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Department of the Air Force

Innovate, Accelerate, Thrive - The Air Force at 75

Gender Integration: Uniforms & Grooming Standards



AF/A1

6-7 December 2022

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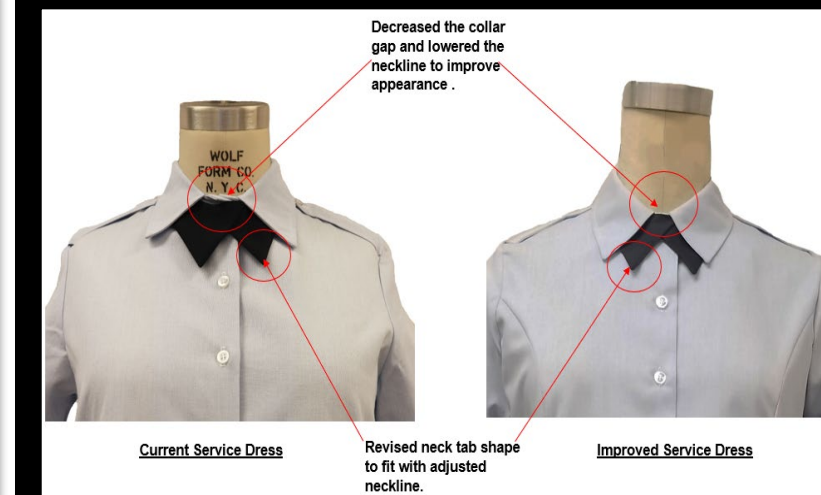
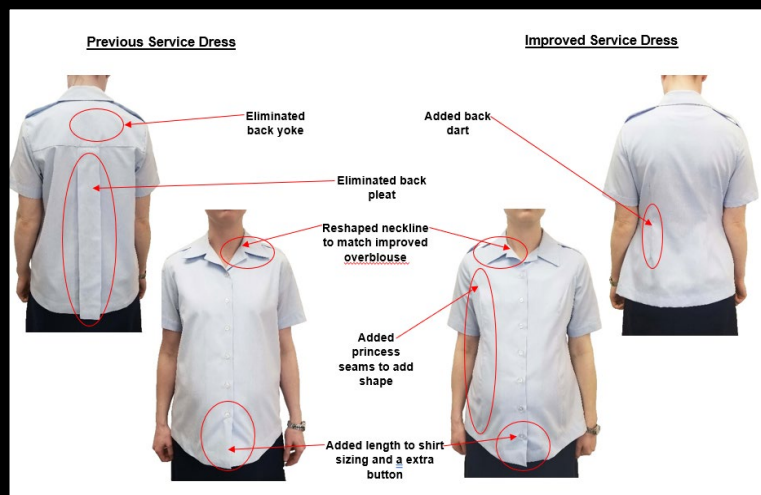


Updates/Modifications to Maternity Uniforms

☐ Modifications to Maternity Uniforms:

☐ New maternity service dress shirts (long/short sleeve) - available end of 2021

☐ Mods include: new polyester/cotton herringbone fabric, redesigned neckline and collar for improved fit/comfort, replaced back pleat with darts for improved shape/fit, realigned buttons for improved modesty, lengthened shirt body for accommodation through all trimesters, added lengths for height differences, re-engineered armhole and shoulder for improved mobility.





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Updates/Modifications to Maternity Uniforms

- ☐ Modifications to Maternity Uniforms:
 - ☐ New maternity service dress ensemble (Wrap Dress, Dress Coat, Slacks and Skirt with 360-degree belly panel) – projected release Sept 2023
 - ☐ First update in 20 years
 - ☐ Items will replace current maternity service dress (Jumper, Slacks, and Skirt)
 - ☐ Fit/Wear test assets in production
 - ☐ Fit/Wear testing scheduled for Jan 2023





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Updates to Grooming Standards

- ☐ Airmen authorized to wear hair in a “natural” color regardless of natural born hair color
- ☐ Female Airmen increased hair bulk standards from 3.5 inches to 4 inches from scalp
- ☐ Authorized Ponytails/braid/equivalent hairstyles
 - ☐ *Hair pulled back and secured behind the head, radius will not exceed 6 inches from point where the hair is gathered i.e., no more than 6 inches to the left and 6 inches to the right, 12 inches total width and 6 inches protruding from where hair is gathered
- ☐ Bangs may touch eyebrows
- ☐ Removed “faddish” language and any references to complexion



Unbraided Single Ponytail/Pull-through Ponytail Style/Braided Ponytail



Braided Ponytails/Multiple Braids in a Single Ponytail



Pulled back secured and does not exceed 6 inch radius



Two Braids Looped Underneath/Two Braids

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Gender Integration: Female Fitment



AFLCMC/WNU
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Female Fitment

AF FEMALE FITMENT

BEST PERFORMANCE REQUIRES GEAR THAT FITS

This initiative has brought together various functional area experts, to include human factor engineers, physiologists, and engineers, to ensure that the Air Force has updated anthropometric data for all females. This data will ensure that all AF requirements are inclusive of current AF Female anthropometric requirements.

- Female Fitment Events – Nine events that captured survey data and anthropometric measurements
- GearFit – Feedback application for aircrew to provide inputs for their gear and uniforms
- Requirements Owner Inputs – Functional communities bringing requirements for materiel solutions
- Anthropometric Studies/Data Collection – Feeds into all programs for accommodation consideration
- Continuous collaboration with Women's Initiative Team (WIT) and MAJCOM Female Fitment Leads – Provides feedback from lowest levels on female fitment needs and challenges





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Defense Advisory Committee on Women in the Services (DACOWITS) December 2022 – Requests for Information



5 – Gender Integration

- a. What process is currently being applied to evaluate the effectiveness of PPE and combat gear for women?
 - i. Provide date of last anthropometric study used to develop PPE and combat gear for women.
 - ii. Provide any additional technology/studies utilized to improve PPE and combat gear for women.
- b. What is the current timeline and process to procure equipment via existing supply channels?
- c. What is the current timeline and process to procure alternative equipment (e.g., unique fit) not obtainable via existing supply channels?
- d. Provide an update on modifications to or the development of gender specific PPE, combat gear, and uniforms since June 2018, to include:
 - i. Updates/modifications to maternity uniforms.
 - iii. Information related to studies conducted to improve female flight suits.
- e. Provide an onsite visual display that depicts new gender specific PPE and combat gear developed for women.



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Airmen Accommodation Lab

The AAL has and will be funded to conduct the studies that will:

- Determine body size limits for Career Enlisted Aviator (CEA) positions
- Verify current pilot body size limits per platform (or recalculate, given modifications)
- Address sizing and function of Aircrew Flight Equipment (AFE)
- Statistically define the future body size variation of the recruiting population
- Produce a 3D scanner-based system that will be used to size uniforms, equipment and assign aircraft positions based on measured body size





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Anthropometric Studies

- 2019 – Anthropometric study for Air Force Security Forces was conducted to better determine the proper fitment of body armor for female Defenders. The study allowed AFLCMC/WNU to identify an interim body armor solution for female Defenders that could be procured quickly until the Army's Modular Scalable Vest (MSV) came online in FY21
- 2021 – First ever Career Enlisted Aviation Study (CEAS) anthropometric study began with the aim of eliminating unnecessary barriers by to establishing the first scientifically sound stature requirement for aircrew members. There have been several anthropometric studies in the past; all pertaining to only the flight deck and pilots. This discriminately eliminated 90% of the female population from fulfilling roles as an enlisted aviators. The team's findings have already opened the aperture for shorter enlisted aviators





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Anthropometric Studies

- The Creation of a Baby Bump for our Female Burn Manikin, at Combat Capabilities Development Command Soldier Center, enables us to characterize the performance of Maternity fire-resistant clothing by quantifying injuries in accordance with the industry standards. The removeable front pregnancy panel, reflect the core maternity specs for the bust and the belly
- Current - Ongoing data collection comparing body measuring technologies with traditional methods. Building database and determining future use for body scanning technologies. Additionally, partnerships with sister services are ongoing and commonality is used when requirements allow. Anthropometric data sharing allows each service to meet female fitment needs



Female Burn Manikin



Procurement Timelines

The Air Force Uniform Offices process includes:

- Development time to create Supply Request Package (SRP) ranges from 9 -15 months. Each uniform has different requirements that affect timelines
- Upon acceptance of the SRP, DLA timelines for delivery range from 18 - 24 months. This includes the process to get a vendor on contract and production times
- In total, using existing supply chains, new uniforms or existing uniform modification timelines range from 25 – 39 months for delivery

Opportunities to shorten standard processing timelines include:

- Modifications to existing uniform contracts
- Adopting sister service solutions
- Using Commercial off the shelf (COTS) solutions to meet requirements until DLA can field items
- Contracting and fielding small quantities (low rate initial production contracts) until DLA can field items
- Utilizing AFLCMC/WNUs IDIQ contract vehicle dubbed Try-Decide-Buy (TDB). TDB has 11 small businesses on the ready to find COTs solutions to fitment gaps found in fielded equipment



Procurement Timelines

An example of how the standard timelines can be shorted is the Security Forces Female Body Armor Program which delivered a solution that allows every female Defender in the Total Force to be equipped with a body armor system that is specifically tailored for the female form

- In 2019, a study was conducted for Air Force Security Forces to better determine the proper fitment of body armor for female Defenders. The study utilized female volunteers and consisted of, taking traditional body measurements by hand, body scans and active movement scans with gear on to determine where modifications were required for better female fitment yet preserve the protective nature of the equipment
- The study allowed AFLCMC/WNU to identify an interim COTS body armor solution for female Defenders that could be procured quickly until the Army's Modular Scalable Vest (MSV) came online in FY21
- The program was able to deliver 7,800 units to Active, Guard, and Reserve female Defenders from contract award to fielding in 20 months
- The speed at which we accomplish this is dependent upon the type of equipment needed and readily available solutions





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Uniform Updates – Maternity Flight Duty Uniform (MFDU)



A policy change on 19 Sept 19 authorized piloted aircrew, missile operations duty crews & certain qualified pilots to perform duties during pregnancy without a medical waiver. Maternity flight suits did not exist. The AFUO executed a solution that included three projects:

- Project 1: Interim Solution, 27/P Coverall Modification utilized in-house safe modifications by the AFUO for around 300 flight suits to meet the immediate need
- Project 2: In Sept 21, a low rate initial production contract for Maternity FDU Coverall was awarded. The MFDU utilized fabric & design from current 27/P and converted sizing to alpha. The updated design & fit through the bodice, belly & hips accommodate the pregnant form. The waist tabs allows for adjustability to accommodate multiple stages of pregnancy. 2K units were initially fielded Jun 22
- Project 3: Maternity 2-piece A2CU SRP is expected to be submitted to DLA Dec 22. The Maternity A2CU is expected to be fielded by DLA Jun 24. The team developed a fire-retardant stretch knit belly panel with waistband elastic for comfort while accommodating all stages of pregnancy



Project 2: MFDU



Project 3:
Maternity A2CU



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Uniform Updates – Advanced Aircrew Combat Uniform – Female (A2CU-F)



The creation of the Advanced Aircrew Combat Uniform Female (A2CU-F) was due to poor female fit of unisex A2CU and is designed to accommodate the 5th to 95th percentile of female specific anthropometric size & stature

- In May 20, the Massif 2-Piece Flight Suit, was approved as an interim solution for non-ejection female aircrew to procure until DLA could field the uniform
- Air Force Uniform Office and AF Anthropometric teams worked together to determine & validate the best female fit and began fit/wear testing in Sept 20
- The uniform improves safety & comfort for female aircrew and reduces costs to the female aircrew member, or unit, by eliminating the need for alterations
- DLA began fielding the A2CU-F in Jun 22 and it is currently available for female aircrew
- Long-term government owned solution is half of the cost of the commercial off-the-shelf solution
- Multi-service common solution – Army adopted, and Navy will adopt with minor modification





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Uniform Updates – Physical Training Gear (PTG)

First-ever female specifically designed AF PTG. Updated design & appearance for more athletic fit aligned with commercial trends

- Air Force Uniform Office and AF Anthropometric teams worked together to determine & validate the best female fit. Fit/Wear testing validated sizing requirements
- T-Shirt specifically designed female fit with raglan sleeves for active movement
- Tracksuit specifically designed female fit with added length to the back for coverage
- Running Short introduced “biker” style liner for modesty & shorter length for running
- All purpose short specifically designed female fit with longer length for casual wear
- Available 2024





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Uniform Updates – Service Dress Maternity Ensemble



Addresses the need for updated professional Maternity Service Dress ensemble that would serve all stages of pregnancy. Air Force Uniform Office and AF Anthropometric teams worked together to determine & validate the best female fit

- First update in 20 years
- Worked with Women's Initiative Team on concepts
- Addressed fit on Maternity Blouse
- Slack and Skirt include a 360° Belly Panel
- Fit/Wear test assets in production
- Fit/Wear testing is expected to begin Jan 23





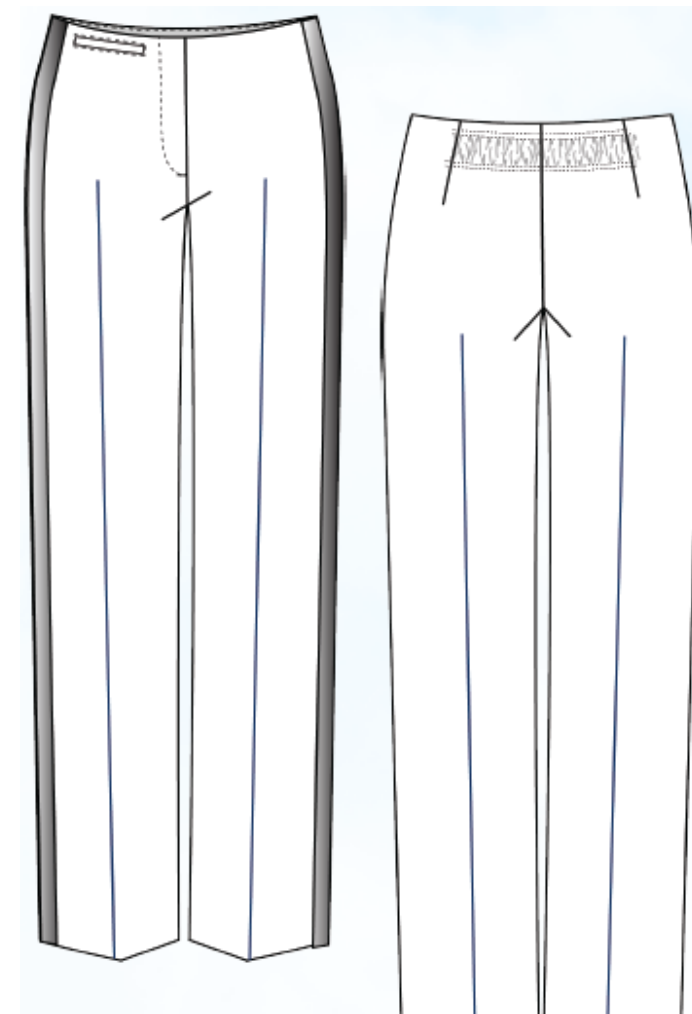
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Uniform Updates – Mess Dress Slacks

Development of female mess dress slacks as an alternative option to the current female mess dress skirt

- The female mess dress slacks design & fabric will provide Air Force females a formal and equally comfortable option in addition to the already available skirt
- Available 2024





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Questions?