

Fitness Preparation

Initial Recruit Fitness Assessment

The aim of the IRFA is to determine the fitness entry-level requirement for the Army. Furthermore, it is an **injury prevention tool** in which to predict a recruits potential to be injured whilst participating in military training.



Upon successful enlistment into the Australian Army, an IRFA is conducted by Physical Training Instructors (PTI) on day two at the ARTC Gymnasium. If a recruit fails to demonstrate the baseline level for the IRFA, a retest is conducted within 24 hours. If a recruit fails the retest, they are counselled and remedial training is commenced for two weeks and a further assessment is conducted to assess their performance. Successful completion of the IRFA will result in removal of the recruit from mandatory remedial training to continue recruit training. **If a recruit fails to reach the IRFA baseline level after two weeks of remedial training, ARA enlistees are discharged and GRES enlistees are returned to unit.**

The following physical fitness standards must be achieved in order to commence recruit training at ARTC:

	Male	Female
Push Ups	15	8
Sit-Ups	45	45
Shuttle Run	Level 7.5	Level 7.5

Push Ups

Aim:

To provide an indication of upper body and core abdominal strength and endurance.

Start Position:

Lying flat on your stomach with legs straight and feet no further than 30 cm apart. The hands are positioned comfortably apart generally under the shoulders. Hands and feet are to be on the same level. After the command 'ready' is given, the arms are fully extended so that the body is off the ground. The body is held in a generally straight line from shoulders to the ankles. This is the 'up' position.

Action:

- The body is lowered to a position where the upper arms are parallel to the ground. The body may be lowered further, but may not rest on the ground. This is the 'down' position; and
- Hands are not to be moved towards or away from the feet to decrease the percentage of body weight supported through the shoulders.
- Repetitions will not count if the following occur:
 - The body is not lowered to the 'down' position; or
 - The body is not raised to the 'up' position.
- Ceasing the Assessment:
 - The push up assessment will cease if any of the following occur:
 - The member has completed the required repetitions; or
 - The member rests on the ground, sags in the middle, raises their hands or feet from the ground; or
- For safety purposes, the PTI terminates the activity.



Sit Ups

Aim:

The cadence sit up assessment indicates a member's abdominal strength and endurance.

Start Position:

The member lies flat on their back with the feet placed flat on the ground. The lower leg is at 90 degrees to the knee. The arms are held straight with the palms touching the thighs. The feet can be held or not held. This is the 'start' position.

Action:

- The neck and upper body are flexed in succession to raise the upper body. As the upper body is raised to the 'up' position the hands and lower arms slide up over the knees until the wrist touch the knees. The body is then lowered until the shoulder blades touch the floor, thereby returning to the start position.
- Repetitions are performed to a cadence of 1:3 seconds, each repetition conducted in a controlled and even fashion.
- The chin is to be kept as close to the chest as possible to stabilise the head.

Repetitions will not count if the following occur:

- The hands and arms are lifted from the thighs/knees, or jerked as a means of leverage or used to pull the body up: or
- The head is jerked forward; or
- The member pauses in the 'up' position; or
- The member fails to complete a repetition.

Ceasing the Assessment:

The sit up assessment will cease if the following occur:

- The member is unable to maintain the required cadence: or
- The member has completed the required repetitions; or
- For safety purposes, the PTI terminates the activity.



Beep Test

Aim:

The shuttle run is a 20 metre multi-stage fitness assessment designed to measure the aerobic component of physical fitness.

Prior to the commencement of the shuttle run assessment you will receive a brief from the Physical Training Instructors. Once the CD is started you will receive a countdown of five seconds before the actual assessment starts. Thereafter, the disc will beep at regular intervals. In time with the regular beeps you must be at the opposite 20 metre line by the time the first beep sounds. Upon reaching the line you place one foot on or over the line. If you reach the line prior to the beep sounding you are to wait until the next beep sounds before commencing the next shuttle.

You are to run for as long as possible, until you can no longer keep up with the speed of the beep cadences. If you are unable to maintain the speed required on two consecutive beeps you will be withdrawn from the assessment.



Aerobic Fitness

In order to successfully pass the IRFA you will be required to undertake some form of physical training. It is recommended that you adhere to the FITT principle to ensure that you are achieving the best results through optimal training and recovery periods.

The FITT principle is as follows for aerobic fitness:

F - Frequency- how often you are required to exercise.

- 3 - 5 times a week
- It is paramount that you base the frequency of your training sessions on your current fitness levels. As you become fitter and adjust to the training load you may increase the amount of training sessions.

I - Intensity- how hard you exercise.

- 60 – 90% of your maximum heart rate
- Intensity is an extremely important aspect and probably the hardest to monitor.
- An easy method to calculate your target heart rate is to utilise the below calculation:

$$220 - \text{Age} \times \%$$

Example: 25-year-old determining 65% of their max heart rate

$$220 - 25 \times 65 = 195 \times .65$$

$$195 \times .65 = 126 \text{ Beats Per Minute}$$

T - Time - duration you are required to exercise for.

- 20 – 60 minutes
- As per frequency, it is paramount that you base the duration of your training sessions on your current fitness levels. As you become fitter and adapt to the training load you may increase the duration of your training sessions.

T - Type - exercise types in order to achieve your goals.

- Aim at participating in several forms of exercise that elevates your heart rate for the duration of the session.
- Participate in activities such as: Walking, running, swimming and cycling.

Muscle Fitness

In order to successfully pass the IRFA you will be required to undertake some form of physical training. It is recommended that you adhere to the FITT principle to ensure that you are achieving the best results through optimal training and recovery periods.

The FITT principle is as follows for muscular strength:

F - Frequency

- 2 - 3 times a week
- As you become fitter and stronger adjust to the training load you may increase the amount of strength training sessions.

I - Intensity

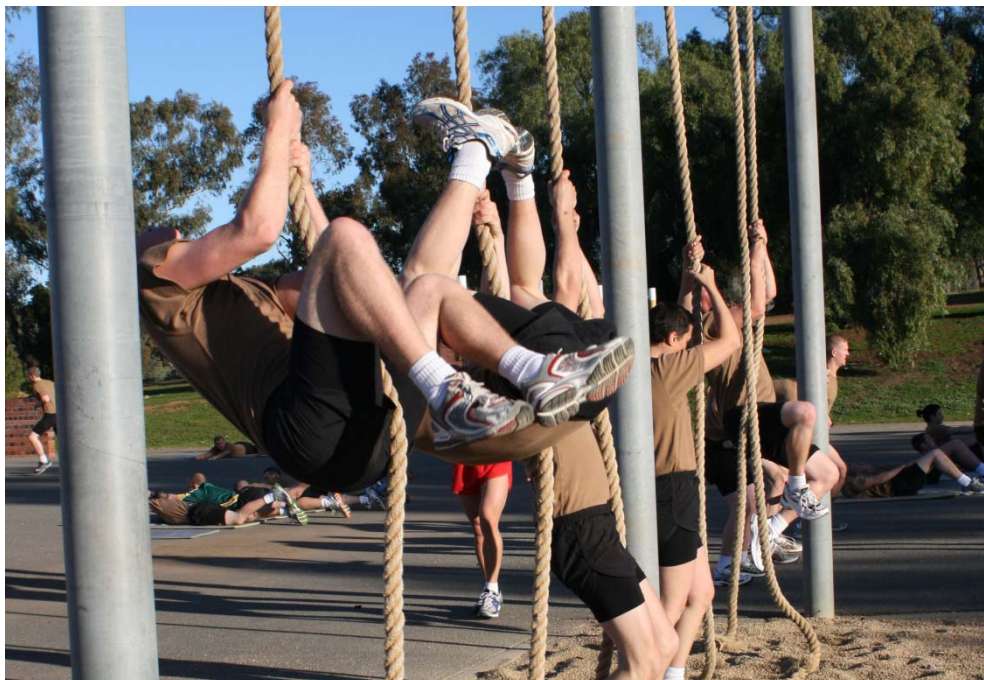
- 1 X Set of 10 – 15 repetitions on each muscle group/ exercise.
- Intensity is an extremely important aspect and properly the hardest to monitor.

T - Time

- 20 – 60 minutes
- As per frequency, it is paramount that you base the duration of you training sessions on your current fitness levels. As you become fitter and adapt to the training load you may increase the duration of your training sessions.

T - Type

- Aim at participating in several forms of exercise.
- Participate in muscular strength activities such as: Free weights, machine weights, and body weight exercises such as push ups, sit ups, heaves and squats. z



Training Advice

Warming Up

Warming up before exercise is the best way to prepare the body and reduce the risk of injuries. In normal conditions, a 5 to 10 minute warm up is all you'll need - add a few extra minutes in colder weather. Concentrate on warming up the specific muscle groups you will be using in your exercise and include range of movement exercises. For example, light jogging, cycling or brisk walking followed by general upper body movements including light punching and chest presses mimicking a push up.

Cooling Down

Cooling down after participating in exercise is the process in which you gradually slow down your level of activity. The advantages of cooling down include, returning heart rate to resting levels, prevent blood pooling in working muscles and reduce likelihood of injuries. As a guide a cool down should consist of performing low intensity exercises for 5 – 10 minutes combined with stretching and holding each major muscle group for 15 –20 seconds.

Overtraining

Overtraining is defined as a condition of fatigue and under-performance often associated with giving your body more work or stress than it can handle without adequate rest. Some signs and symptoms of overtraining are exhaustion, injuries, trouble sleeping, irritability, decrease in performance, slow to recover from exercise and knee pain and/or shin soreness.

If you have not been exposed to recent, regular exercise and commence high intensity physical training you are at a greater risk of overtraining. As a result, it is important that you gradually progress with your training with adequate rest periods.

Good luck and good training.

