



DEPARTMENT OF THE AIR FORCE
WASHINGTON, DC

OFFICE OF THE SECRETARY

15 February 2023

MEMORANDUM FOR DACOWITS

FROM: HQ USAF
1720 Air Force Pentagon
Washington DC 20330-1720

SUBJECT: USAF DACOWITS RFI Response RFI #9

QUESTION #9

In December 2022, via RFI 7, the Committee asked the Military Services to provide updates to their physical fitness training programs. In 2020, the Navy shifted to planks vice sit-ups. Starting in 2023, the Marine Corps will mandate planks, which were added as an option to sit-ups in 2019. The Army's revised Army Combat Fitness Test (ACFT) requires planks in lieu of sit-ups. According to the Army, utilizing the plank as a sole core assessment allows the Service to properly measure soldiers' core strength consistently and equally, as well as reduce injury rates. The Air Force is the only Service that still allows Airmen to do sit-ups as part of their physical fitness assessment. The Committee requests a written response from the Air Force which provides the scientific and medical justification to keep sit-ups as part of the physical fitness assessment.

RESPONSE:

The Air Force moved away from a one-size-fits-all model with the implementation of alternative components for physical fitness assessments beginning 1 January 2022. Airmen have three options for the core strength component, including 1 minute of sit-ups, 2 minutes of cross-leg reverse crunches, or a timed forearm plank.

These changes resulted from a combination of feedback from Airmen, scientific evidence drawn from published literature on relevant alternate fitness components, and examination of other services' physical fitness assessments.

In December 2020, the Fitness Program Working Group conducted a Subject Matter Expert and Field Review. The Working Group included experts in Exercise Science, Physical Therapy, and Sports Medicine. The team explored the efficacy of current assessment components and discussed Airmen's desire for potential changes. The working group determined Airmen preferred to keep traditional components in place while also introducing additional options and giving service members a choice (e.g., sit-ups, crunches, or planks). Field inputs came from Airmen of all genders, rank/grade, age groups, fitness levels, with and without medical exemptions/limitations.

Furthermore, Rand examined this topic in a study conducted in 2021 (Robson, Leamon, Lytell, et al., 2021): Review of Evidence Relevant to the AF Fitness Assessment. The study found that injury association with sit-ups is based on limited research (Robson, Leamon, Lytell, et al., 2021). Harvard Health Publishing stated, “Considering the arguments suggesting that there may be potential injury risks associated with sit-ups, planks may offer an alternative that places less strain on the lower back but still recruits different core muscle groups” (Harvard Health Publishing, 2020). Rand noted more research is needed to determine whether planks or any other core assessment will reduce injury risks. Finally, Rand recommended considering planks as an alternative to sit-ups to measure core stability and strength.

The Dept of the Air Force elected to offer more testing options to our Airmen. As CSAF stated, “we know not all Airmen maintain their fitness the same way and may excel in different areas. Alternate components provide choices while still providing a mechanism to determine overall fitness.” The Air Force will continue to work with the Air Force Surgeon General for medically related physical fitness issues and will continue to evaluate the Physical Fitness Program, ensuring the program aligns with the goal of motivating all members to participate in a year-round physical conditioning program that emphasizes total fitness, to include proper cardiorespiratory conditioning, muscular endurance training, and healthy eating.