JENKS FIRE RESCUE

PAT

TEST PREPARATION GUIDE

Preparation Guide for the Physical Ability Test

Section 2 PAT Training Program

The PAT Training Program

The PAT Training program consists of two training programs. The first program is the aerobic training program and the interval program. Both of these programs complement each other and improve your aerobic and anaerobic fitness specific to the Physical Ability Test.

Aerobic Training

The cardiopulmonary endurance program should begin at a level that is considered "moderately difficult" but not "difficult." Your intensity should not be so high that you cannot speak during the exercise. The program below consists of a series of progressive levels. As you adapt to each step, you should move up to the next level. This program should be done 3 to 5 days per week.

Interval Training

Interval training involves a repeated series of exercise activities interspersed with rest or relief periods. This is an excellent tool for improving both aerobic and anaerobic endurance. In this program running intervals are performed on Tuesdays and Thursdays. It is important that interval days have at least one day of slow easy running between them. This provides the recovery necessary to prevent over training.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
LEVEL 1	Run 1 mile at an easy pace being sure to be able to talk the entire time	Run 30 seconds @ somewhat hard pace then walk for 30 seconds. Repeat this for a total of 1 mile	Run 1 mile at an easy pace being sure to be able to talk the entire time	Run 30 seconds @ somewhat hard pace then walk for 30 seconds. Repeat this for a total of 1 mile	Run 1 mile at an easy pace being sure to be able to talk the entire time
LEVEL 2	Run 1.5 miles at an easy pace being sure to be able to talk the entire time.	Run 30 seconds @ somewhat hard pace then walk for 30 seconds. Repeat this for a total of 1.5 miles.	Run 1.5 miles at an easy pace being sure to be able to talk the entire time.	Run 30 seconds @ somewhat hard pace then walk for 30 seconds. Repeat this for a total of 1.5 miles	Run 1.5 miles at an easy pace being sure to be able to talk the entire time
LEVEL 3	Run 2 miles at an easy pace being sure to be able to talk the entire time.	Run 60 seconds @ somewhat hard pace then walk for 60 seconds. Repeat this for a total of 2 miles	Run 2 miles at an easy pace being sure to be able to talk the entire time	Run 60 seconds @ somewhat hard pace then walk for 60 seconds. Repeat this for a total of 2 miles	Run 2 miles at an easy pace being sure to be able to talk the entire time
LEVEL 4	Run 2.5 miles at an easy pace being sure to be able to talk the entire time.	Run 60 seconds @ somewhat hard pace then walk for 60 seconds. Repeat this for a total of 2.5 miles	Run 2.5 miles at an easy pace being sure to be able to talk the entire time	Run 60 seconds @ somewhat hard pace then walk for 60 seconds. Repeat this for a total of 2.5 miles	Run 2.5 miles at an easy pace being sure to be able to talk the entire time
LEVEL 5	Run 3 miles at an easy pace being sure to be able to talk the entire time.	Run 90 seconds @ somewhat hard pace then walk for 90 seconds. Repeat this for a total of 3 miles	Run 3 miles at an easy pace being sure to be able to talk the entire time	Run 90 seconds @ somewhat hard pace then walk for 90 seconds. Repeat this for a total of 3 miles	Run 3 miles at an easy pace being sure to be able to talk the entire time

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
LEVEL 6	Run 3 miles at an easy pace being sure to be able to talk the entire time	Run @ easy pace for 3 minutes then run stairs moderately hard for 1 minute	Run 1.5 miles at an easy pace being sure to be able to talk the entire time	Run @ easy pace for 3 minutes then run stairs moderately hard for 1 minute	Run 3 miles at an easy pace being sure to be able to talk the entire time
LEVEL 7	Run 3 miles at an easy pace being sure to be able to talk the entire time.	Run @ easy pace for 3 minutes then run stairs moderately hard for 90 seconds	Run 1.5 miles at an easy pace being sure to be able to talk the entire time.	Run @ easy pace for 3 minutes then run stairs moderately hard for 90 seconds	Run 3 miles at an easy pace being sure to be able to talk the entire time
LEVEL 8	Run 3 miles at an easy pace being sure to be able to talk the entire time.	Run @ easy pace for 3 minutes then run stairs moderately hard for 2 minutes	Run 1.5 miles at an easy pace being sure to be able to talk the entire time.	Run @ easy pace for 3 minutes then run stairs moderately hard for 2 minutes	Run 3 miles at an easy pace being sure to be able to talk the entire time
LEVEL 9	Run 3 miles at an easy pace being sure to be able to talk the entire time.	Run @ easy pace for 3 minutes then run stairs moderately hard for 2 minutes and 30 seconds	Run 1.5 miles at an easy pace being sure to be able to talk the entire time.	Run @ easy pace for 3 minutes then run stairs moderately hard for 2 minutes and 30 seconds	Run 3 miles at an easy pace being sure to be able to talk the entire time
LEVEL 10	Run 3 miles at an easy pace being sure to be able to talk the entire time.	Run @ easy pace for 3 minutes then run stairs moderately hard for 3 minutes	Run 1.5 miles at an easy pace being sure to be able to talk the entire time.	Run @ easy pace for 3 minutes then run stairs moderately hard for 3 minutes	Run 3 miles at an easy pace being sure to be able to talk the entire time

Muscular Strength/Endurance Program

This is a resistance program designed to improve your total body strength and endurance. This is not a bodybuilding or a power-lifting program. It is designed to prepare you specifically for the Physical Ability Test. If you are not familiar with lifting programs, have any joint pain or feel uncomfortable performing these exercises, you should seek the advice of a professional trainer or your doctor

This program is designed to be performed three days a week. This means that you will not be lifting 4 days a week. These rest days are just as important as your workout days. A critical mistake made by some applicants is over training when preparing for the Physical Ability Test. If you feel you are over training, refer back to the exercise principles, slow down your progression, reduce your overload, and allow for adequate rest between workouts.

This workout should follow the previously mentioned warm-up and stretching program. This program is designed to be a circuit workout. Circuit training has been proven to be a very effective and efficient way to improve muscular strength, muscular endurance and cardiovascular endurance. Once you begin this workout, you will lift at each station for 10 repetitions and then move on to the next exercise. Rest between exercises should not exceed 30 seconds unless you are experiencing some discomfort. For safety purposes, it is recommended that you lift with a partner and spot each other when necessary.

General Safety Tips While Performing Resistance Training

- Always lift with a partner.
- Ask for help from an expert if you don't know what you are doing.
- Progress slowly to avoid injuries.
- Never show off by attempting to lift more weight than you normally lift.
- Use proper lifting technique when lifting weight plates and dumbbells.
- Never drink alcohol or take medications that may cause drowsiness prior to lifting weights.
- Do not lift too quickly, always control the weights.
- Always use strict form. Proper technique is more important than the amount of weight lifted.
- Keep head in a neutral position, looking straight ahead and not upwards or downwards.

Progression

Unless you are an experienced weightlifter, it is recommended that you begin by doing one complete cycle through this circuit. After the first week, if you are not still getting muscle soreness 24 to 48 hours after your workouts, you can progress to two cycles through the circuit. After the second week, if you are not still getting muscle soreness 24 to 48 hours after your workouts, you can progress to three cycles through the circuit. Although it is not critical, it is recommended that

you follow the exercises in order. If, after progressing to the next level, you feel very sore, you many want to decrease the weights and the number of times you complete the circuit.

Weight Training Circuit Workout

1. Seated Leg Press

Quadriceps, Hamstrings, Glutes, Calves

PAT Events: Stepmill, Hose Drag, Ladder Raise, Forcible Entry, Rescue, Ceiling Breach and Pull

Set appropriate weight to overload above muscles but not so heavy as to cause injury or failure

- Place feet flat on push platform about shoulder width apart and toes pointed slightly outward
- Adjust seat so knees are flexed at 90 degrees
- Push weight up while exhaling
- Stop just short of locking your knees
- Keep knees in alignment with feet
- Keep head in neutral position

2. DB Military Press

Deltoids, Triceps, Trapezius

PAT Events: Ladder Raise, Search, Ceiling Breach and Pull

Set appropriate weight to overload above muscles but not so heavy as to cause injury or failure

- Raise two dumbbells to height of shoulders
- With palms facing forward, alternate pressing each dumbbell upward toward the ceiling one at a time
- Exhale while lifting
- Keep head in neutral position
- Using slight leg push is acceptable
- Repeat with other arm

3. Lat Pull Down

Latissimusdorsi, Rhomboids, Posterior Deltoids, Biceps

PAT Events: Hose Drag, Ladder Extension, Forcible Entry, Rescue, Ceiling Breach and Pull

Pick appropriate weight to overload above muscles but not so heavy as to cause injury or failure

- Adjust seat and leg hold to allow full range of motion
- Hold bar in chin up grip with hands close together and palms toward face
- Pull bar straight down to just below the chin
- Exhale to starting position

4. DB Split Squats

Glutes, Quadriceps, Hamstrings, Calves

PAT Events: Stepmill, Hose Drag, Ladder Raise, Forcible Entry, Rescue, Ceiling Breach and Pull

Pick appropriate weight to overload above muscles but not so heavy as to cause injury or failure

- Pick a light weight (many people can start with no weights at all)
- Do not start with more than 10 lbs.
- Stand with feet together than step backward with one foot about 26"
- Keep back straight and arms down at side with head neutral, slowly bend both legs
- Lower yourself slowly until your left knee barely touches the floor
- Forward leg should remain vertical throughout motion with knee directly over ankle. If knee tends to move forward over the toes, adjust back foot further backward
- Return to the starting position
- Inhale while lowering and exhale while pushing back up into upright position
- Repeat with opposite leg

5. Bench Press

Pectorals, Deltoids, Triceps

PAT Events: Ladder Raise, Forcible Entry, Search, Ceiling Breach and Pull

Pick appropriate weight to overload above muscles but not so heavy as to cause injury or failure

- Lie on bench with feet flat on floor
- Hold bar with arms should width apart of slightly wider
- Lower bar to middle of chest
- Push bar up to starting position
- Inhale while lowering and exhale while pushing back up

6. DB Row

Latissimusdorsi, Rhomboids, Posterior Deltoids, Trapezius, Biceps

PAT Events: Ladder Raise, Forcible Entry, Search, Ceiling Breach and Pull

Pick appropriate weight to overload above muscles but not so heavy as to cause injury or failure

- Standing to right of bench, place left knee on bench and support upper body with left (non- lifting) arm
- Keep head in neutral position
- Pull DB from ground into waist area with right arm
- Lower DB back to starting position
- Avoid twisting at waist
- Inhale while lowering weight and exhale while lifting weight
- Repeat sequence on opposite side

7. LegExtension

Quadriceps

PAT Events: Stepmill, Hose Pull, Ladder Raise, Forcible Entry, Search, Rescue

Pick appropriate weight to overload above muscles but not so heavy as to cause injury or failure

- Adjust machine so that back of knees are against pad and back is supporting lower back
- Extend knees stopping just before the knees lock
- Slowly lower weight to starting position
- Exhale while pushing weight and inhale while lowering weight

  Note: This exercise should not be performed by individuals who have undergone reconstructive knee surgery.

8. Leg Curl

Hamstrings

PAT Events: Stepmill, Hose Pull, Ladder Raise, Forcible Entry, Rescue

Pick appropriate weight to overload above muscles but not so heavy as to cause injury or failure

- Lie flat on machine with top of knees just off the pad and ankle roller situated above the heels
- Flex the knee until ankle roller reaches the buttocks. Keep hips down and stomach in contact with pad throughout the motion
- Slowly lower weight to starting position
- Inhale while pulling weight and exhale while lowering weight down

  Note: This exercise should not be performed by individuals who have undergone reconstructive knee surgery.

9. DB Curl

Biceps, Forearms

PAT Events: Hose Drag, Ladder Extension, Forcible Entry, Rescue, Ceiling Breach and Pull

Pick appropriate weight to overload above muscles but not so heavy as to cause injury or failure

- Stand up with knees slightly bent
- Begin with arms down at sides
- Bend right elbow bring the dumbbell toward right shoulder
- Slowly lower dumbbell to starting position
- Exhale while raising weight and inhale while lowering weight
- Repeat sequence on opposite side

10. Triceps Extension

Triceps

PAT Events: Ladder Raise, Forcible Entry, Rescue, Ceiling Breach and Pull

Pick appropriate weight to overload above muscles but not so heavy as to cause injury or failure

- Stand up with knees slightly bent
- Place hands on bar about 8' apart
- Keeping upper arms at sides, extend the elbows until arms are almost straight and bar is at mid thigh
- Slowly return bar to an elbow flexed position at mid chest level. Upper arms should remain in contact with sides. Do not allow elbows to move forward, away from body
- Exhale while pushing bar down and inhale while returning bar back up
- Exhale while raising weight and inhale while lowering weight
- Repeat sequence on opposite side

11. Abdominal Curls

Abdominal Muscles

PAT Events: All Events

- Sit on ground with knees bent at 90 degrees
- Keeping feel flat on floor and hands at your side, slowly curl your torso so chin approaches your chest
- Do not raise torso to more than a 45 degree angle off the floor
- Slowly return to slightly above your starting position, keeping tension on abdominal muscles at all times.
- Exhale while curling up and inhale while lowering torso back down

12. Swimmers

Erector Spinae (lower back), Glutes

PAT Events: All Events

- Lie face down on ground with feet together
- Place arms straight out in front
- Move the right arm and left leg up at he same time
- As you return the right arm and left leg, move the left arm and right life up at the same time
- Continue alternating in a moderate cadence

13. Wrist Rollers

Forearm Muscles

PAT Events: Hose Drag, Equipment Carry, Ladder Extension, Forcible Entry, Rescue, Ceiling Breach and Pull

- Stand erect
- Set machine to "somewhat difficult" resistance
- Grab machine with both palms facing the floor
- Alternating roll each wrist towards the ceiling
- Repeat with palms upward when done

14. Hand Grippers

Forearm Muscles

PAT Events: Hose Drag, Equipment Carry, Ladder Extension, Forcible Entry, Rescue, Ceiling Breach and Pull

- Stand erect
- Set machine to "somewhat difficult" resistance
- Grab machine with both hands
- Alternating close grip to squeeze machine

EXERCISE WITHOUT WEIGHTS

Although it is easier to improve muscular strength and endurance with weight equipment, it is also possible to accomplish this with some simple exercises. These exercises require minimum equipment and can be done almost anywhere. Perform these exercises in a circuit. Move from one exercise to the next with minimal rest. Initially, work in the somewhat hard range. This means do not exercise to failure. Start by going through the circuit one time and then gradually progress until you can complete this circuit three times in a row.

Calisthenics Circuit Workout

1. Chair Squats

Glutes, Quadriceps, Hamstrings

PAT Events: Stepmill, Hose Drag, Ladder Raise, Forcible Entry, Rescue, Ceiling Breach and Pull

- Hold arms out straight in front of you
- Slowly lower your buttocks into the chair as soon as you feel the slightest contact with the chair, slowly stand back up to the starting position
- Keep your head in a neutral position
- Inhale while lowering yourself and exhale while standing up

2. Push Ups

Pectorals, Deltoids, Triceps, Abdominals, Low Back

PAT Events: Ladder Raise, Forcible Entry, Rescue, Ceiling Breach and Pull

- Place hands on ground shoulder width apart or slightly more
- Keep feet together and back straight throughout the exercise
- Lower the body until the upper arms are at least parallel to the ground
- Push yourself up to the initial position by completely straightening arms
- Inhale while lowering yourself and exhale while standing up

3. Split Squats

Glutes, Quadriceps, Hamstrings, Calves

PAT Events: Stepmill, Hose Drag, Ladder Raise, Forcible Entry, Rescue, Ceiling Breach and Pull

- Stand with feet together then step backward with foot about 26" behind left foot
- Keep back straight and arms down at side with head neutral, slowly lower right knee straight down onto the floor
- Inhale while lowering and exhale while pushing back up into upright position
- Forward leg should remain vertical throughout motion, with knee directly over ankle. If knee tends to move forward over the toes, adjust back foot further backward
- Repeat with other leg

4. Chin Ups

Latissimusdorsi, Rhomboids, Posterior Deltoids, Biceps

PAT Events: Hose Drag, Ladder Extension, Forcible Entry, Rescue, Ceiling Breach and Pull

- Grasp horizontal bar with palms facing you and hands 6" apart
- Hang from bar with arms fully extended
- Pull yourself upward until your chin is above the bar
- Do not kick or swing your legs
- Return to the starting position
- Inhale while lowering yourself and exhale while pulling yourself up
- If unable to complete 3 chin ups, elevate yourself to the bar with a stool or a partner and slowly lower yourself down in a slow and controlled fashion

5. Bench Steps

Glutes, Quadriceps, Hamstrings, Calves

PAT Events: Stepmill, Hose Drag, Ladder Raise, Forcible Entry, Search, Rescue, Ceiling Breach and Pull

This requires good balance, so initially set the step next to a wall or use a partner for safety

- Use a step or bench 6" to 18" high
- Place right foot flat on the bench with the left foot flat on the floor
- Push down with the foot on the bench and step up until both legs are straight
- Slowly lower yourself back down to the starting position
- Exhale while pushing up and inhale while lowering down
- Repeat entire sequence with other leg
- Start with a smaller step and progressively increase the height. Do not exceed 18" high

6. Dips

Pectorals, Deltoids, Triceps

PAT Events: Ladder Raise, Forcible Entry, Search, Ceiling Pull and Breach

- Place hands behind you on dip bar or chair with feet straight in front.
- Bend arms and lower body in a controlled manner until the upper arms are parallel with the floor
- Straighten the arms to return to the starting position
- Legs can be bent to keep feet from touching the floor
- If unable to perform 3 dips, use a stool or a partner to help you up and then lower yourself down slowly
- Inhale while lowering yourself and exhale while pushing up

7. Squat Thrusts

Pectorals, Deltoids, Triceps, Abdominals, Glutes, Quadriceps

PAT Events: Stepmill, Hose Pull, Ladder Raise, Forcible Entry, Search

- Stand erect with feet together
- Quickly bend knees until palms touch the floor just slightly in front of you
- Supporting weight with arms, tighten your abdominal muscles, and throw your feet backwards until you are in the push up starting position
- Reverse sequence until you are back at the starting position. This is one repetition
- Inhale and exhale evenly throughout the exercise

8. Abdominal Curls

Abdominal Muscles

PAT Events: All Events

- Sit on ground with knees bent at 90 degrees
- Keeping feet flat on floor and hands at side, slowly curl torso so chin approaches your chest
- Do not raise torso to more than a 45-degree angle off the floor
  Slowly return to slightly above your starting position, keeping tension on abdominal muscles at all times
- Exhale while curling up and inhale while lowering torso back down

9. Swimmers

Erector Spinae (Lower back), Glutes

PAT Events: All Events

- Lie face down on ground with feet together
- Place arms straight out in front of you
- Move the right arm and left leg up at the same time
- As you return the right arm and left leg, move the left arm and right leg up at the same time
- Continue alternating in a moderate cadence

10. Hand Grippers

Forearm muscles

PAT Events: Hose Drag, Equipment Carry, Ladder Extension, Forcible Entry, Rescue, Ceiling Breach and Pull

- Stand erect
- Place tennis ball in palm of hand
- Slowly squeeze hand compressing tennis ball
- Repeat with other hand