



MIAMI-DADE PUBLIC SAFETY TRAINING INSTITUTE

JOB-RELATED TASK ASSESSMENT

PREPARATION GUIDELINES FOR APPLICANTS FOR THE POSITION OF POLICE OFFICER WITH THE MIAMI-DADE POLICE DEPARTMENT

GOALS AND HOW TO TRAIN TO MEET GOALS

In any organization, there will be a wide range of physical attributes among employees, and individuals applying for law enforcement positions in the Miami-Dade Police Department are no different. There will be those who make weight management and staying in good physical condition a priority. Others are not so inclined. There is no way to justify the latter, given the critical nature of the work law enforcement officers must perform and the need to respond physically in life or death situations. Be that as it may, imposing a physical abilities assessment is critical when attempting to identify one's ability to perform physical tasks of a law enforcement officer.

A Job-related Task Assessment (JTA) was created and validated for this purpose. The starting point was a comprehensive Job Task Analysis to identify the most physically demanding job tasks performed by officers. Results provided data for the crafting of JTA obstacle course. Job-relatedness is the central component that dictates legal defensibility of the PAT.

In addition to job-relatedness, EEOC guidelines stipulate that a JTA must reflect "minimal bona fide occupational qualifications." In other words, what is minimally required for adequate job performance, and not what is optimal. This relates to the intensity of effort required on the JTA. Is it realistic and does it comport with what would be reasonably required on the job? The consensus among the Miami-Dade Police Department subject matter experts was that the JTA compared favorably with actual job requirements and was *about right and neither too easy, nor too demanding*. This supports the EEOC mandate.

The next step entailed determination of an appropriate cut-off standard that governs who passes the JTA and who fails. As stated, and it is important to emphasize that the JTA must reflect what is minimally required for adequate job performance. It was determined

through a rigorous validation process that the JTA must be completed within a standardized time limit of 6 minutes and 50 seconds or less.

The JTA requires that those being tested progress from the starting point to a destination as quickly as possible, encountering obstacles along the way, and knowing that when reaching the destination an emergency situation will be encountered. The emergency situation could entail catching a fleeing suspect and then having to confront, subdue and restrain. Alternatively, the emergency situation could entail arriving at the scene of a compromised colleague in need of assistance. Many other emergency scenarios are possible as well.

There are two keys to successful performance. The first key is “getting there” quickly. However, and equally important, the second key is arriving with sufficient reserve capacity to cope and complete whatever actions are required. In other words, “getting there” and being exhausted not only serves no good purpose, it also places the individuals involved in harm’s way. It is helpful to view the JTA as a physical assessment of one who is providing backup to a colleague in trouble. Can they get to where they need to be in a timely manner, and upon arriving can they meet the physical demands they encounter and carry out appropriate actions?

Passing the JTA ensures that prospective officers possess a level of physical working capacity required to (at the least) be able to meet the minimal physical demands associated with performance of critical job tasks. Obviously, being able to surpass the minimal level is desirable, and the greater the physical working capacity the better. However, the pass/fail cut-off standard by law requires a level commensurate only with meeting minimal standards.

Self-Help Field Testing

Self-help field testing is a highly useful tool for preparing individuals (on your own) for the JTA. Self-monitored fitness tests were created which approximate quantification of the underlying constructs required for successful JTA performance (stamina, strength, and muscular endurance). To determine appropriate fitness field test target scores, law enforcement officers underwent a battery of sophisticated physiologic laboratory tests. Results from the laboratory tests were then translated into a field test performance for each construct.

It is important to emphasize that self-testing with fitness field tests is intended only as a helpful preparation tool, and is not intended as a surrogate test for the JTA. In other words, although the ability to pass the field test guidelines presented below greatly enhances the probability of passing the JTA, it is not a guarantee.

In order to simplify field testing as much as possible, it was limited to testing stamina. To demonstrate stamina (aerobic capacity) the field test requires running a given distance in a set time. See: “Training for Aerobic Capacity (Stamina)” below.

American College of Sports Medicine Guidelines for Safe Exercise

“Do I need to see a doctor before I begin exercising?” or “Is it safe?”

An extensive medical work-up is not necessary for many people who wish to begin an exercise or physical activity program. This is particularly true if the program is of light-to-moderate intensity.

However, for vigorous training and if you have been sedentary in recent years, it's best to be cleared by your doctor. In addition, your relative risk of heart disease should be taken into consideration. The American College of Sports Medicine (ACSM) recommends a risk-stratification approach to exercise participation. The level of risk corresponds to the number of heart disease risk factors a person may have. These factors include the following. If you have concerns for any of these factors, be sure to check with your doctor.

- high blood pressure
- abnormally high serum cholesterol levels
- family history of heart disease
- smoking habit, obesity
- abnormal glucose tolerance (pre-diabetes, AKA Metabolic Syndrome)

As a minimum, adults who are to begin an exercise program should begin with a self-administered assessment using a popular questionnaire such as the Physical Activity Readiness Questionnaire (PARQ). The PARQ is easy to use and helpful in determining one's suitability to safely begin an exercise program. Results from the PARQ self-assessment will suggest whether medical clearance would be useful and/or necessary prior to beginning an exercise program.

Physical Activity Readiness Questionnaire (PARQ)

1. Has your doctor ever said that you have a heart condition and that you should only do physical activity recommended by a doctor?
2. Do you feel pain in your chest when you do physical activity?
3. In the past month, have you had chest pain when you were not doing physical activity?
4. Do you lose your balance because of dizziness or do you ever lose consciousness?
5. Do you have a bone or joint problem (for example, back, knee or hip) that could be made worse by a change in your physical activity?
6. Is your doctor currently prescribing drugs (for example, water pills) for your blood pressure or heart condition?
7. Do you know of any other reason why you should not do physical activity?

If you answered yes to one or more of these questions, see your doctor before you start becoming much more physically active or before you have a fitness appraisal.

Is Risk Related to High Blood Pressure or Other Diseases?

High blood pressure, also known as hypertension, is a dangerous condition when left untreated. A regular exercise program can help lower blood pressure in the long run. However, untreated high blood pressure may actually be aggravated by exercise and therefore is an exception to the risk stratification approach. Therefore, ACSM recommends that people with a personal history of high blood pressure see their physician for a complete medical evaluation before beginning an exercise program. Your doctor will know what additional tests may be necessary.

What about the Age or Sex of the Person?

Age and sex are two of the factors that increase a person's risk for heart disease. Women who are 55 years of age and older and men who are 45 years of age and older are generally thought to be at higher risk and may need to seek the advice of a physician before beginning an exercise program. The self-assessment questionnaire will help determine that.

PHYSICAL TRAINING: PREPARATION FOR THE JTA

Aerobic Capacity (Stamina)

There are many training schemes you can apply that will increase fitness. This scheme is for the rank beginner, someone who has either never jogged/run (a jog is simply a slow run, likely 10 minutes per mile or more) on a regular basis, or who hasn't done so for a prolonged period. A major key to success is consistency and devoted effort. Another key is to start slowly and progress slowly. Keep in mind that your fitness gains will outstrip your orthopedic adaptations, and if you push too hard and too fast, an orthopedic injury is likely.

A simple walking / jogging approach is comfortable and effective. Before you start, do two things. One, be sure you can exercise safely. Read and adhere to the guidelines provided by the American College of Sports Medicine. And, two, be sure to invest in a good pair of jogging shoes. They are designed to absorb the shock encountered by the lead foot when jogging which can be 2.5 to 4 times your bodyweight with each stride. Over a distance this level of shock can damage the joints in the legs, especially the knees.

Training for Aerobic Capacity (Stamina)

12 Week Walk/Jog Aerobic Fitness Program: The goal is 30 minutes of jogging without stopping

Here is a typical scheme that adheres to the slow and easy progression emphasized above. Flexibility is important, but it's best to stretch *after* your workout when your muscles are warm and ready to be stretched. Stretching before you work out accomplishes little and may even lead to injury. Use walking as your warm-up exercise.

Allow the first three to four weeks to accomplish two things. One, it's a "break-in" period, introducing your body to the rigors of aerobic exercise. This means it's a time for caution. After

four weeks, the pace of progress can increase. And, two, you want to be very comfortable during your exercise so that you look forward to your next workout. In this way, over the early weeks you begin to establish an exercise habit that you can embrace as pleasant.

This program is ultraconservative and is designed for someone who is either jogging for the first time, or someone who may have been highly active earlier in life, but has been sedentary for many years. If you have been continuously active, you can greatly accelerate this program. Your goal is to self-test on the 1.5-mile run and complete the distance in 13 minutes and 57 seconds or less.

Four stage progression in six month intervals

Stage	Projected PAT time	1.5-mile run/self-test in min
I	9:30	16:30
II	8:45	15:15
III	7:45	13:00
IV	6:50	10:30

Week 1.

Monday/Wednesday/Friday/Saturday – “Just a little bit to start”

Walk to warm up – 5 minutes

Jog 1 minute (comfortably) then walk the next 2 minutes (a 1 jog to 2 walk ratio)

Alternate jogging and walking in this way for 15 minutes total

Tuesday/Thursday – allow time to recover

Take an easy 30-minute walk

Sunday - Rest

Week 2.

Repeat Week 1 with the exception of changing the jog to walk ratio to 1 jog to 1 walk

In other words, after your warm-up walk, jog 1 minute then walk 1 minute for 15 minutes

Week 3.

Repeat Week 2 with the exception of changing the jog to walk ratio to 2 jog to 1 walk

In other words, after your warm-up walk, jog 2 minutes then walk 1 minute for 20 minutes

Week 4.

Repeat Week 3 with the exception of changing the jog to walk ratio to 3 jog to 1 walk

In other words, after your warm-up walk, jog 3 minutes then walk 1 minute for 25 minutes

Week 5.

Repeat Week 4 with the exception of changing the jog to walk ratio to 5 jog to 1 walk
In other words, after your warm-up walk, jog 5 minutes then walk 1 minute for 30 minutes

Week 6.

Repeat Week 5 with the exception of changing the jog to walk ratio to 8 jog to 1 walk
In other words, after your warm-up walk, jog 8 minutes then walk 1 minute for 30 minutes

Week 7.

Repeat Week 6 with the exception of changing the jog to walk ratio to 10 jog to 1 walk
In other words, after your warm-up walk, jog 10 minutes then walk 1 minute for 33 minutes

Week 8.

Repeat Week 7 with the exception of changing the jog to walk ratio to 12 jog to 1 walk
In other words, after your warm-up walk, jog 12 minutes then walk 1 minute for 39 minutes

Week 9.

Repeat Week 8 with the exception of changing the jog to walk ratio to 15 jog to 1 walk
In other words, after your warm-up walk, jog 15 minutes then walk 1 minute for 32 minutes

Week 10.

Repeat Week 9 with the exception of changing the jog to walk ratio to 20 jog to 1 walk
In other words, after your warm-up walk, jog 20 minutes then walk 1 minute then jog 10 minutes

Week 11.

Repeat Week 10 with the exception of changing the jog to walk ratio to 25 jog to 1 walk
In other words, after your warm-up walk, jog 25 minutes then walk 1 minute then jog 5 minutes

Week 12.

Repeat Week 11 with the exception of jogging for 30 minutes
In other words, after your warm-up walk, jog 30 minutes

You can now jog 30 minutes without stopping. Congratulations!

It's time for your 1.5-mile self-test. Time your run and see how well you do against the goal of 13 minutes and 57 seconds. If you fall short of your goal, continue training by jogging for 30 minutes each workout, and place emphasis on gradually increasing your pace.

Muscular Endurance

Push-ups are excellent to promote upper body muscular endurance. If you are not strong enough to perform “regular” push-ups (weight on hands and toes, body straight with rigid alignment, lower until chest and chin touch the floor, push upwards by extending the arms until the elbows lock and repeat), you can do push-ups on the knees. This reduces the challenge from pushing up approximately 64% of your bodyweight (this can vary depending upon body composition and how your weight is distributed) to only 49% of your body weight.

Begin by performing as many push-ups as you can until you cannot do anymore. This is one set. Allow three minutes to recover and repeat for a second set. As you progress, you can add one set each week to a total of six sets. In each set do as many push-ups as you can. Your first set will be your best because you are fresh. With each successive set your repetitions will decline due to fatigue.

Perform your push-up workout on two of the “rest” days in which you do no jogging.

If you are able to perform “regular” push-ups, you can also do knee push-ups in the latter sets as you fatigue. You also can alternate regular push-ups in one workout, then knee push-ups in the next. When performing knee push-ups, you likely will be able to do several additional repetitions.

Increase Upper Body Strength with Resistance Training

You are strongly encouraged to engage in strength building through resistance training. Two days per week is effective. Integrating all three workouts into your schedule, you would have jogging (aerobic fitness) four days per week, and strength training two days per week. You can include your push-up, muscular endurance workout at the end of your resistance training workout.

Here are four basic principles you need to know.

- First, in order to increase strength and force muscles to grow, you must overload them. This means making your muscles do things they ordinarily don't do. This makes them uncomfortable and, in turn, they will make adjustments so as to handle the overload more easily next time it is encountered.
- Second, because muscles can and will make adjustments when overloaded, you must progressively increase the amount of overload by lifting progressively heavier weights.
- Third, resistance training is very task specific and only the targeted muscles will improve, so choose your exercises carefully.
- Fourth, rest and nutrition are as important as exercise. Exercise hard, follow a healthy, high protein diet (approximately 1.2 to 1.6 grams of protein per kilogram of body weight (1 kg = 2.2 pounds) and get plenty of sleep, try for eight hours per night.

Your workout will be staged in sets and reps. A set is a series of repetitions (reps). If you press a barbell overhead ten times, this would be one set of ten reps.

You will use differing amounts of weight for each exercise. Some muscles are larger and stronger than others and will require greater weight in order to effectively overload.

You should concentrate on upper body exercises as these will help most on the PAA. The exercises selected have been chosen because they can easily be done with an inexpensive barbell or on machines with a weight stack in a commercial gym.

How to determine how much weight you should use for each exercise? For each separate exercise, you will need to establish an appropriate starting weight. Let's assume you are going to engage in the overhead press (from shoulders to arms' length overhead and back to shoulders). Begin with a very light weight and perform one set of ten reps. Allow two minutes of rest, then add weight (5 to 10 pounds) and perform another set of ten reps. Keep going in this manner until you find a weight that challenges you and that you are barely able to press ten times. This is your starting weight.

When performing each exercise, you will perform one light warm-up set for 12 to 15 reps, then three strength building sets. Allow no more than two minutes rest between sets. Perform ten reps on the first strength building set. Aim for eight reps on the second set, and six reps on the third. With each progressive workout, add a rep if you can to the second and/or third sets. Eventually, your goal will be to perform three sets of ten reps. When you can do this, it's time to add more weight to the bar and return to the ten, eight, six format and progress from there again.

When performing each exercise, strict form is a must. Perform each exercise through the full range of movement of the joint. Never cheat, as cheating will shift the load to other muscle groups. It also will increase the potential for injury.

Be mindful of your posture. Stand straight and fix your eyes on a point to help maintain your balance.

Perform each rep slowly and strictly. Allow two seconds on the "up" (concentric) phase, and two seconds on the "down" (eccentric) phase.

Never hold your breath. Breathe in on the down phase, and blow out on the up phase.

Since your goal is not to become a competitive bodybuilder, limit your exercises to those that will help performance on the PAA. This also will limit the time commitment for your workouts, and you should finish easily in 30 minutes or less.

You can expect to experience some muscle soreness early in your training. This is "delayed muscle soreness" and may not appear for 24 to 48 hours after a workout. This is natural and will fade in a day or two. Because the muscles are experiencing some inflammation, an anti-inflammatory agent like ibuprofen can help combat the soreness. Once you are training regularly, it is less likely that you will experience muscle soreness.

Exercise # 1 for chest, shoulders, triceps – The Bench Press.

- If you have access to a bench with supports for the bar and you have a partner to “spot” you, the bench press is an excellent exercise. Always have someone watching so that the weight doesn’t get stuck on your chest. In other words, never perform the bench press alone.
- ***A weight stack machine is another option and does not require spotting. This is also true for all the exercises described below.***
- Lying on the bench, using an overhand grip with hands shoulder width apart, lower the bar slowly and under control from arms’ length to the chest.
- Pause the bar on the chest momentarily (keep the muscle tense, do not relax) then extend the bar to arms’ length and repeat.

Exercise # 2 for biceps - The Curl.

- Curls will strengthen your biceps and add muscle mass to your arms.
- Address the bar, hands and feet shoulder width apart.
- Using an underhand grip (palms facing away from the body) grasp the bar and stand upright.
- The bar is at thigh level.
- Flex the biceps and bend the elbows, keeping the elbows close to your sides.
- Raise the bar until it touches your chin.
- Slowly and under control, lower the bar back to the thighs and repeat.
- Curls with dumbbells (one in each hand) is an option.

Exercise # 3 for the upper back. The Bent-Over Rowing Motion.

- Bent over rows will strengthen the upper back muscles.
- Address the bar, hands and feet shoulder width apart.
- Bend the knees slightly and bend forward at the waist (as if bowing).
- Grasp the bar with an overhand grip and pull the bar to your chest while bent over (mimicking rowing a boat).
- Lower the bar to arm’s length and repeat.
- The “lat machine” pulldown is an option available at a commercial gym.

Alternative for Exercises # 2 and # 3 – Pull-ups.

- If you have access to a pull-up (overhead) bar, perform pull-ups.
- Begin by hanging from the bar with an overhand grip.
- Pull the body upward and touch the chin to the bar, lower to arm’s length and repeat.
- If complete pull-ups are too hard, perform half pull-ups, lowering the body only to a 90 degree bend in the elbow and repeat.
- Another option is pull the chin to the bar with an underhand grip

Exercise # 4 for the lower back. The Bent-legged Dead lift

- Dead lifts will strengthen the lower back.
- Address the bar and grasp it with an overhand grip by bending at the knees.
- Now, don't clean the bar, but instead simply stand upright.
- Lower the bar to the floor and repeat.
- Be sure to bend the knees on each rep.

Exercise # 5 for the abdominal muscles. Crunches.

- Lying on the floor face up, bend the knees, allowing the feet to be flat on the floor.
- Cross your arms over your chest.
- Slowly "curl" your upper body as if performing a sit-up, but go only half way and hold that position, then slowly lower the upper body to the floor and repeat.
- Concentrate on making certain the abdominal muscles are doing the work by going slowly and using very strict form.

NOTE: At the end of your resistance training workout, add your push-up workout.

NOTE: If you have access to a commercial gym, you will have the option of performing a wider variety of exercises and the use of varying machines. The concepts and the approach remain the same. For each workout, choose a sequence of exercises which can change periodically to add variety to your workouts.

If you are busy and need a quick workout, you could perform curls (or pull-ups) and then do your push-up workout. Both exercises strengthen the arms.