

Foreign Military Physical Fitness Assessments

Response to DACOWITS June 2020 RFI 13



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Chapter 1. Introduction

The Defense Advisory Committee on Women in the Services (DACOWITS) requested a literature review on physical fitness assessments used by foreign militaries. The Committee was particularly interested in the (1) measures, (2) assessment scales, and (3) implementation methods of physical fitness assessments used by foreign militaries. Chapter 2 provides an overview of the approach and history of physical fitness assessments used in the U.S. Army for context. Chapter 3 discusses how the physical fitness assessments for foreign militaries varied. Chapter 4 details the various approaches used by foreign militaries to implement physical fitness assessments. Chapter 5 outlines the conclusions and implications for DACOWITS.

A. Scope and Limitations to Research

For the purposes of this literature review, a physical fitness assessment is defined as an evaluation of a Service member's fitness level as it relates to general health and wellness. These assessments can be used to examine general health and wellness, job preparedness, and/or combat readiness and can be implemented at any point during the service cycle, including recruitment, annual testing, promotion cycles, and separation from military service. This broad definition of physical fitness assessment mirrors the definition used in the DACOWITS 2019 annual report and other scholarly research reviewing military physical fitness assessments.¹

There are varying amounts of information available about militaries across the world, and there are limited available information about the physical fitness assessments implemented by these militaries.² As a result there are limitations to the findings of this report:

- ▶ **Limited publicly available sources from official channels.** Few foreign militaries provided current information about the purpose, activities, evaluation, and implementation of their physical fitness assessments through official communication channels, such as official government or military websites or government-issued documentation. While some countries disseminated information on their military physical fitness assessments through official channels, the information was often not comprehensive, was antiquated, or was inconsistent between sources. Countries that did not provide information in English posed additional barriers for the research team. For the purpose of this literature review, the research team omitted data found on unofficial channels.
- ▶ **Lack of comparative data sources.** Academic literature reviews surrounding military physical fitness assessments were limited and often focused on a selected few countries with publicly available data, which made it difficult to evaluate and compare physical fitness assessment across a large number of countries in a comprehensive way.
- ▶ **Lack of timely and current date information surrounding physical fitness assessments.** Foreign militaries changed and evolved the measures, scale, and implementation methods for physical fitness assessments as studies provided new evidence for improvements. At the time of data collection for this report, some countries were altering or redesigning their physical fitness assessments to align with the most recent data, and other countries had not updated their physical fitness assessments recently. As a result, the research team omitted data on outdated assessments or future plans for assessments that had not yet been implemented.

This literature review focuses on foreign armies (i.e., land or ground forces) from 16 countries that allow women access to combat roles and for which data are readily available. The selected countries are Australia, Canada, Denmark, Finland, Germany, Ireland, Israel, the Netherlands, New Zealand, Norway, the Philippines, Poland, Singapore, Sweden, Switzerland, and the United Kingdom. This report focuses on the army Services because the army is the most common branch across the selected countries, and it is often the largest Service within a country.³

Chapter 2. U.S. Army's Approach to Physical Fitness Assessments

The U.S. Army's approach to assessing physical fitness and well-being has changed over the years, with an increasing focus on evidence-based assessments that reduce injury and better predict Service members' success in their occupational specialties. This chapter provides a review of the physical fitness assessment in the Army, including the current Army Physical Fitness Assessment (APFT) and the newly developed Army Combat Fitness Test (ACFT).

A. History of the APFT

The Army has been testing and scoring physical fitness measures among Service members and trainees for more than 150 years. In 1858 the first recorded Army physical fitness assessment was implemented for cadets at the United States Military Academy.^{4, 5} This test required cadets to climb a 15-foot wall, vault a 5-foot tall horse, leap a 10-foot wide ditch, run a mile in 8 minutes or run 2 miles in 18 minutes, walk 4.5 miles in an hour, and walk 3 miles in an hour while carrying equipment that included a 20-pound knapsack.⁶

In 1944, a seven-event test was implemented that required soldiers to perform pullups; burpees (i.e. full body squat thrusts); squat jumps; pushups; "man-carries;" situps; and a 300-yard shuttle run. A 100-point scoring system was used to score the test. During this time servicewomen took a self-assessment with similar components. It was not until 1965 physical fitness assessments were mandated for both men and women in the Army. Throughout the 1960s and 1970s, more than seven fitness assessments were piloted and implemented in the Army. In 1981, President Jimmy Carter requested the Secretary of Defense assess the physical fitness programs for all the Military Services. The most recent APFT was implemented in the 1980s and consisted of pushups, situps, and a 2-mile run. Alternative activities were added in 1982 for Service members with certain medical conditions.⁷

In 2002, DoD updated DoD Instruction (DoDI) 1308.3, DoD Physical Fitness and Body Fat Programs Procedures; this instruction provides guidelines for maintaining physical readiness within the Military Services.⁸ The standards as outlined in the instruction are shown in Figure 1.1.

Figure 1.1. DoD Physical Fitness Program Guidelines as Outlined in DoDI 1308.3



Source: DoDI 1308.3, 2002⁹

In the early 2000s, researchers found Service members experienced excessive injuries during initial military training and while completing the APFT.^{10, 11, 12} The Army determined the APFT predicted only 40 percent of a Soldier's ability to execute high-demand critical warrior tasks. As a result "Army leadership identified the need for a more predictive fitness assessment to improve physical readiness that correlated to high demand Common Soldier Tasks ... and reduce injuries and unplanned attrition."¹³ In 2015, Secretary of Defense Ash Carter announced as of January 1, 2016, all combat positions would be open for women.¹⁴ In response to the gender integration of combat positions and problems associated with the existing APFT, the Army examined alternative tests to assess combat readiness for men and women, leading to the design of the ACFT.

B. Exemption Policies for the APFT

The Army has instituted several exemptions to the APFT surrounding pregnancy and the postpartum period; this section describes those in effect as of the time of data collection. Pregnant women are exempt from the requirement to complete the APFT, and "postpartum Soldiers are exempt from the APFT for 180 days from the date of pregnancy termination."¹⁵ During the pregnancy and postpartum periods, Soldiers are instructed to exercise at their own pace, focusing on recovery and reconditioning. It is during this postpartum period Soldiers participate in the mandatory Army Pregnancy Postpartum Physical Training for a minimum of 4 weeks. While Soldiers are encouraged to remain in the program for up to 180 days postdelivery, they can return to traditional physical training before 180 days "if they pass a diagnostic APFT, meet AR 600-9, The Army Body Composition Program, standards, and are given approval."¹⁶

Soldiers can be deemed exempt from the APFT because of medical conditions other than pregnancy. Soldiers can be placed on a temporary medical profile while receiving medical or surgical care during or while recovering from illness or injury. A Soldier with a stable condition can be placed on a permanent medical profile.¹⁷ When deemed appropriate, Soldiers may complete alternate aerobic events to assess fitness if their profiles prevent them from completing the typical events. These alternate events include

an 800-yard swim test, a 6.2-mile stationary-cycle ergometer test, a 6.2-mile bicycle test, or a 2.5-mile walk test.¹⁸

C. Current State of Army Physical Fitness Assessments

The APFT consists of three activities: 2 minutes of pushups, 2 minutes of situps, and a 2-mile run. A height and weight assessment is completed concurrently during this semiannual test. The standards differ based on age group (ages 17–21, 22–26, 27–31, 32–36, and 37–41) and gender. Soldiers are evaluated based on a total score that combines their individual scores on each event. More points are awarded, on a gender- and age-normed basis, for faster runs or more repetitions of pushups and situps during those timed events. Table 1.1 shows the standards required to receive the maximum (100) and minimum passing score (60) points per event for individuals aged 17 to 21.

Table 1.1. Standards and Associated Scoring per APFT Event for Individuals Aged 17 to 21

| Event | Standard Needed to Receive 100 Points (maximum score per event) | | Standard Needed to Receive 60 Points (minimum passing score per event) | |
|---------|---|--------------------------|--|--------------------------|
| | Male | Female | Male | Female |
| Pushups | 71 pushups in 2 minutes | 42 pushups in 2 minutes | 42 pushups in 2 minutes | 19 pushups in 2 minutes |
| Situps | 78 situps in 2 minutes | 78 situps in 2 minutes | 53 situps in 2 minutes | 53 situps in 2 minutes |
| Run | 2 miles in 13:00 minutes | 2 miles in 15:36 minutes | 2 miles in 15:54 minutes | 2 miles in 18:54 minutes |

Source: Military.com, n.d.¹⁹

The ACFT is designed to address issues associated with the efficacy of the APFT; the goal of this new gender-neutral test is to provide an 80-percent prediction of a Soldier’s ability to complete the average physical demands required for Common Soldier Tasks. The six-event assessment includes scoring of a three-repetition maximum deadlift, standing power throw, hand-release pushup arm extension, sprint-drag-carry, leg tuck, and 2-mile run.²⁰ The U.S. Army Training and Doctrine Command had planned to continue piloting the ACFT on Army installations across the country in the months leading up to the ACFT’s universal replacement of the APFT scheduled for October 2020.^{21, 22} However, the COVID-19 pandemic has delayed further testing of the APFT and suspended implementation of the ACFT until further notice.^{23, 24}

Chapter 3. Variation in Physical Fitness Assessments in Foreign Militaries

Foreign militaries were found to have varying approaches to assessing the physical fitness of their Service members. This chapter provides a review of the following elements of foreign militaries' physical fitness assessments: (1) purposes of the assessment, (2) frequency of the assessment, (3) incorporation of body measurements in the assessment, and (4) activities and components of the assessment.

A. Variation in Purpose

Physical fitness assessments have generally been used to establish a baseline measure for Service members. Most commonly, these assessments are used—

- ▶ **During recruitment.** These assessments establish entrance standards, providing a baseline assessment to determine an applicant's ability to begin training for military service.
- ▶ **Throughout the length of service.** Ongoing assessments that routinely measure a Service member's overall health and wellness to enhance the general fitness and combat readiness of the Service as a whole.
- ▶ **During promotion cycles.** These readiness tests assess a Service member's ability to serve in a new occupational position. These tests assess the member's combat readiness to ensure they can perform at a higher standard.

While the terminology and names associated with each country's physical fitness assessments varied, the majority of the assessments examined in this literature review included the terms "fitness," "test," and "assessment." Some of the physical fitness assessments included indicators for the stage in which the test was implemented (i.e. basic or pre-entry) or the frequency with which a test was administered (i.e., annual, continuous). Figure 2.1 illustrates the terms used to describe the physical fitness assessments employed by foreign militaries.

Figure 2.1. Examples of Terms Used to Describe Foreign Militaries' Physical Fitness Assessments

| | | |
|--|--|--|
| Fitness for operational requirements of employment Canada | Core test Denmark | Physical fitness test Finland |
| Role fitness test United Kingdom | Basic fitness test Germany, Australia | Bar-Or test Israel |
| Defense condition test Netherlands | Ongoing fitness requirement New Zealand | Individual physical proficiency test Singapore |
| Annual fitness test United Kingdom | Defence forces induction fitness test Ireland | Pre-enlistee individual physical proficiency test Singapore |

Sources: Government of Canada, n.d.;²⁵ Malmberg, 2011;²⁶ Malmberg, 2011;²⁷ British Army, n.d.;²⁸ DefenceJobs, n.d.;²⁹ The Government of Germany, n.d.;³⁰ Garin Marahal, 2020;³¹ Singapore Ministry of Defense³² Malmberg, 2011;³³ British Army, n.d.;³⁴ Irish Government Defense Forces, n.d.;³⁵ Singapore Ministry of Defense³⁶

B. Variation in Frequency

Like the United States, many foreign countries, including Canada, Finland, the Netherlands, New Zealand, Poland, and the United Kingdom, have evaluated physical fitness on an annual basis.^{37, 38, 39, 40, 41} These armies have tested physical fitness annually to ensure a Service member can “meet or exceed the minimal physical demands of military Service.”⁴² In comparison, some countries that have required military service for all qualified citizens have tended to schedule physical fitness tests around natural transitions. For example, documentation for the Norwegian Armed Forces stated, “compulsory military personnel are to be tested three times within their military service period of 12 months – within three weeks of entering training, before transferring from training to various parts of military service, and within the final quarter before leaving military service.”⁴³

C. Variation in Use of Body Measurements to Assess Physical Fitness

Many foreign countries kept some record of the anthropometric measures of their Service members, including body compositions (percentage of body fat) and body height and weight. While many countries maintained height and weight requirements for enlistment or kept records of anthropometric measures, far fewer used them for annual fitness tests. Other countries generally did not take these measures during the physical fitness assessments or include them in the scoring of physical assessment.

For example, Canada's Fitness for Operational Requirements of Canadian Armed Forces Employment test used an age- and gender-adjusted scale to calculate scores for aerobic capacity and waist circumference. The waist circumference measure was part of the Health-Related Fitness component used for health education purposes only, meaning there were no associated career sanctions.⁴⁴

Of the reviewed countries with integrated combat positions,ⁱ Ireland and Finland were the only countries outside of the United States to include a measure of body composition in the scoring of annual physical fitness assessments. Ireland's Defense Forces fitness test began with measures of body mass index (BMI). BMI is calculated as one's weight divided by the square of one's height.⁴⁵ For those who did not meet the BMI standards, body composition was measured through a skinfold caliper test, and "individuals who score in excess of 70mm (Males) or 80mm (Females) on the skinfold caliper test will NOT be permitted to continue with the test."⁴⁶ In comparison, the Finnish army evaluated body composition by measuring BMI as well as body height, weight, and waist circumference. After calculating BMI, the Finnish army calculated waist circumference as the average of two measurements "using a cloth tape measure at a point between the lowest rib and iliac crest following a normal exhale."⁴⁷

D. Variation in Physical Fitness Assessment Activities

Many foreign armies required a physical fitness assessment for Service recruits, trainees, and active duty and Reserve Service members. This section describes the activities conducted for the assessment; these included individual events or exercises timed, counted, or scored to determine whether an assessment was successfully completed.

There was both variation and similarities in the activities foreign armies used to assess physical fitness (see Table 2.1). These assessments most commonly included core exercises, strengthening activities, and cardiovascular exercises. Armies that incorporated all three categories of activities accounted for more than 60 percent (11 out of 17) of the selected countries. The most common combination of assessment activities was situps, pushups, and a running exercise; half of the examined countries included these three major activities in their assessments. Some of the less frequently used activities included a balance test (Switzerland), an object-carrying activity (Canada), a chin hang (Ireland), and lunges (Denmark).

ⁱ Australia, Canada, Denmark, Finland, France, Germany, India, Ireland, Israel, New Zealand, Norway, Pakistan, Sri Lanka, Sweden, Switzerland, Turkey, and the United Kingdom

Table 2.1. Physical Fitness Assessment Activities for Foreign Armies by Country

| Country | Core | | | | Strength | | | | | | | | | Cardiovascular | | Other |
|-----------------------------------|--------|----------------|------------------|--------|----------|---------|-------------------|--------------------|------------------------|-----------|------------|--------------------|--------------|----------------|-------------|------------------|
| | Situps | Back Exercises | Side/Back Bridge | Lunges | Dips | Pullups | Pushups/ Pressups | Long/Vertical Jump | Deadlift or Other Lift | Chin Hang | Ball Throw | Plank ^a | Object Carry | Run | Shuttle Run | Balance Activity |
| Australia ⁴⁸ | ● | | | | | | ● | | | | | | | ● | ● | |
| Canada ⁴⁹ | | | | | | | | | ● | | | | ● | ● | ● | |
| Denmark ⁵⁰ | ● | ● | ● | ● | ● | ● | | | ● | | | ● | | ● | ● | |
| Finland ⁵¹ | ● | | | | | | ● | ● | | | | | | ● | | |
| Germany ^{52, 53} | | | | | | ● | | | | ● | | | | ● | | |
| Ireland ⁵⁴ | ● | | | | | | ● | | | | | | | ● | | |
| Israel ⁵⁵ | | | | | ● | ● | | | | | | | | ● | | |
| Netherlands ⁵⁶ | ● | | | | | | ● | | | | | | | ● | | |
| New Zealand ⁵⁷ | ● | | | | | | ● | | | | | | | ● | | |
| Norway ⁵⁸ | | | | | | ● | | ● | | | ● | | | ● | | |
| Philippines ⁵⁹ | ● | | | | | | ● | | | | | | | ● | | |
| Poland ⁶⁰ | ● | | | | | ● | | | | | | | | ● | ● | |
| Singapore ⁶¹ | ● | | | | | | ● | | | | | | | ● | | |
| Sweden ⁶² | ● | ● | | | | | ● | | | | | | | ● | | |
| Switzerland ^{63, 64, 65} | | | | | | | | ● | | | ● | ● | | | ● | ● |
| United Kingdom ⁶⁶ | | | | | | | | | ● | | ● | | | ● | | |
| United States ⁶⁷ | ● | | | | | | | ● | | | | | | ● | | |

Notes: Some countries implemented multiple physical fitness assessments; in those cases the activities associated with the general physical fitness assessment are included in the table. Alternate activities for those with medical waivers or exemptions are not included in the table.

^a In Switzerland the plank is used as a measure of core strength; however, in Denmark it is used as a measure of arm strength.

1. Core Activities

Overall, core strength activities were represented by situps, abdominal or back exercises, and side or back bridge exercises. While situps were the most commonly used exercise to assess core strength, the required number and/or time duration of situps varied across countries. For example, the Australian Defence Force administered a pre-enlistment fitness test that consisted of 45 situps for its core strength test. In comparison, the minimum number of situps required in New Zealand ranged from 25 to 35 depending on gender.⁶⁸ The primary objective of conducting situps is to measure a Service member's abdominal endurance and hip flexor muscle strength. Research has noted while situps may not be a strong indicator of total physical fitness, an individual who tends to perform well on this event "more than likely has a high level of total physical fitness," providing an "indirect measure of total physical fitness."⁶⁹

2. Strength Activities

Muscular strength activities are defined as activities that measure a variety of muscular activities over a short period of time (compared with muscular endurance activities, which are completed over a longer duration). Activities varied across the selected countries but most commonly included leg, arm, and back muscle exercises. The pushup and pullup were the most common exercises among the armies examined. Less common muscular strength activities included the vertical jump, long jump, deadlift, ball throw, and an object-carrying exercise.

3. Cardiovascular Activities

Cardiovascular activities are defined as activities that promote an above-average heart rate. Running was the most commonly included cardiovascular activity in the physical fitness assessment. In fact, every country with the exception of Switzerland included running in its assessment. The primary objective of conducting running events is to measure the participant's aerobic capacity. Many foreign militaries deemed aerobic fitness as an essential component of many if not all military tasks, and an important tool for injury prevention and overall health and fitness.

Activities varied across countries, but the most common were sprints, shuttle runs, and distance running. For example, the United Kingdom's army required a 1.2-mile run after an initial half-mile warmup jog. The test required Service members to run 1.2 miles in 11 minutes and 15 seconds or less to meet the lowest entry standard for an adult Soldier; some occupations required a faster time for qualification.⁷⁰ Germany required both a distance run and a sprinting activity for its entry physical fitness assessment. The sprinting activity involved 5 laps of 10-meter sprints. In between sprints participants had to lie face down and put their hands touching behind their back. Participants had to complete the 1000-meter distance run in less than 6 minutes and 30 seconds⁷¹. Still other countries, such as Denmark, Poland, and Sweden, required a shuttle run. Intended to measure a participant's agility and speed, this activity requires Service members to run between two parallel lines until they have reached volitional exhaustion.⁷²

Some countries provided alternative cardiovascular activities for trainees and Service members who could not complete one of the cardiovascular components because of exemptions. For example, Finland, Denmark, and Canada provided alternative activities.^{73, 74} In Canada, an approved alternative to the shuttle run was a step test,⁷⁵ and the Finnish army's alternatives to measuring aerobic fitness were a bicycle ergometer test and a walk test.⁷⁶

E. Variation in Scoring and Use of Physical Fitness Tests

The scoring and implementation of physical fitness assessment tests varied greatly for ground forces around the world. To highlight the variations, this section details how age and gender affected the scoring and implementation of physical fitness assessments in three countries: Australia, Canada, and Norway. These countries were selected because they used a variety of gender-adjusted and gender-neutral physical fitness assessments and scoring measures, uses, and research surrounding the effectiveness of their assessments.

1. Australia

Australia's used the Basic Fitness Assessment, a gender-neutral and gender-adjusted physical fitness assessment administered at 6-month intervals while Service members train for the army.⁷⁷ The assessment consisted of a 2.4-kilometer (km) run (1.49 miles), pushups, and situps. When assessing the effectiveness of Australia's physical fitness assessment, research indicated it was "significantly biased toward lighter individuals," which rendered the test less effective for Service members with lower body mass who might encounter more difficulty lifting or carrying objects.⁷⁸ As illustrated in Table 2.2, the minimum performance standards for the assessment varied substantially on the basis of gender and age.

Table 2.2. Australian Defence Force Basic Fitness Assessment Standards for Men and Women by Age

| Age Group | 25 and under | 26–30 | 31–35 | 36–40 | 41–45 | 46–50 | 51 and over |
|----------------------|--------------|-------|-------|-------|-------|-------|-------------|
| Men | | | | | | | |
| Pushups | 40 | 35 | 30 | 25 | 20 | 10 | 6 |
| Situps | 70 | 65 | 57 | 50 | 30 | 20 | 15 |
| 2.4-km run (min:sec) | 11:18 | 11:48 | 12:18 | 12:42 | 13:12 | 13:48 | 14:30 |
| 5-km walk (min:sec) | - | - | - | - | 44:00 | 45:00 | 45:00 |
| Women | | | | | | | |
| Pushups | 21 | 18 | 15 | 10 | 7 | 3 | 3 |
| Situps | 70 | 65 | 57 | 50 | 30 | 20 | 15 |
| 2.4-km run (min:sec) | 13:30 | 14:00 | 14:30 | 15:00 | 15:30 | 16:00 | 16:30 |
| 5-km walk (min:sec) | - | - | - | - | 45:00 | 47:00 | 47:00 |

Note: min:sec = minutes:seconds

Source: DefenceJobs, n.d.⁷⁹

2. Canada

The Canadian Armed Forces (CAF) used gender-neutral physical fitness standards. Women were allowed to serve in any capacity in the CAF as long as they met the prerequisites for each position.^{80, 81} The

physical fitness standards—which applied to both men and women—consisted of a 1.5-mile run in less than 9 minutes and 45 seconds, 40 pushups without a rest, and 40 situps in less than 1 minute.⁸²

3. Norway

Norway’s Armed Forces used a gender- and age-adjusted physical fitness assessment.⁸³ All military personnel aged 18 to 60 were required to take the assessment annually.⁸⁴ The physical fitness assessment, updated in 2016, included a 3,000-meter run, pullups, a long jump from a standing position, and a ball throw using a 10-kilogram medicine ball.^{85, 86} Service members who were unable to complete the 3,000-meter run could perform a shuttle run, known as the “beep test.” After hearing the buzzer, Service members had to run continuously between two lines set 20 meters apart for as long as possible while maintaining the same speed. To pass the assessment, Service members had to successfully complete the endurance activity and all three strength activities. Exemptions for the test were granted for medical reasons and required a Service member to provide a note from a medical professional to indicate they were unable to participate in the test.⁸⁷ Table 2.3 shows the standard required to achieve the maximum and median score by gender for individuals aged 29 or younger.

Table 2.3. Physical Fitness Assessment Standards by Event and Gender for Individuals Aged 29 or Younger

| Event | Scale | Standard Needed to Receive 9 Points (maximum) | | Standard Needed to Receive 4 Points (median) | |
|---------------------|-----------------|---|--------|--|------------------|
| | | Male | Female | Male | Female |
| 3000-meter run | minutes:seconds | 12:00 | 12:00 | 14:30 | 15:45 |
| Shuttle run | level:shuttle | 11:6 | 11:6 | 9:3 | 7:10 |
| Medicine ball throw | meters | 5.0 | 5.0 | 4.2 | 3.1 |
| Long jump | meters | 2.45 | 2.45 | 2.15 | 1.80 |
| Pullup | repetitions | 10-A ^a | 10-A | 3-A | 6-B ^b |

Notes:

^a For a pullup from the alpha position (A), the participant starts from a vertical position, hanging from a bar, and uses their arms to pull their chin up to or above the bar.

^b For a pullup from the bravo position (B), the participant starts with their body parallel to the ground and uses their arms to raise their chin to a bar, leaving only their feet remaining on the ground.

Source: Norwegian Armed Forces, 2019⁸⁸

Chapter 4. Foreign Militaries Exemption Policies for Physical Fitness Assessments

This chapter reviews foreign militaries' exemption policies for physical fitness assessments; it outlines exemptions related to pregnancy and other medical conditions.

A. Physical Fitness Assessment Exemptions Related to Pregnancy

In comparison with the United States model, foreign militaries handled pregnancy exemptions differently. For example, pregnant Service members were not required to complete fitness assessments in Australia but could choose to complete the assessment if they were within the first 20 weeks of pregnancy and had medical clearance from a doctor. These Service members would have “12 months from the date of delivery, or 90 days after returning to duty (whichever is the latter) to pass their required assessments.”⁸⁹ New Zealand, like Australia, exempted Service members from fitness testing for a full year after delivery of a child “to provide an opportunity to regain the required fitness level for service. [Service members] may attempt [their] Service fitness test as often as [they] like during this period and failed tests will not be recorded until the 12 month period is up.”⁹⁰

According to the United Kingdom's army pregnancy and maternity guide for servicewomen, after a medical examination, a medical officer would either certify that the servicewoman was medically fit to return to work or suggest a longer leave for continued recovery. For this appointment the guide suggested the Service member “discuss with the medical officer [their] exemption from fitness tests for 6 months.”⁹¹ In comparison, the Republic of the Philippines did not provide pregnancy exceptions for some enlisted servicewomen; instead it required immediate discharge from the military for women who became pregnant. According to the policy, “an enlisted female who becomes pregnant; has given birth and has any form of miscarriage or abortion out of wedlock as duly certified by competent authority shall immediately be discharged.”⁹²

Unlike other countries, Poland did not differentiate between pregnancy and other medical exemptions; according to its policy, “the professional Soldier may be exempted from the test of physical fitness in a given calendar year for health reasons, and the woman Soldier professional is released also during pregnancy or breastfeeding.”⁹³

B. Physical Fitness Exemptions Related to Other Medical Conditions

Aside from exceptions made for pregnant servicewomen, foreign countries could exempt Service members from their physical fitness assessments for other medical conditions. For example, the fitness tests in both Canada and Finland began with health screening questionnaires, which were then used to identify potential medical issues that would require medical examination prior to the physical fitness assessment.^{94, 95} In both countries, a physician would determine whether the Service member was capable of completing the physical fitness assessment, needed an alternative or modified assessment, or should receive an exemption from the test for a specific duration.^{96, 97} Similarly, the Australian Defence Force allowed medical exemptions for its annual physical fitness training and testing.⁹⁸

Chapter 5. Conclusions and Implications

Physical fitness assessments are a critical component of ensuring Service member health and military readiness across the globe. These assessments evaluate a Service member's fitness level as a measure of their general health and well-being and are mostly commonly used as a routine assessment throughout service, during the recruitment process, or as a gateway to certain occupational specialties. This literature review compiled information on foreign militaries physical fitness assessments using publicly available information, official military publications, and academic research. The physical fitness assessments of 17 countries' army or ground forces were reviewed. The lack of comparative data across countries makes it challenging to draw immediate conclusions related to the United States' rollout of the ACFT.

U.S. and foreign militaries use a variety of physical fitness assessments to measure and track the physical fitness and health of their Service members. Assessments are commonly administered on an annual basis, and most foreign military physical fitness assessments include a combination of core activities, muscle strength activities, and cardiovascular components. The most frequently used exercises align with the U.S. Army's current physical fitness assessment activities, which are situps, pushups, and a running component. Some foreign militaries incorporate body measurements, such as body fat tests or BMI calculations, in their health assessments. Similar to the United States, many countries offer exemptions for pregnant Service members or those experiencing medical conditions. Broadly, the elements and administration of foreign militaries physical fitness assessments have more commonalities with the U.S. Army's PFA than differences.

As DACOWITS continues to study the U.S. Military Services' physical fitness assessments, in particular the Army's transition to the ACFT, foreign military approaches to these assessments can provide additional context and information. Health and physical fitness are broad cornerstones of Service member readiness, and approaches to measurement and evaluation vary based on many factors. DACOWITS can consider the range of approaches foreign militaries take to assessing physical fitness while also taking into account the varying missions and needs of these military forces as they differ from those for the United States.

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