Female Soldier Protective Equipment and Clothing Update to The Defense Advisory Committee on Women in the Services (DACOWITS)

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Purpose

Provide the Defense Advisory Committee On Women In The Services (DACOWITS) an update on the latest advances and improvements for Personal Protective Equipment and Clothing for female Soldiers

Agenda

Personal Protective Equipment

- Female Sized Improved Outer Tactical Vest (F-IOTV)
- Protective Insert Sizing Improvements
- Family of Concealable Body Armor (FoCBA)
- Protective Under Garment (PUG) New Female Sizing

Clothing and Individual Equipment

- Army Combat Uniform Alternate
- Army Aircrew Combat Uniform (A2CU-A)
- Women's Flame Resistant Undergarments
- Female Army Physical Fitness Uniform

Soldier Protective Equipment

Female Improved Outer Tactical Vest (F-IOTV)

The F-IOTV is a variant of the IOTV Gen III that was designed by NSRDEC. The sizing system for the Female IOTV accommodates the female population across 8 new sizes.

- The vest incorporates a darted front panel which curves the vest around the chest for better coverage.
- The vest is shorter in length, which enables female soldiers to sit without the vest riding up.
- The vest has narrower shoulders and provides additional shoulder and waist adjustments.
- A redesigned collar which better accommodates the hair bun worn by many female Soldiers.
- All sizes use current IOTV plates.

"I could wear this all day!"
"I could run a marathon in this."
"Are these the same plates? They feel much lighter."
"Can I have this one?"
"When are we going to get these?"
"It's about time!"

F-IOTV Highlights

Protective Insert Size Improvements

ESAPI, XSAPI, ESBI, and XSBI are part of a body armor system that provide protection from certain small arms fire and fragmentation when inserted into the outer vest. The plates are used in conjunction with the soft ballistics packages as a total armor ensemble in the IOTV and SPCS

Legacy Sizes	
Nomenclature	**Sizes**
ESAPI/XSAPI	XS,S,M,L,XL
ESBI/XSBI	7”X8”

New Sizes	
Nomenclature	**Sizes**
ESAPI/XSAPI	SL
ESBI/XSBI	6”X8”, 6”X6”

New Sizes

ESAPI/XSAPI
SL (~Small Long)

ESBI/XSBI
6”x 8”
6”x 6”

Increased number of protective inserts sizes provide a better fit for Soldiers of all statures.

Family of Concealable Body Armor (FoCBA)

FoCBA provides concealable ballistic and stab protection intended to be worn by Soldiers in correction, confinement, law enforcement and intelligence operations.

Female Specific Sizing:

- Design shall address the female-specific sizing
- Develop a truly female only vest design as opposed to another unisex size
- Optimized Area of Coverage for an enhanced Fit
- Optimized Area of Protective Coverage to enhance overall vest functionality

Type 1
Both Ballistics and Stab Protection

Type 2
Stab Protection Only

Pelvic Protection Systems

Protective Under Garment [PUG] and Protective Outer Garment [POG] provides protection against ground-based IED threats. The PUG is worn next to the skin and the POG is a ballistic system that is worn over the Flame Resistant Army Combat Uniform trousers.

PUG

POG

<u>Female PUG Enhancements:</u>

- New PUG Indefinite Delivery Indefinite Quantity contract will incorporate, seven (7) new female specific sizes for a better fit, lighter weight and more breathability. Contract award is anticipated in mid September 2013.

- Female PUG sizing system is based off of hip circumference, as opposed to waist circumference for Male PUGs. The female PUG also does not include a fly opening in the front. The female PUG offers the exact ballistic protection and area of coverage as the male PUG.

Soldier Clothing and Individual Equipment

Army Combat Uniform-Alternate

The ACU-A offers 32 additional sizing choices that will accommodate Soldiers with smaller physical stature

Items not shown:

- Removed drawstring; added elastic waistband
- Shortened button fly
- Repositioned pockets (lower leg and cargo)

Bi-swing placement adjusted inward

Shoulder width narrowed

Repositioned rank

Adjusted sleeve length and width

Repositioned elbow patches

Repositioned pencil and sleeve pockets

Adjusted chest waist and sweep ratio

Longer length front and back

Adjusted hip to waist ratio

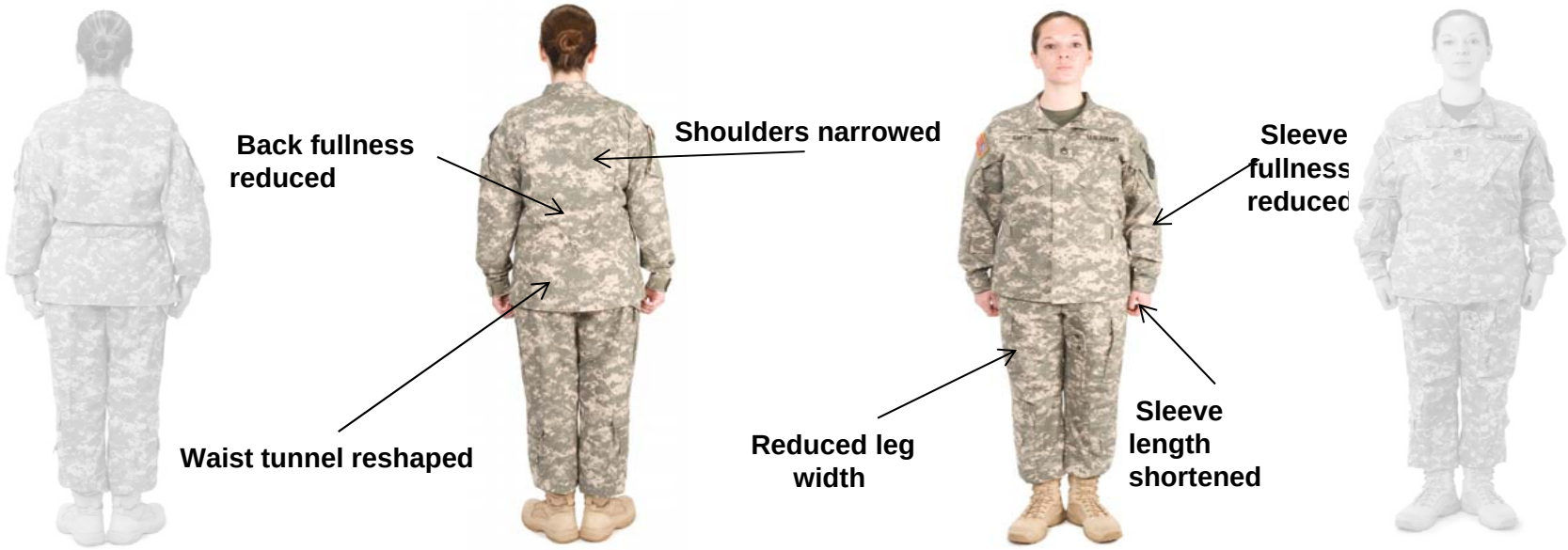
Adjusted front and back rise

Repositioned knee patches

Army Aircrew Combat Uniform (A2CU)

- The A2CU is a two-piece flight suit that offers the Soldier protection from flash fires
- The A2CU Alternate provides fit improvements for the female Soldier and the same level of flame resistant (FR) protection as the A2CU

A2CU-A



A2CU A2CU-A A2CU-A A2CU

Fire Resistant Environmental Ensemble (FREE)

- Provide female Aviators, or other female Soldiers that require No Melt/No Drip or Flame Resistant undergarments within the Fire Resistant Environmental Ensemble (FREE) system
- Increase overall comfort and support for female Soldiers while using the FREE system without sacrificing burn protection from flash flame threats

Men's FREE Undergarments / Next to Skin Layers

Women's FREE Undergarments / Next to Skin Layers

Army Physical Fitness Uniform

APFU

What DESIGN changes do I expect to see?

Jacket

- Half elastic for sleeves
- Remove elastic waist/ add drawstring
- Adjust pattern fit
- Add zipper thong to zipper tab
- Remove reflective feature
- Possible female sizing

Long Sleeve T-shirt

- Adjust pattern fit
- Add tagless label
- Reduce fabric weight
- Add quick dry
- Remove reflective "A" and Army
- Add antimicrobial
- Remove mock collar
- Remove sleeve cuff

Trunks

- Add 4-way stretch boxer short w/ antimicrobial crotch
- Adjust key pocket size
- Make ID pocket more secure
- Add side stretch panel
- Remove reflective feature
- Adjust pattern fit
- Reduce fabric weight
- Add tagless label
- Possible female sizing

Short Sleeve T-shirt

- Adjust pattern fit
- Add tagless label
- Reduce fabric weight
- Add quick dry
- Remove reflective "A" and Army
- Add antimicrobial

Pant

- Half elastic on leg bottom
- Taper leg
- Remove liner
- Possible female sizing

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Every Soldier, Everywhere, Everyday!