaluated 3FY07
- FR testing to begin July 2007
- Contracting action (TBD) for block II anticipated 2FY08

OBJECTIVE: To Provide environmental and electrostatic protection for Soldiers handling fuel with fire resistant material. Block II upgrade will incorporate the universal camouflage pattern and fire resistance

BOI: 2 pair per 92F/L

NSNs: TBD



Fire Resistant Environmental Ensemble (FREE)



Fire Resistant Environmental Ensemble (FREE)



NOTE: These pictures are representative of FREE garments

SYSTEM DESCRIPTION:

• The Fire Resistant Environmental Ensemble (FREE) is a multi-layered versatile, all climate system that allows Combat Vehicle and Air Crew members to adapt to varying mission requirements and environmental conditions. The system consists of: male and female undergarments; base layer; mid-weight underlayer; light weather outer layer; intermediate weather outer layer; cold weather gloves; balaclavas hot and cold weather; extreme/wet weather layer; rigger belt and wool socks. Joint interest with the USMC and USAF

ACTIONS:

- FREE solicitation published 27 February 2007
- Solicitation closed 25 April 2007
- Phases
 - PH I – Lab Testing, Government will award IDIQ contracts for top performing products equating to 3 systems (May 2007)
 - PH II – Human Factors, equipment compatibility, and system-level burn testing. Results will support down selection to 2 systems (September 2007)
 - PH III – User eval in Korea (November 2007-January 2008) between the two systems. Production orders will be placed for the winning system

OBJECTIVE: Provide a fire resistant multi-layered clothing system for aviators and combat vehicle crew members. A multi-layered system for all conditions with decreased bulk, greater functionality, enhanced Soldier Survivability and in the universal camouflage pattern

BOI: 1 per aviation/armor crewmember

NSNs: TBD



Milestones



FR Product	Key Milestones	Projected Contract Actions
Army Aviation Combat Uniform (A2CU)	Jun 07 – specification modified to final version	Jul 07 – DSCP modifies contracts to final version
Army RFI FR Fleece	Mar 07 – first unit equipped (FUE)	None additional
Fire Resistant Army Combat Uniform (FR ACU)	May 07 Solicitation posting	Contract award by Aug 07
Army Combat Shirt (ACS)	Sep 07 FUE with interim version	Feb 08 – Solicit more adv ACS
Improved Combat Vehicle Crewmen's Coverall (iCVC)	LUE underway through 3FY07	Provide iCVC SRP to DSCP 4FY07
Ghillie Suit Accessory Kit Upgrade (GSAK)	USAIC determines upgraded kit components 3FY07	Provide upgraded GSAK SRP to DSCP 1FY08
Fuel Handlers' Coverall (FHC)	Down select FR technologies anticipated 1FY08	Contract (TBD) for Block 2 FHC anticipated 2FY08
Fire Resistant Environmental Ensemble (FREE)	Phase 3 downselection to 1 winning system 2FY08	Phase 1 down selection and IDIQ contract awards May 07



Summary



- Joint Coordination
 - Products
 - Berry Waivers
 - Joint Aviation Logistics Commanders
- Data Exchange with the BAMC Burn Center/Institute of Surgical Research
- Natick FR Test Center
- Continuous Improvement