

INFORMATION PAPER

ATTG-TRI-A
16 October 2020

SUBJECT: Defense Advisory Committee on Women in the Services (DACOWITS)
December 2020 Quarterly Business Meeting Request for Information (RFI)

1. Purpose. To provide a response to the DACOWITS Request for Information (RFI) Number 7, December 2020, regarding the Army Combat Fitness Test (ACFT).
2. Request for Information Number 7. The Army provide a written response on the results of the University of Iowa's independent validation of the ACFT baseline performance standards, to include any assessment of physiological gender differences.
3. Background. The Army Baseline Soldier Physical Readiness Requirements Study (BSPRRS) was conducted by the U.S. Army Center for Initial Military Training at Fort Eustis to determine the physical requirements for all Soldiers in a combat environment. A team at the University of Iowa Virtual Soldier Research program conducted a peer review of the BSPRRS. The independent peer review from the University of Iowa was conducted by a well-qualified team of five scientists who found that the methodologies utilized by the Army were appropriate and rigorous and the results provide a strong baseline validation for the six-event ACFT.
4. Baseline Physical Requirements. The BSPRRS and subsequent peer review focused on the minimum physical requirements for all Soldiers in a combat environment. In a multi-domain and complex battlefield, the minimum physical fitness requirements are the same regardless of gender. Therefore, while women were present in the study, at a rate roughly equal to their proportion throughout all components (Active and Reserve), neither the BSPRRS, nor the peer review directly studied the physiological differences between men and women.
5. Findings of the BSPRRS and Peer Review.
 - a. The University of Iowa peer review validated that the objectives of the study were successfully achieved, namely:
 - (1) The methodology used to develop the baseline physical requirements from the Warrior Tasks and Battle Drills (WTBD) and Common Soldier Tasks (CST) was well accepted and consistent with professional and scientific norms. The peer review further found that the BSPRRS properly identified tasks to represent each core task, and distilled them to the final WTBD-ST through practical considerations, pilot testing, field observation, and input from focus groups. Overall, the peer review found that the Army's methodology used was sound.
 - (2) The BSPRRS showed that the Army Physical Fitness Test (APFT) explained less than half of the variability in WTBD/CST performance. Further, the BSPRRS showed the need for a better physical assessment to predict combat fitness.

INFORMATION PAPER

(3) The peer review determined that a set of six common physical fitness test events were more predictive (> 70% variability explained) of combat task performance than the APFT. Further, the peer review determined that the six-event ACFT provides a more complete representation of a Soldier's true abilities, encompassing more fitness domains than the three-task APFT.

c. The BSPRRS applied a combination of qualitative and quantitative approaches to develop an obstacle course as a surrogate representation of WTBD/CSTs. Overall, this methodology, used to develop the criterion metric of Soldier physical requirements was scientifically valid. Both men and women were evaluated in a ratio reflecting the current proportions across all components of the Army (84% men, 16% women).

d. The six-task ACFT was developed through testing of Soldiers, using both stepwise linear regression and stakeholder feedback, and further validated with additional testing of separate Army cohorts. The process utilized scientifically appropriate and rigorous methodologies. The ACFT explained 70-85% of the variability in simulated WTBD/CST performance, nearly twice the original APFT.