

As you'd expect, the Army doesn't do all of its physical training in the confines of the gym ... or even inside. Improvised training – anything that uses unconventional or makeshift equipment or methods – plays a big part in getting military recruits fitter.

Sessions can involve exercising with anything from ash poles to tyres, barrels to jerry cans, overhanging tree branches, kerbs, railings, stairwells and varying terrain such as sand or mud. Improvised training is fun and wide-ranging, and the inclusion of partner and group work fosters a sense of camaraderie.

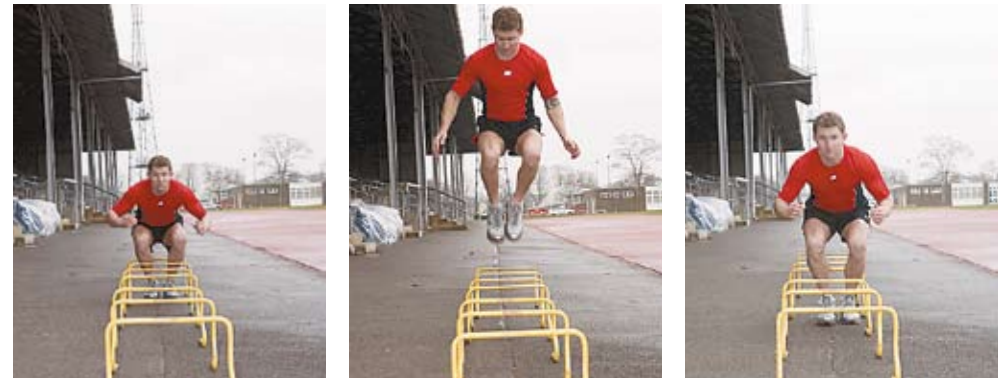
As well as offering an insight into some of these innovative Army training methods (some of which you may want to include in your own training), this final booklet features an advanced circuit training routine on pages 10-13 – following on from the one used in the basic 16-week fitness programme. It's very important to keep stepping up the level of challenge as you get fitter, so that you don't get stuck in a rut.

To help with this, you'll find some top tips for staying motivated and tracking your progress, too. So stick at it – and enjoy!



Power training

Power (the ability to exert a force at speed) is useful for sports and many military tasks. These are just two examples of power boosting exercises



TWO-FOOTED HURDLE JUMPS ▲

This exercise improves leg strength and power. Set out some small hurdles or other obstacles, fairly close together, and jump over them with your feet together – using your arms to provide momentum. Increase the height, number or distance between the hurdles to increase the degree of difficulty.

TYRE TOW ►

The real challenge with towing heavy equipment is getting moving from a standing start. The tyre tow builds leg strength and power. Start with small tyres and progress to something larger when you can. To add challenge, you can drag the tyre up a hill.



PTI TIP

One of the best ways of relieving mental stress is to indulge in short but intense bursts of physical activity. This tends to reduce, rather than induce, tiredness.



SAQ: speed, agility, quickness training

SAQ training is all about honing your reflexes and enhancing your neuromuscular (nerve to muscle) pathways so your body responds more quickly and accurately. Focus on maintaining good technique – and rest or move on when fatigue prevents you from doing so

BUNNY HOPS ▶

Place both hands on a low bench or step, with both feet on one side of it. Spring into the air, keeping your hands on the step, and take your legs over the surface to the other side. Immediately, spring back over again, and continue alternating for your chosen number of repetitions or length of time.

To improvise: if you don't have the right equipment, perform the exercise standing upright. Jump with feet together, side to side over a line marked on the floor (or use the white markings of a football pitch in your local park).



TYRE RUNNING ▼

Place a number of tyres or hoops on the ground in a staggered pattern, and run through them as quickly as possible, lifting your knees high.

To improvise: use chalk to draw tyre-sized circles on the ground.



PTI TIP

One of the best gadgets you can invest in to help improve your fitness is a heart rate monitor. This enables you to keep tabs on how hard you are working, and ensures you aren't either taking it too easy or overdoing it.



CONE SPRINT ◀

Set out a course of small cones (the closer together they are, the tougher the exercise) and run between them as quickly as possible, without knocking any of them over.

To improvise: Use "street furniture" such as bollards to run between, or place objects such as rolled up sweatshirts on the ground as your obstacles.

Partner training

You can have a lot of fun exercising with a partner or friend – you may find it brings out your competitive streak ... Work with someone of roughly the same build and size, so you can be competitive without the possibility of injuring, or being injured by, your training partner

PARTNER STAND ▶

Start by sitting on the floor, back to back, with knees bent and feet flat on the floor. Interlock your arms and adjust your position so that your shoulders are level. Now, pressing against each other's back, rise up on to your feet until you are standing. Pause here, and then sit back down again.



TWIST AND PASS WITH POWERBAG ▼

Stand back to back with your feet hip-width apart. Hold a Powerbag or medicine ball, gripping it with one hand above and one below. Twist to your right and pass it to your partner (twisting to their left), who should grasp it with one hand on each side. Your partner then twists to their right, and you twist to your left to take hold of it again. Swap grip positions with your partner after each set.



BACK-TO-BACK WRESTLE (SEATED ON FLOOR) ▶

Sit on the floor with legs outstretched, back to back with your partner. Interlink your arms and attempt to get the elbow of your opponent to touch the floor, while they do the same to you. Try for best of three!



PARTNER MEDICINE BALL PASS ▶

Stand back to back with your partner, feet wider than hip-distance apart. Hold a medicine ball in both hands and bend forward to pass the ball under your legs to your partner. (Alternate hand positions, as in the twist and pass with Powerbag, below left). Your partner takes the ball and stands up, this time passing you the ball overhead. Now bend forward again, to pass it between your legs.



POWERBAG TUG OF WAR ▼

Standing in a split stance (one foot forward, one back), hold one end of a Powerbag or substitute, with your partner gripping the other end. Mark a line on the floor between you. When you are ready, attempt to pull your opponent over the line, while they attempt to make you cross the line first.



PTI TIP

Charting your fitness progress is a great way of staying motivated. Once you've completed the basic 16-week programme and have filled in the wallchart, why not start keeping a training journal?



The great outdoors

Many gym machines and pieces of equipment are built to emulate what's available in the world outside (treadmills and Stairclimbers, for instance). There are plenty of ways to use both the natural and the built environment as an outdoor gym – here are some options ...

BEAM WALK/KERB WALK ▶

Beam work helps to improve coordination and balance. If you don't have a beam to walk along, use the edge of the kerb. As your balance improves, try to balance without looking at your feet.



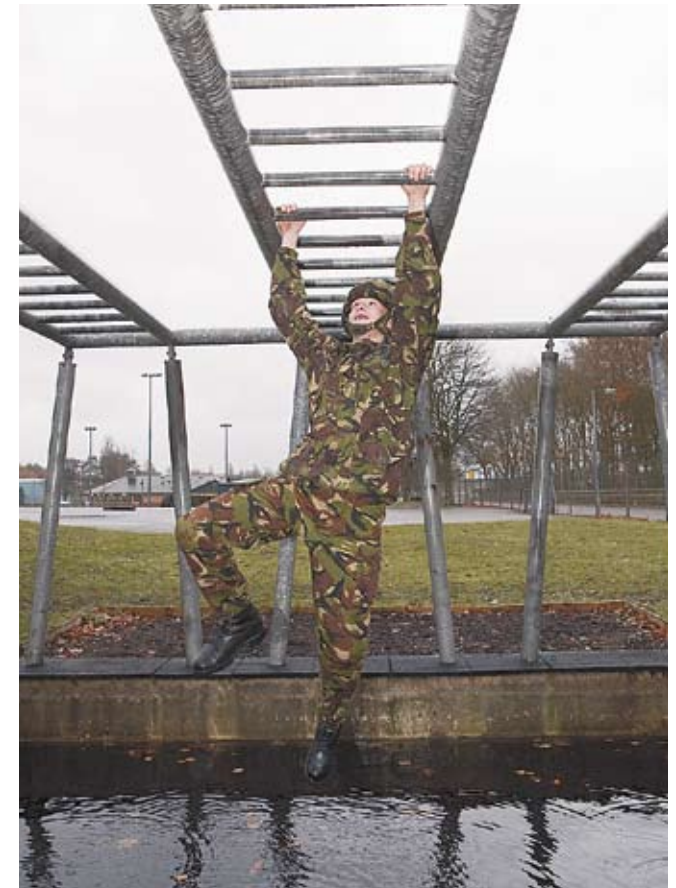
STAIR SPRINT ▼

Sprinting up stairs builds your leg strength and speed and challenges your cardiovascular system. Perform multiple repetitions with recovery intervals in between. As an alternative, try ascending the stairs using two-footed jumps – focus on keeping the time your feet are in contact with the step to a minimum.



MONKEY BARS ▶

Kids' playgrounds often have monkey bars, giving you the opportunity to have some fun while building your upper body strength.



RAILING PRESS-UPS AND PULL-UPS ▶

Railings of varying heights make a useful exercise tool. You can perform incline press-ups, or shuffle underneath and try some modified pull-ups (see Booklet 3 to see how to do these exercises).



PTI TIP

When out for a run, look for ways to incorporate some of these exercises into your session, to add variety. If you are with a partner, take it in turns to set the next "exercise challenge".



Advanced Army circuit

If you're finding the circuit training in the basic 16-week programme too easy, or want to add some variety to your training, try this more advanced option. Perform the number of repetitions and circuits recommended for the stage you are at in the 16-week programme, or try one of the two options outlined below left

ADVANCED CIRCUIT OPTION 1

Perform 10 repetitions of each exercise followed by 10-15 seconds of rest before you start the next exercise.

Complete 3-5 circuits (in the order shown) with 60 seconds of rest between each circuit.

ADVANCED CIRCUIT OPTION 2

Perform each exercise for 20 seconds followed by 10-15 seconds of rest before you start the next exercise.

Complete 3-5 circuits with 60 seconds of rest between each circuit.



1 SQUAT JUMP ◀

This advanced version of the squat adds speed and explosiveness, building power in the quads, glutes and hamstrings. Stand with feet hip-distance apart and bend your knees until your hands touch the back of your calves. From this position, leap up into the air, landing back down into the squat position and touching your calves between each rep.

2 DECLINE PRESS-UP ▼

Place your feet on a raised surface, such as a sturdy chair, so that your shoulders and head are lower than your hips. Begin with arms shoulder-width apart, fingers facing forward, back straight and body in a straight line. Look slightly ahead, not at the floor. Lower your body towards the floor – elbows pointing back, not splaying out to the side. Stop when your chest and hips are an inch off the floor, then straighten your arms to return to the start position.

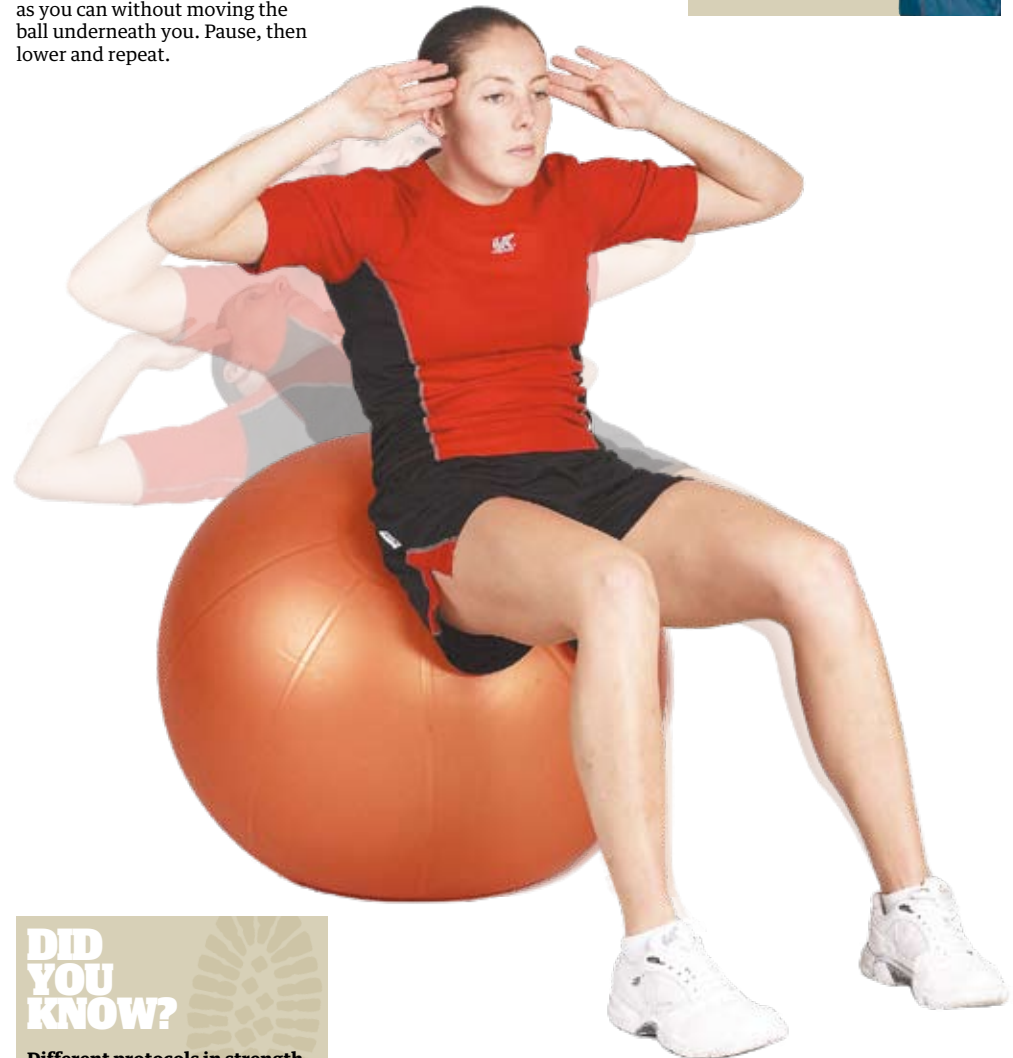


3 SIT-UP ON BALL ▼

Lie on a Swiss ball with your feet on the floor. Adjust yourself so that your bottom is just off the front of the ball, with your buttocks unclenched and your hands either beside your head or crossed over your chest. Contracting the abdominals, raise and flex the upper torso as far as you can without moving the ball underneath you. Pause, then lower and repeat.

PTI TIP

As a general guide, avoid overall increases in your training volume of more than 5-10 per cent per week.



DID YOU KNOW?

Different protocols in strength training produce different results – eg. lots of reps with a light weight and brief rests will have a different outcome to multiple short sets with a heavy weight and long rest periods. This is known as the “SAID” principle: specific adaptation to imposed demands.

PTI TIP

You can design your own circuit, using any combination of exercises in these training guides. Just ensure that you choose a good mix of upper and lower body, abdominal and back exercises.



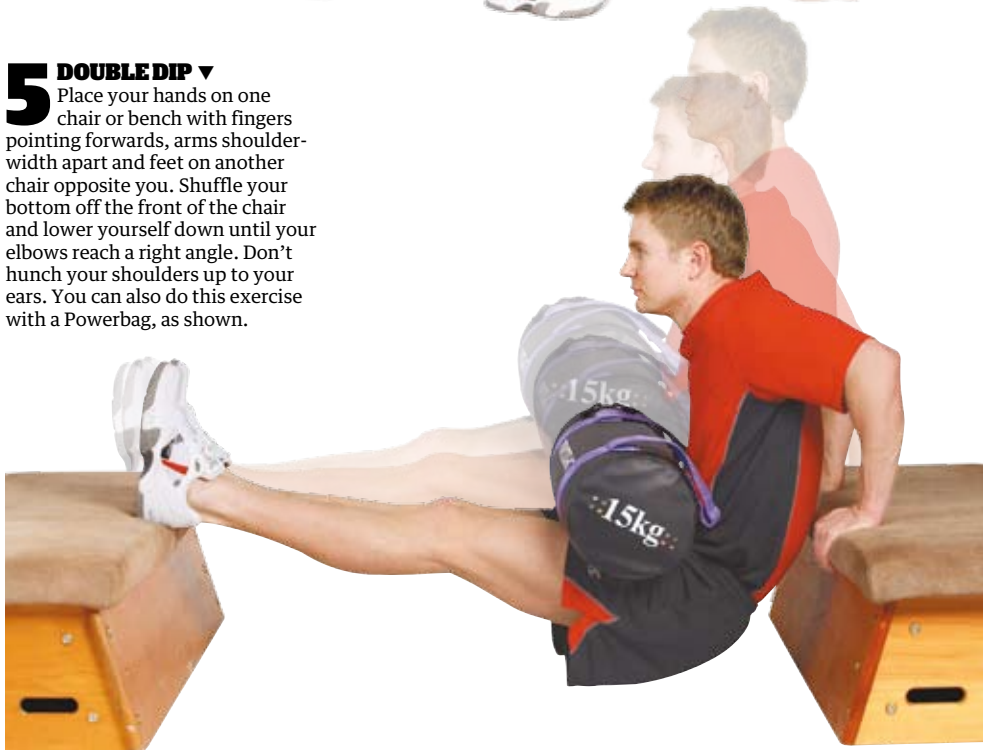
4 BASIC BURPEE ▶

Stand with feet shoulder-width apart. Bend your knees and lower body towards the floor. Once your hands touch the floor, thrust your legs to the rear into a press-up position, keeping your back straight and tummy pulled in. Then bring your knees back in, take the weight off your hands and stand up. Add a vertical jump at the end of each rep, to increase the difficulty.



5 DOUBLE DIP ▼

Place your hands on one chair or bench with fingers pointing forwards, arms shoulder-width apart and feet on another chair opposite you. Shuffle your bottom off the front of the chair and lower yourself down until your elbows reach a right angle. Don't hunch your shoulders up to your ears. You can also do this exercise with a Powerbag, as shown.



6 STEP-UP WITH WEIGHTS ▶

Stand in front of a step with a dumbbell or other weight in each hand, resting by your thighs. Step up with your right leg, bring your left foot up, then step down with your right leg, following with the left. Continue for the set, and then swap sides.



7 SUPERMANS ▼

Lie face down on the floor, with your arms extended flat on the floor over your head. Lift your right arm and left leg off the floor simultaneously, keeping the hips and pelvis centred, and your head in line with the spine. Lower, and then lift your left arm and right leg off the floor. Continue to alternate for the set.



8 CRUNCH ▼

Start by lying on the floor with your hands beside your head. Sit up, bringing your knees to your chest, and then rock back, fully extending your legs before bringing the knees in to meet the chest again. Do not allow the feet to touch the floor between reps.



The Army RMT Tests

Recruits do their “representative military tasks” (RMT tests) after 14 weeks of basic training. The required standard varies according to their job – for example, someone in the infantry may need to walk long distances carrying a heavy pack, while an engineer needs good upper body strength for lifting heavy equipment

DID YOU KNOW?

Women are equally as trainable as men and, in relative terms, have been shown to respond to physical training as well or even better than men.



1 JERRY CAN CARRY

This tests the strength of the upper arms and shoulder girdle, along with grip strength and the stabilising muscles of the torso, back and legs. The jerry cans (each weighing 20kg) are picked up and carried by the handles for up to 180 metres, using a 30m course. The aim is to complete each 30m leg of the course in 20 seconds – giving a target time to complete the full 180 metres of 2 minutes.



2 AMMO BOX LIFT

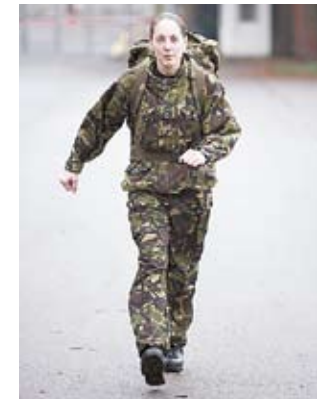
This test measures the weight that can be lifted safely to a height of 1.45 metres (the height of a loading platform on a 4-tonne truck). The start weight for both men and women is 20kg. Grip the handles of the box using an overhand grasp, arms straight, knees bent, back straight and feet shoulder-width apart. A maximum of 10 seconds is allowed to complete the lift, with a minimum of 10 seconds rest between reps. Increase the weight until you reach your maximum safe lifting load, or 45kg.



3 LOADED MARCH

The purpose of the loaded march is to test the muscular strength of the upper body, the muscular endurance of the lower limbs and the efficiency of the cardiovascular system. Recruits are required to carry a load of 15-25kg, depending on their trade, over a distance of 6 miles in a time of 85 to 90 minutes.

Platoons undertake the test as a group, maintaining an average pace of 15 minutes per mile. Frequent rehydration stops are taken throughout the test.



PTI TIPS

JERRY CAN CARRY
Use short, regular paces rather than striding out.

AMMO BOX LIFT
Initiate the lift using the major leg muscle groups.

LOADED MARCH
Adopt a fast marching pace (4mph) interspersed with “shake out” runs of 200-400m



The table below shows the range of RMT test results expected by Army recruits, depending on what job they will be performing. Level 1 is the highest level of achievement required, level 5 the ‘bare minimum’ (although the loaded march minimum stops at level 3). If you perform the tests, see how your results compare ...

Task	Units	Level				
		1	2	3	4	5
jerry can carry	distance (m)	180	150	120	90	60
ammunition box lift	weight (kg)	45	40	35	30	25
six-mile loaded march in 90 minutes	load (kg)	25	20	15		

THE OFFICIAL BRITISH ARMY FITNESS PROGRAMME

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