# **MIAMI POLICE DEPARTMENT**



# POLICE OFFICER

# PHYSICAL ABILITIES TEST

## TRAINING MANUAL

400 NW 2<sup>nd</sup> Avenue, Miami, FL 33128

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#### **OVERVIEW**

The Police Officer Physical Abilities Test is one component of the entry level examination for the position of City of Miami Police Officer. The job of a Police Officer requires a certain degree of physical strength and endurance, which are necessary to complete many of the tasks required on the job. As such, the Police Officer Physical Abilities Test is geared toward assessing the physical abilities of the Police Officer applicant.

The Police Officer Physical Abilities Test is demanding а component of the testing process; therefore, strongly it is suggested that you train to develop your strength and endurance in order to pass this section of the entry-level examination. In order to help you prepare, the City of Miami has provided you with this training manual which outlines the components of the Physical Abilities Test and provides training suggestions your for successful completion of this phase of the pre-employment process.

Before starting this or any other type of physical training program, you should consult your personal physician. You may choose to bring this manual with you so that your doctor can review with you the exercises suggested and possibly suggest further information that will assist you with your preparation.

#### LIST OF EVENTS

The Police Officer Physical Abilities Test consists of four (4) events that measure an applicant's physical ability to perform essential tasks that are a part of the Police Officer job. These events require strength, endurance and coordination. The events are described below. For detailed information on scoring, please refer to the Physical Abilities Test Scoring Guidelines.

#### 1.5 MILE RUN (AEROBIC CAPACITY)

	Age	19-29	30-39	40-49	50-59	60+
Male	Target Time	13:08 min.	13:48 min.	14:33 min.	16:16 min.	18:39 min.
Female	Target Time	15:56 min.	16:46 min.	18:26 min.	20:17 min.	22:34 min.

#### PUSH-UPS, 1-MINUTE MAXIMUM EFFORT (UPPER BODY MUSCULAR STRENGTH/ENDURANCE)

	Age	19-29	30-39	40-49	50-59	60+
Male	Target # of Repetitions	26	20	15	10	8
Female	Target # of Repetitions	13	9	7	7	7

# SIT-UPS, 1-MINUTE MAXIMUM EFFORT (CORE BODY MUSCULAR ENDURANCE)

	Age	19-29	30-39	40-49	50-59	60+
Male	Target # of Repetitions	35	32	27	21	17
Female	Target # of Repetitions	30	22	17	12	4

#### 300 METER RUN (ANAEROBIC CAPACITY)

	Age	19-29	30-39	40-49	50-59	60+
Male	Target # of Repetitions	62.1 sec.	63 sec.	77 sec.	87 sec.	87 sec.
Female	Target # of Repetitions	75 sec.	82 sec.	106.7 sec.	106.7 sec.	106.7 sec.

#### EQUIPMENT REQUIRED

You are required to wear appropriate attire to participate in the Police Officer Physical Abilities Test. As such, you must wear 1) sneakers or rubber soled shoes, and 2) clothing appropriate for physical activity.

#### PREPARING FOR THE POLICE OFFICER PHYSICAL ABILITIES TEST

Remember, before starting this or any other type of physical training program, you should consult your personal physician. You may choose to bring this manual with you so that your doctor can review with you the exercises suggested and possibly suggest further information that will assist you with your preparation.

Due to the intense physical nature of this test, it is highly recommended that you give yourself ample time to train. It is also suggested that you take the following four-stage approach to your training: 1) build up your aerobic capacity, 2) build up your anaerobic capacity, 3) build up your physical strength, and 4) practice the actual events on which you will be tested.

1. Building Your Aerobic Capacity

Aerobic capacity is the first thing you must develop in order to train for the test. In order to be able to build your anaerobic capacity, you must first have an aerobic base from which to build.

Aerobic capacity is built through exercise. Running, walking, jogging, swimming, bicycling and climbing stairs are all excellent ways to build your cardiovascular ability. It is suggested that you train on one of these exercises at least 20 minutes a day and at least three days per week. When doing aerobic exercise, it is also important to train at an optimum heart rate. In order to determine the heart rate at which you should train, use this formula:

 $(220 - your age) \ge 0.70 =$  the slowest heart rate at which you should train, or 70% of your maximum heart rate.

 $(220 - your age) \ge 0.85 =$  the fastest heart rate at which you should train, or 85% of your maximum heart rate.

Ideally, you should exercise for 20 minutes at 70% of your maximum heart rate three times a week when you begin your training and work up to as much as one hour at 85% of your maximum heart rate five times a week. Climbing stairs is the best way to quickly build your cardiovascular capacity, while jogging is almost as beneficial and the most practical. Ideally, you should spend six weeks building your cardiovascular ability.

2. Building Your Anaerobic Capacity

While it is necessary to build a base level of aerobic ability before heavier training can begin, the most important factor to passing this test is your anaerobic capacity. Anaerobic capacity is built through exercises that require an all out effort for short periods of time. A good example of anaerobic activity is sprinting. During a sprint, the athlete runs hard and fast for a relatively short distance. Other anaerobic activities include playing basketball, soccer, football and other court sports that require quick bursts of energy.

Ideally, you should sprint. One hundred-yard dashes at close to your maximum speed are your best for increasing your anaerobic capacity. It is suggested that during your first six weeks of aerobic exercise you gradually incorporate an anaerobic activity such as sprinting into your routine. For example, during weeks three and four of your aerobic training, incorporate one day of sprints. During weeks five and six, incorporate two days of sprinting.

Sprinting should consist of running at close to maximum speed for 30 seconds and walking for 30 seconds. This routine should be continued several times. For example, you decide to go to a track and run the straight-away and then walk the curved section of the track. Such a workout would have you running 100-yard dashes and alternating in 120-yard walks. Beginning with four laps and working your way up to 16 laps (four miles) is ideal.

Climbing stairs as fast as you can is another good way to build your anaerobic capacity. Playing a sport, such as basketball, that requires lots of sprinting is also a great way to build up your anaerobic capacity. Spend as much time as you can focusing on these types of activities. After six weeks, your level of stamina should be vastly improved.

#### 3. Building Physical Strength

Although the main consideration of the test is anaerobic capacity, a certain degree of physical strength is required to pass each event. Lower body strength is paramount with regard to physical strength in these events. In this regard, the quadriceps (front of thigh), hamstrings (back of thigh) and calves (back of lower leg) must be strengthened. Quadriceps strengthened through exercises such as squats, lunges, climbing stairs and leg extensions. The quadricepses are the most important muscles for you to develop in order to have the lower body strength to pass this test. Hamstrings, which are also important, can be developed by doing leg curls. Calves can be developed by doing toe raises.

With regard to upper body strength, you will need to develop (in order of importance) your lower back, upper back (latisimas dorsi), stomach (abdominals), triceps (back of upper arm), trapezius (neck and upper center of back), biceps (front of upper arm), grip strength and wrists. Lower back strength is developed through squats, good mornings, and roman chairs. The latisimas dorsi are developed through chin-ups, pull-ups and pull-downs. The abdominals are developed through crunches, sit-ups and leg rises. Triceps are built by doing triceps extensions, dips and frech curls. The trapeziuses are built by doing shrugs, shoulder presses and dead lifts. The biceps are built by doing curls. Grip strength can be developed by doing bar hangs and squeezing grip sprints. Wrist strength can be developed by doing wrist curls.

Exercising with weights should be done such that each muscle has at least one day rest before it is worked again. For example, if you work your whole body on one day, you should rest the following day. If you work your upper body on day one, you can work the lower body on day two and rest day three. Any combination of body parts can be worked on any given day provided that they were not worked the previous day. Each muscle should be worked one to three times a week.

It is also important to continue your aerobic and particularly your anaerobic training at this time. For example, a typical workout schedule might be as follows:

DAY 1	LEGS, TRAPEZIUS, ABDOMINALS, AEROBICS
Squats	3 x 10 (3 sets of 10 repetitions)
Leg Curls	3 x 10
Toe Raises	3 x 20
Shrugs	3 x 10
Crunches	3 x 15
Leg Raises	3 x 15
Treadmill	30 minutes at 80% maximum heart rate

DAY 2	CHEST, BACK ANEROBICS
Bench Press	3 x 10
Dips	3 x 10
Chin-Ups	3 x 10
Rows	3 x 10
Basketball	1 hours

DAY 3	ANAEROBICS
Sprints	12 x 100 yards

DAY 4	SHOULDERS, ARMS, AEROBICS
Military Press	3 x 10
Raises	3 x 10
French Curls	3 x 10
Curls	3 x 10
Climbing Stairs	20 minutes at 80% maximum heart rate

#### DAY 5

REST

DAY 6	QUADS, LOWER BACK, ABDOMINALS, TRICEPS
Leg Extensions	3 x 10
Rows	3 x 10
Crunches	3 x 20
Triceps	3 x 10
Extension	

DAY 7		ANAEROBICS
Sprints	12 x 100 yards	

An alternative regimen could be to work your whole body on day 1, run sprints on day 2, rest day 3 and repeat this routine again on days 4, 5 and 6.

#### 4. Practice

Passing the Police Officer Physical Abilities Test is not just a matter of endurance and strength; it is a matter of endurance and strength at the test events. Practicing the events that you will be tested on is by far the best indicator of whether or not you can pass the test. Practicing the events will let you know where you are weak in order for you to focus the remainder of your training. This final phase of your training is the most critical. Only by training on the actual events will you know how fast you are, how strong you are, and how to reserve your strength and energy for remaining events.

TRAIN ON THE ACTUAL EVENTS EVERY CHANCE THAT YOU GET. Applicants are processed by the Miami Police Department. When your name is processed, you will be given information at an orientation session that will allow you to further practice the PAT events. And when you are unable to train on the actual events, make your training as realistic as possible. For example, climb stairs with weights, drag a heavyweight across distances, run through waist deep water, hoist weights, etc.

Make your training realistic and as soon as you are able to practice the events, do it!

#### EXERCISES

The following is a list of exercises and illustrations to better prepare you to train for the Police Officer Physical Abilities Test.

- 1. Leg Press
- 2. Squat
- 3. Leg Extensions
- 4. Leg Curl
- 5. Lunge
- 6. Step-Up
- 7. Chin-Up
- 8. Pull-Down

- 9. Row
- 10. Bench Press
- 11. Push-Up
- 12. Dip
- 13. Seated Dip
- 14. Shoulder Press
- 15. Curl
- 16. Crunch

If you do not have access to a gymnasium with weights to perform these exercises, you can perform them at home using canned goods, bags of flour, paint cans, or other such household items as weights.

#### LEG PRESS

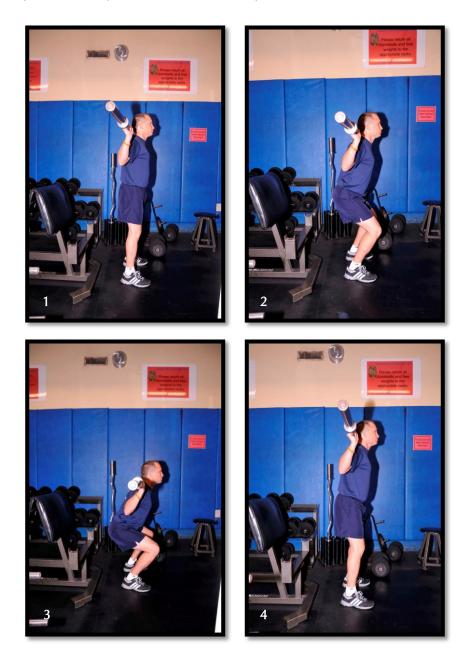
#### TARGET AREA: UPPER LEG STRENGTH

- Plant feet flat and securely on base about 14 inches apart.
- Release safety stops and slowly lower the weight as you inhale.
- Bring knees close to your chest.
- Briefly pause before returning weight to the starting position as you exhale.
- Do not lock your knees.



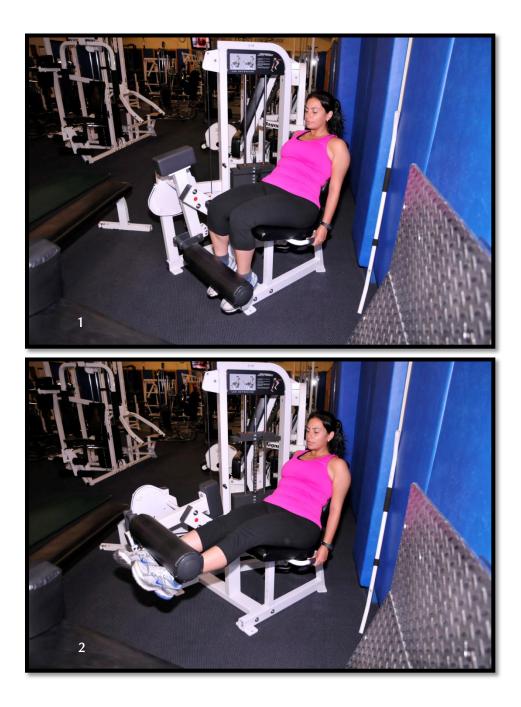
#### SQUAT

- Place barbell on upper back.
- Use a comfortably wide grip and keep feet 16 inches apart.
- While keeping your head up, back arched, and eyes straight ahead, bend knees so as to lower yourself with the weight.
- When your legs are parallel to the ground, begin your assent.
- Inhale as you lower yourself, exhale as you ascend.



#### LEG EXTENSIONS

- Sit on machine with feet under pads.
- Straighten legs slowly.
- Pause, and then return slowly to start position.



### LEG CURL

- Lie face down, knees just over edge of bench.
- Place feet under pads and hold handles.
- Curl legs, bringing heels into buttocks.
- Pause, slowly lower legs to starting position.



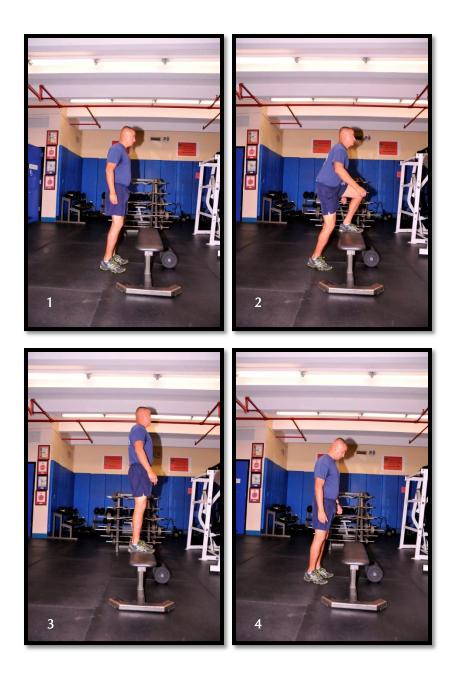
#### LUNGE

- Hold dumbbells at arms length, palms facing in.
- Step forward with one leg, bending at knee to bring weights as close to the ground as possible.
- Return to start position and continue the exercise alternating legs.



#### STEP UP

- Stand at base of bench with both feet on the ground.
- Place one foot on bench and step up onto the bench such that you are now standing completely on it.
- Step down with one foot and stand back on floor.
- Continue the exercise, alternating feet.



#### PULL-UP

#### TARGET AREAS: BACK AND BICEPS

- Grasp bar with a medium to wide grip, palms facing away.
- Pull yourself up until your chin is past the bar.
- Lower yourself slowly.



#### PULL-DOWN

#### TARGET AREAS: BACK AND BICEPS

- Grasp bar with a medium to wide grip, palms facing away.
- Pull the bar down past your chin.
- Return the bar slowly to the starting position.





### TARGET AREAS: BACK AND BICEPS

- Sit on floor in front of pulley.
- Grasp the handle bar with palms facing each other.
- Sitting upright, pull the handles as far back as possible.
- Slowly return to starting position.



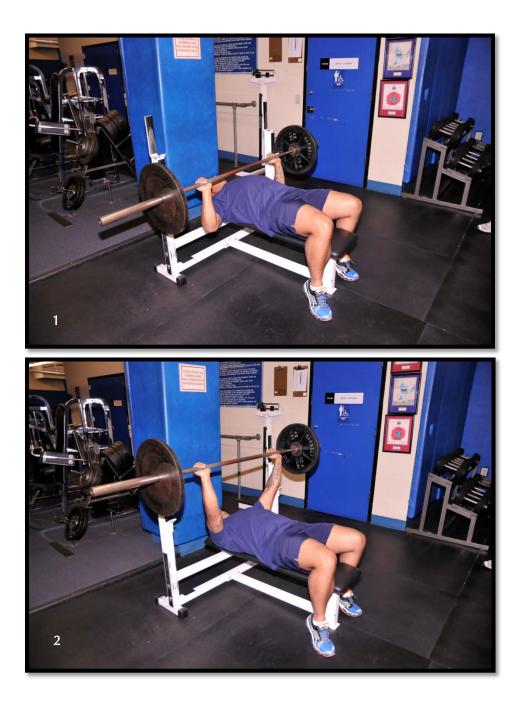


ROW

#### BENCH PRESS

#### TARGET AREAS: CHEST AND TRICEPS

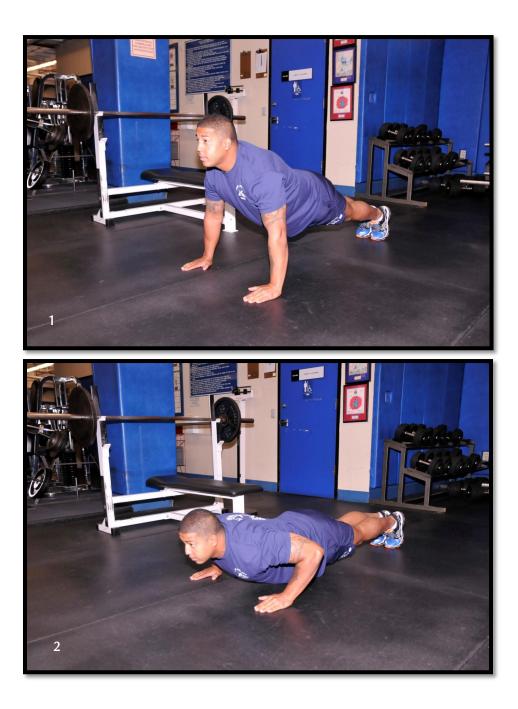
- Lie on bench, grasping bar widely with palms facing your feet.
- Lift bar off pegs and slowly lower to chest.
- Push bar back to starting position.



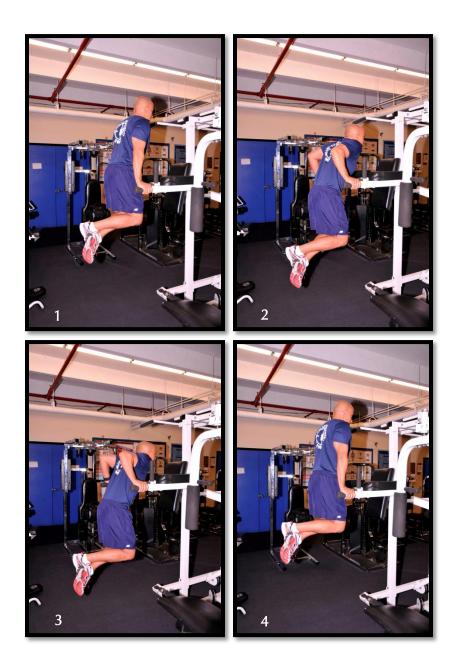
#### PUSH-UP

#### TARGET AREAS: CHEST AND TRICEPS

- Lie on the ground face down with hands in front of you, palms down.
- Keeping your back straight, press your body off of the ground, keeping elbows in.
- Slowly return to starting position.



- Hold yourself erect on bars with elbows slightly bent.
- While arching back, lower your body until your arms are parallel with the ground.
- Press yourself back up to the starting position.



#### SEATED DIP

- Place palms behind you on one bench and rest feet on another bench.
- Slowly bend your elbows to lower yourself below the bench until your arms are parallel to the floor.
- Pause, press yourself back up to return to starting position.



#### SHOULDER PRESS

- Sitting upright on bench, rest dumbbells on shoulders with palms facing away.
- Press the weights up over your head almost locking elbows.
- Slowly lower the weight back to start position.



- Grasp barbell 18 inches apart, palms facing away.
- Slowly curl the bar in a semicircular motion bringing palms into chest.
- Pause and slowly return the weight to the starting position.



#### CRUNCH

#### TARGET AREA: ABDOMINAL MUSCLES

- Lie on back with hands clasped behind your head and legs out straight and together.
- Slowly curl your upper torso up off the floor about six inches.
- Hold and return to start position.

