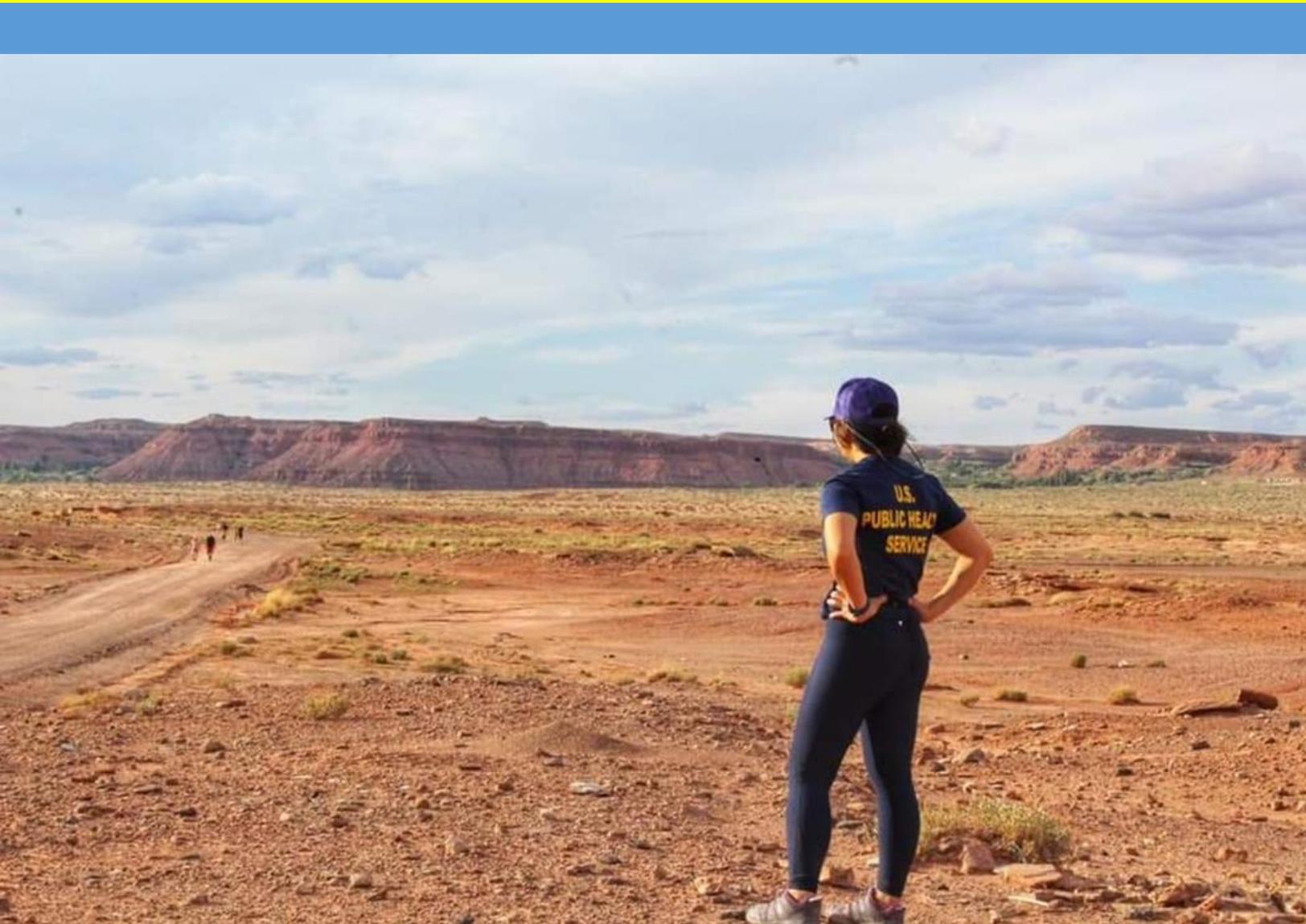




# U. S. PUBLIC HEALTH SERVICE COMMISSIONED CORPS



## ANNUAL PHYSICAL FITNESS TEST TRAINING GUIDE

Version 1.0

# APFT Training Guide

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## Welcome Statement

Welcome to the Annual Physical Fitness Test (APFT) Training Guide! As officers in United States Public Health Service (USPHS) Commissioned Corps, you have the responsibility of maintaining specific levels of physical fitness and height-weight standards. Despite the known importance of physical activity, only about 20% of Americans are getting the recommended amounts of physical activity.<sup>1</sup> Insufficient physical activity has been linked as a primary contributor to the development of chronic diseases<sup>2-4</sup> and is a major risk factor for musculoskeletal injury.<sup>5,6</sup> Research suggests first responders and military personnel who are not able to successfully perform certain functional activities are at increased risk of injury while on the job.<sup>6,11,12</sup> As leaders in public health, it is your duty as a uniformed officer to be physically fit, so that you can serve your nation and community in times of crisis. This guide includes evidence-based physical activity recommendations for adults and provides exercises for different levels of fitness.

The APFT is an assessment of cardiorespiratory endurance, upper body endurance, core endurance, and flexibility. The purpose of this guide is to help prepare you to pass the APFT. You should prepare sufficiently to take and pass the APFT, as well as to be in good physical condition for USPHS deployments. You should try to practice the APFT at least a couple of times a month and track your progress. If you are not currently achieving a satisfactory score, establish goals to work towards meeting the requirements of becoming basic ready, and practice regularly by yourself or with a buddy. The price of success is hard work, and it is important for your Corps and your Nation that each of you is successful.

*In Officio Salutis,*



VADM Jerome M. Adams, MD, MPH  
20<sup>th</sup> U.S. Surgeon General

*This document is intended to assist the officer to successfully complete and pass the APFT. Please refer to USPHS Instruction [POM 821.65](#) (effective 11 July 2018) for additional information regarding the APFT and passing criteria. APFT exercises are included in the [Appendix of this guide for reference](#). [If you are unsure of your safety to exercise, please consult with a licensed medical provider prior to initiating a new exercise program.](#)*



## Adult Physical Activity Recommendations

According to the Department of Health and Human Services' 2018 Physical Activity Guidelines, it is recommended that adults achieve 150 to 300 minutes of moderate-intensity physical activity per week.<sup>7,9</sup> This is equivalent to about 30-60 minutes of exercise, five days a week. For adults that engage in vigorous-intensity physical activities, which is roughly twice the energy expenditure of moderate-intensity activities, it is recommended to engage in 75 to 150 minutes of physical activity per week to obtain optimal health benefits.<sup>7,9</sup> At least 2 days per week should be devoted to strengthening exercises of the upper body, lower body and core muscles.

The American College of Sports Medicine (ACSM) defines moderate intensity as 50-69% of an individual's max heart rate and vigorous intensity as 70-89% of max heart rate.<sup>9</sup> The easiest way to determine an approximate max heart rate is to take 220 minus your age. According to the American Heart Association, most individuals can gradually work up to exercising comfortably at 85% of the maximum heart rate after a few months of regular exercise.<sup>13</sup> The chart below provides ranges of moderate and vigorous heart rate intensities. Heart rate measures are provided in beats per minute.<sup>8</sup>

### Determining Training Heart Rate Zones Based on Age and Exercise Intensity

Age in Years	Maximum Heart Rate	Target Heart Rate for Moderate Intensity	Moderate Intensity 10 second count	Target Heart Rate for Vigorous Intensity	Vigorous Intensity 10 second count
20	200	100-140	17-23	141-170	23-28
25	195	98-136	16-23	137-166	23-28
30	190	95-133	16-22	134-162	22-27
35	185	93-129	16-22	130-157	22-26
40	180	90-126	15-21	127-153	21-26
45	175	88-122	15-20	123-149	20-25
50	170	85-119	14-20	120-145	20-24
55	165	83-115	14-19	116-140	19-23
60	160	80-112	13-19	113-136	19-23



## The Borg Scale (Rate of Perceived Exertion) & Talk Test

The Borg Rate of Perceived Exertion (RPE) scale ranges from 1-10, with a score of “1” representing very light exertion and a score of “10” representing maximum effort. Individuals should be exercising between a RPE of 4-6 during low to moderate intensity training and 7-9 during vigorous and high intensity training sessions.<sup>8</sup>

### 1: Very Light Activity

Includes activities such as watching TV or riding in a car.

### 2-3: Light Activity

Feels like you can maintain for hours. Physically it is easy to breath and have a conversation.

### 4-6: Moderate Activity

Feels like you can exercise for hours. You are breathing more heavily and can only hold a short conversation.

**7-8: Vigorous Activity**  
On The verge of becoming uncomfortable. You are short of breath and can only speak short sentences at a time.

### 9: Very Hard Activity

Very hard to maintain exercise intensity. You can only breathe or speak a single word at a time.

### 10: Max Effort Activity

Feels almost impossible to keep going. You are completely out of breath and unable to speak.



## Best Practices

- ✓ Each officer requires an individualized plan. The officer should play an active role in developing their plan for obtaining a healthier lifestyle, as well as meeting USPHS fitness standards.
- ✓ If you are not currently achieving a satisfactory score on the APFT, set goals to work towards meeting the established requirements. Goals should be specific, measurable, attainable, relevant and time-bound. It is recommended to track progress individually, utilizing tracking logs with weekly physical training and review progress at least monthly.
- ✓ Promote additional calorie expenditure outside of physical training. Officers focusing on weight loss will require daily activity. Walking is a great way to increase moderate intensity exercise and is sustainable especially when access to exercise facilities are limited.

## Physical Training Guidance

- ✓ Avoid fitness programs that over-train, increasing the risk of overuse injuries to muscles and joints.<sup>8,9</sup> Limit long runs and incorporate speed work to improve run performance.<sup>9</sup>
- ✓ It is common to experience muscle soreness when beginning a new exercise routine. Allow for rest days that focus on light intensity walking and stretching to help facilitate recovery.
- ✓ Any exercise performed incorrectly or that incorporates extreme movements that cause a joint to move beyond its normal range of motion, such as excessive, rapid or repetitive twisting, may cause injury.<sup>8</sup> If you experience pain with any of the exercises, stop immediately. If pain continues, seek

The **Talk Test** is the easiest way to measure relative intensity. As a rule of thumb, if you're doing moderate-intensity activity you can talk, but not sing during the activity.<sup>9</sup> If you're doing a vigorous-intensity activity, you will not be able to say more than a few words without pausing for a breath.<sup>9</sup>

the advice of a licensed medical provider.

- ✓ This guide addresses exercise prescription based off the FITT (Frequency, Intensity, Time, and Type) principle.<sup>8-10</sup> **Frequency** refers to how often an exercise is done. **Intensity**, as discussed



earlier with the Borg Intensity and Heart Rate scales, refers to how hard you exercise. **Time** refers to the amount of time spent exercising and **Type** is the different ways in which you can exercise (cardio vs. strengthening as one example). Each of these variables can be manipulated to further help progress the officer in his or her training. All are important to consider when addressing injury prevention. Different activities will stress different muscles and it is important not to do too much of the same activity and to vary your workouts in intensity, time, frequency, and type of exercise.

## Activity Guidelines and Program Design

All physical training sessions consist of the following components in this order.

Activity	Time (Minutes)
Dynamic Warm-up	5 – 10
Physical Training Session	20 – 40
Cool-down	5
Stretching	5 – 10

The components (dynamic warm-up, physical training, cool-down, and stretching) of the program design will be further defined with examples of specific exercises that the officer can perform. These exercises should complement a mixture of endurance activities such as running, biking, stair stepping, and elliptical training.

## 3-Day Training Schedule

A 3-day training schedule is the ideal place to start for someone that is new to exercise.

	Monday	Tuesday	Wednesday	Thursday	Friday, Saturday, or Sunday
Dynamic Warm Up	5 – 10 min	Recovery*	10 min	Recovery*	10 min
Pre-Planned Activity	Cardio 20 min Strengthening 15 min	Walking 15 – 30 min (Very light to light intensity)	Cardio 30 min	Walking 15 – 30 min (Very light to light intensity)	Strengthening 20 min



	(Moderate to Vigorous Intensity)		(Moderate to Vigorous Intensity)		(Light to Moderate Intensity)
<b>Cool Down</b>	5 min		5 min		5 min
<b>Stretch</b>	5 min	5 – 10 min	5 min	5 – 10 min	5 – 10 min
<b>Totals</b>	50 – 55 min	20 – 40 min	40 min	20 – 40 min	40 – 45 min

\* Recommend on recovery days to participate in walking program and light stretching as needed to improve flexibility. Schedule above based off of ACSM FITT Principle guidelines.<sup>9</sup> With a three day training program it is recommended to practice your APFT at least once every other week as your pre-planned activity. Limit vigorous intensity workouts to no more than 2 to 3 times per week.

## 5-Day Training Schedule

A 5-day training schedule is appropriate for someone that has been exercising consistently. Frequency, Intensity, Time, and Type of exercises will vary for the individual level of fitness.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday & Sunday
<b>Dynamic Warm Up</b>	5 min	<b>Recovery*</b>	5 – 10 min	10 min	<b>Recovery*</b>	5 min
<b>Pre-Planned Activity</b>	<b>Cardio</b> 15-20 min <b>Strengthening</b> 15 min (Moderate to Vigorous Intensity) or <b>Mock APFT</b>	<b>Walking</b> 15 – 30 min (Very light to light intensity)	<b>Cardio</b> 30 min (Moderate to Vigorous Intensity)	<b>Strengthening</b> 20 min (Light to Moderate Intensity)	<b>Walking</b> 15 – 30 min (Very light to light intensity)	<b>Cardio</b> 15 – 20 min <b>Strengthening</b> 15 min (Moderate Intensity)
<b>Cool Down</b>	5 min		5 min	5 min		5 min
<b>Stretch</b>	5 min	5 – 10 min	5 – 10 min	5 – 10 min	5 – 10 min	5 min
<b>Totals</b>	45 – 50 min	20 – 40 min	40 – 50 min	40 – 45 min	20 – 40 min	45 – 50 min

\* Recommend on recovery days to participate in walking program and light stretching as needed to improve flexibility. Schedule above based off of ACSM FITT Principle guidelines.<sup>9</sup> With a five day training program it is recommended to practice your APFT at least once every other week as your pre-planned activity. Limit vigorous intensity workouts to no more than 2 to 3 times per week.



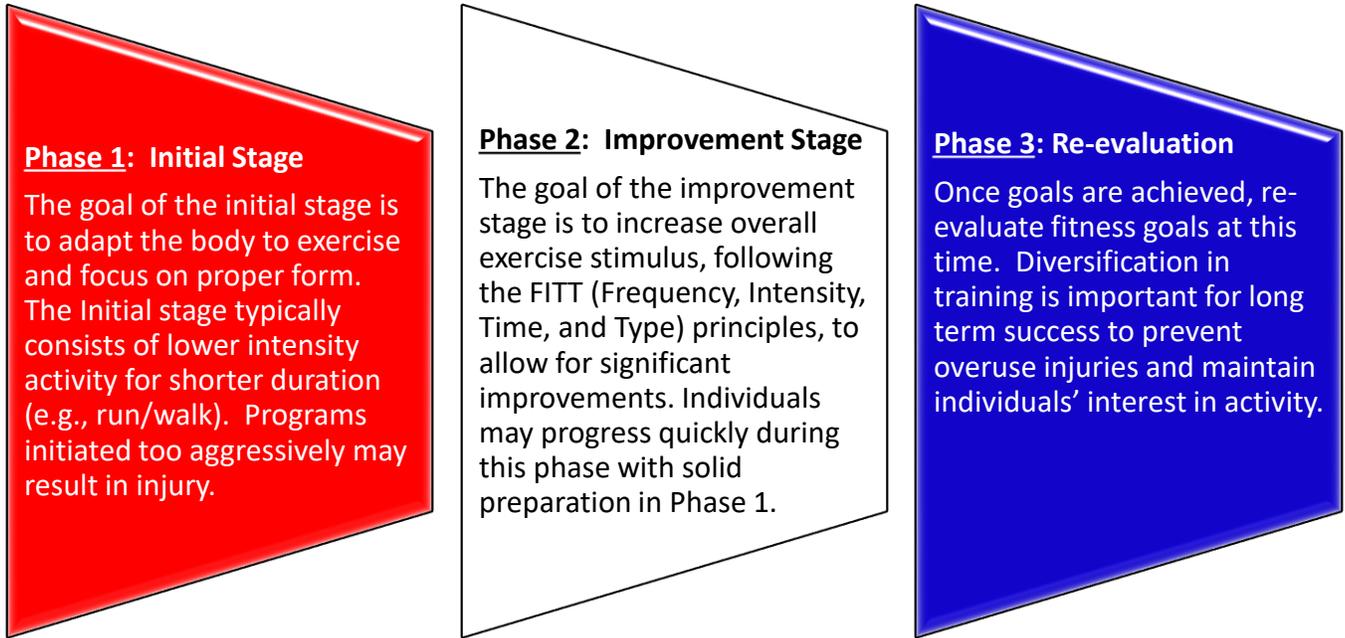
## Progression

The rule of progression is to gradually implement an exercise program. Avoid doing too much, too soon or too fast, to minimize set-backs and injuries. Attempt to keep the following items in mind:

- Pay specific attention to time/duration and intensity when starting a workout program.
- Initial intensity and time should reflect the beginning fitness level of the individual. The average aerobic intensity should be that which can be maintained for 15 minutes. For some individuals this may be a walking, a walking/running, or an alternate cardio program.
- In order to make improvements in fitness, you must physically work at a level beyond what you are accustomed to and challenge your current state of fitness. Overloading using cardiovascular and/or strength training will cause some fatigue, but with proper recovery will yield biologic improvements. The three factors that are manipulated to induce exercise overload are intensity, time/duration, and frequency.
- More is not always better. After a certain weekly amount of exercise, fitness improvements are negligible and the potential for injury increases. Individuals exhibiting signs of injury, such as muscle or joint pain, or feeling fatigued on a regular basis, may be exercising too much and should seek medical advice.
- Due to the variability of individual body type, physical condition, and environment, there is limited evidence that supports a universal exercise program that is ideal for everyone. Many coaches, trainers, and clinicians will recommend the 10% rule for progression, but there is limited evidence to support this and some research that goes against this “rule of thumb”.<sup>14</sup> Preliminary evidence suggests that increasing mileage by 30% or more in a two-week period may increase the likelihood of injury while other factors, such as increased Body Mass Index (BMI), higher body fat percentage, improper form and prior injury, may predispose an individual to a higher risk of injury while running.<sup>15</sup>

**Assessment of Progress:** There are three levels of fitness progression.





## Preparing for the Run

If you've never run before, the following is a conservative training schedule for achieving a goal of running for 20 to 30 minutes without stopping. This guide is based off the most up-to-date evidence available.<sup>1-33</sup> It is a weekly progression of walk/run sets. If you perform four (4) sets that equates to a total 20 minute run, if you perform 6 sets of the run/walk ratio, you will run 30 minutes. Whether you run two times or three times a week, it is recommended to take a day off in between. Soreness lasting more than 2 to 3 days may be the onset of musculoskeletal injury and should not be ignored. Please allow your body adequate time to heal in between training runs.

Week	Days per week	Walk/Run Ratio
1	3 – 5	20 – 30 minute (min) walk only
2	2 – 3	4 – 6 Sets of (4.5 min walk + 30 sec run)
3	2 – 3	4 – 6 sets of (4 min walk + 1 min run)
4	2 – 3	4 – 6 sets of (3.5 min walk + 1.5 min run)
5	2 – 3	4 – 6 sets of (3 min walk + 2 min run)
6	2 – 3	4 – 6 sets of (2.5 min walk + 2.5 min run)
7	2 – 3	4 – 6 sets of (2 min walk + 3 min run)



8	2 – 3	4 – 6 sets of (1.5 min walk + 3.5 min run)
9	2 – 3	4 – 6 sets of (1 min walk + 4 min run)
10	2 – 3	4 – 6 sets of (30 sec walk + 4.5 min run)
11	2	20 – 30 min run only

### Training Progression for Sedentary Individuals

The chart below provides guidelines for progression for frequency, intensity and duration of physical training sessions for sedentary members.

Program Stage	Week	Exercise Frequency (days per week)	Exercise Intensity (% heart rate max)	Exercise Duration (minutes)
Initial Stage	1	3	40-50	15-20
	2	3-4	40-50	20-25
	3	3-4	50-60	20-25
	4	3-4	50-60	25-30
Improvement	5-7	3-4	60-70	25-30
	8-10	3-4	60-70	30-35



	11-13	3-4	65-70	30-35
	14-16	3-5	65-75	30-35
	17-20	3-5	70-85	35-40
	21-24	3-5	70-85	35-40
Maintenance	24+	3-5	70-85	20-60

ACSM, *Guidelines for Exercise Testing and Prescription, 10th Edition*

Pre-planned PT session not including time for warm-up, cool down and stretching.

## Dynamic Warm Up

The purpose of the warm-up is to adequately prepare the body for physical activity. The activities performed in the warm-up routine should mimic the activities that will be performed during the exercise session. Warm-up period lasts between 5 to 10 minutes, starting with low intensity and gradually increasing in intensity as the warm-up progresses.

Activity	Time (Minutes)
Dynamic Warm-up	5 – 10
Physical Training Session	20 – 40
Cool-down	5
Stretching	5 – 10

### Benefits include:

- Reducing the potential for muscle and connective tissue injuries.<sup>8,9</sup>
- Increasing blood flow and oxygen delivery to exercising muscles. The more blood that reaches the muscles, the easier the delivery of nutrients required for energy production.
- Increasing blood flow to the heart which leads to reduced risk for exercise-induced cardiovascular events.<sup>8,9</sup>

The following exercises can be performed as your dynamic warm up prior to your physical training session. They are organized into levels of fitness. It is recommended all officers begin with level 1 and progress only after they have executed proper form. For some exercises, you may be able to progress to a level 3, whereas other exercises you may still be at a level 1, even after weeks of training.

### 1) High Knee Walks: 20 repetitions

**Level 1:** March in place while tapping raised knee with opposite hand.

**Level 2:** Add a crunch twist, reach opposite elbow to opposite knee.

**Level 3:** While jogging in place, tapping raised knee with opposite hand.





2) **Lunge Progression:** 10 repetitions

*Level 1:* Perform lunges at a slow pace. The knee of the forward leg should not go past the toes.

*Level 2:* Lunge deeper until back knee is about one inch from ground. Do not hit the ground with your knee.

*Level 3:* Include a trunk side-bend.



3) **Dynamic Calf Progression:**

*Level 1:* Standing Ankle pumps, perform 30 – 40 beats.

*Level 2:* Walk on heels for 10 – 15 steps, then walk on toes for 10 – 15 steps.

*Level 3:* Perform in downward dog pose, pump ankles for 30 – 40 beats, reaching heels towards floor.





4) **Bottom Kickers:** 20 repetitions

*Level 1:* Bend knee so that the heel reaches toward the buttocks, a stretch should be felt in the front of the thigh.

*Level 2:* Jog in place, kicking heels up towards the buttocks.

*Level 3:* Same as level 2, performed at a faster pace.

Starting Pose

Level 1

Level 2

Level 3



5) **Straight Leg Progression:** Alternate legs to complete 10 repetitions per leg

*Level 1:* Kick leg out a comfortable distance, a stretch may be felt in the back of the thigh.

*Level 2:* Perform same action as level 1, kick higher to increase the stretch.

*Level 3:* Kick higher, reach opposite hand to opposite toes.

Starting Pose

Level 1

Level 2

Level 3



6) **Hip Abductor Progression:** 10 repetitions each direction

*Level 1:* With feet facing forward, step sideways, reverse direction after 5 repetitions.

*Level 2:* Step sideways while adding a half squat, reverse direction after 5 repetitions.

*Level 3:* Perform a side lunge. Ensure that the bent knee does not travel past the toes.

Starting Pose

Level 1

Level 2

Level 3



7) **Hip External Rotation Dynamic Progression:** 10 – 20 repetitions each side

*Level 1:* Begin on right side with knees and feet together with a bend in the knees and hips. Open knees while maintaining contact in the feet. Ensure your hip does not roll back.

*Level 2:* Start in a standing position, raise one leg while rotating it away from the body, return leg to start position.

*Level 3:* Complete same movement as level two and add a small hop on the stationary leg while rotating the leg in the air.



8) **Hip Abductor and Shoulder Progression:** 20 repetitions

*Level 1:* With feet facing forward, step sideways, reverse direction after 5 repetitions.

*Level 2:* Perform jumping jacks.

*Level 3:* Add a mini squat to the jumping jack.



9) **Shoulder Girdle Dynamic Progression:** 20 repetitions

*Level 1:* Start by shrugging shoulders up and down for 20 counts.

*Level 2:* Perform small circles with your arms out at your side, do 10 clockwise and 10 counter clockwise.

*Level 3:* Make your circles a little larger than in level 2.





**10) Thoracic Rotation Progression:**

*Level 1:* Start in a standing position with knees slightly bent. Do not extend knees past toes. Reach from side to side for 20 counts.

*Level 2:* Start in a hands and knees position and rotate your arm under your body. Perform 5 – 10 repetitions per arm.

*Level 3:* Complete same movement as level 2, add a reach toward ceiling. Perform 5 – 10 repetitions per arm.

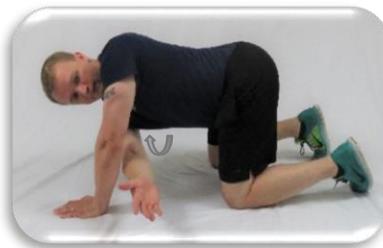
Starting  
Pose

Level 1

Level 2

Level 3

*Level 1:*  
Standing  
  
*Level 2 and 3:*  
Hands  
and  
knees  
position



Activity	Time (Minutes)
Dynamic Warm-up	5 – 10



Physical Training Session	20 – 40
Cool-down	5
Stretching	5 – 10

Each physical training sessions can consist of cardiorespiratory and/or strength training.

**Cardiorespiratory training:** may be conducted for at least 30 minutes at a moderate intensity [brisk walk (3 mph or faster), bicycling, elliptical training, water aerobics], 5 days a week or 25 minutes at a high intensity (jogging/running, swimming laps, jumping rope, circuit training), 3 to 5 days per week.<sup>7-9</sup>

**Strength Training:** should consist of 8 to 10 exercises consisting of 8 to 12 repetitions and repeated if desired up to 2 to 3 sets.<sup>9,10</sup> Individuals should focus on major muscle groups of the upper and lower extremities, and core muscles. Strength training can be conducted using machines, free weights, body weight, resistance bands, and dumbbells.

The exercises below are functional strength training exercises and can be performed as part of your physical training session. They should be done after an adequate warm up activity. It is recommended all officers start at Level 1 and progress only after they have executed proper form and ability.

1) **Squat Progression:** 10 repetitions

**Level 1:** Perform a mini squat by bending the knees to a 30 degree angle. Do not let your knees move forward excessively past the toes or bend towards centerline as you squat.

**Level 2:** Perform a full squat by bending the knees to a 90 degree angle. Do not let your knees move forward excessively past the toes or bend towards centerline as you squat.

## Physical Training Sessions

- ✓ The following exercises can be done using individual body weight to help facilitate strength training. They are considered functional strengthening exercises as they mimic movement patterns that an officer should be able to perform.
- ✓ The exercises are separated into 3 different levels. It is recommended all officers utilizing this guide begin with level 1 for each exercise.
- ✓ As an exercise is mastered in performance, the officer can progress up to the next level.
- ✓ You might perform different exercises at different levels depending on your baseline muscle strength and overall fitness level.
- ✓ It is recommended to do muscular strengthening exercises at least 2 times per week.



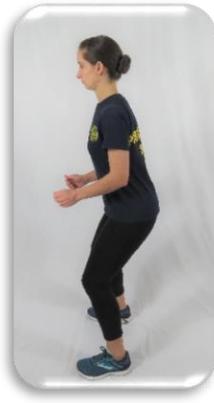
*Level 3:* Add a jump after squatting. Land with your knees bent to absorb the impact.

Starting Pose

Level 1

Level 2

Level 3



2) **Push-Up Progression:** 10 – 20 repetitions

*Level 1:* Begin on hands and knees with arms slightly wider than shoulder width. Keeping your back straight, lower your body towards the floor.

*Level 2:* Perform a push-up on hands and feet, keeping both legs straight.

*Level 3:* Place feet on a chair.

Level 1

Level 2

Level 3



3) **Glute Bridge Progression:**

For all levels, begin by engaging your abdominals.

*Level 1:* Slowly lift your bottom off the ground and hold for 5 – 10 seconds. Perform 10 repetitions.

*Level 2:* Extend one leg, lift your hips up and hold for 5 – 10 seconds. Perform 5 repetitions per leg.

*Level 3:* Lift your bottom and slowly march in place for 10 counts, keeping your hips raised throughout the exercise.

Starting Pose

Level 1

Level 2

Level 3



4) **Quadruped Progression:** 20 repetitions total.

For all levels, begin in a quadruped (hands and knees) position.

*Level 1:* Raise one arm up and then alternate to the other side.

*Level 2:* Kick one leg backwards and then alternate to the other side.

*Level 3:* Kick one leg backwards and raise opposite arm at the same time.

Level 1

Level 2

Level 3



5) **Superman:**

For all levels, start by laying on your stomach and tightening your core.

*Level 1:* Slowly lift one arm and the opposite leg off the ground. Slowly return back down and repeat with the other arm and opposite leg. Perform 20 repetitions.

*Level 2:* Raise both arms and legs at the same time and hold for 5 seconds. Perform 10 repetitions.

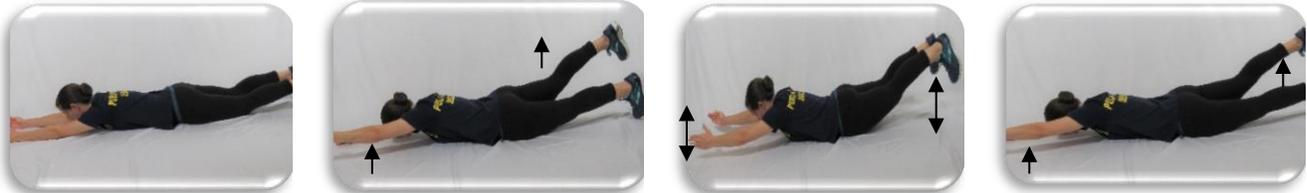
*Level 3:* Stay in a fully extended position with both arms and legs lifted off the ground. Quickly alternate opposite arms and legs up & down for 30 counts.

Starting Pose

Level 1

Level 2

Level 3



6) **Lunge Progression:** 10 repetitions per leg

*Level 1:* Perform a partial lunge by bending both knees to a 30 degree angle. Do not let front knee angle inwards or move forward past the toes.

*Level 2:* Perform a full lunge by bending both knees to 90 degrees until back knee is about one inch from ground.

*Level 3:* Perform lunge jumps, alternating which leg is in front.

Starting Pose

Level 1

Level 2

Level 3



7) **Romanian Deadlift Progression:**

*Level 1:* Begin with both feet on the ground, knees slightly bent. Lean forward at your hips, keeping your back straight, and then return to the upright position. Perform 10 repetitions.

*Level 2:* Stand on one leg, knee slightly bent. Lean forward at your hips, going ½ way to the ground. Return to the upright position. Perform 5 repetitions each side.

*Level 3:* Stand on one leg, knee stance knee slightly bent. Lean forward at your hips until you can touch the ground with your hand. Your moving leg should be straight. Return to the upright position. Perform 5 repetitions each side.

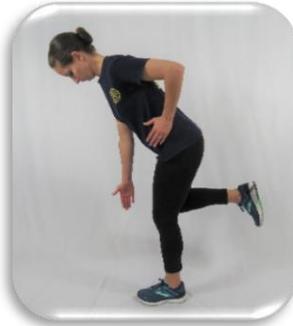
**\*\*It is important to keep a neutral spine during this exercise. Keep your back straight and do not round your lower back as you bend forward. It is also important to keep your stationary knee(s) slightly bent as this helps to keep your back straight as you lean forward.\*\***

Starting Pose

Level 1

Level 2

Level 3



**8) Downward Dog walkouts to plank:**

Start on hands and feet, with hips lifted up in the air. With your hands, slowly walk forward to a full plank position. Keep your core engaged and do not arch your back. Then walk yourself back to return to starting position. Modifications: Perform on hands and knees or decrease the amount you walk out for a less-intense exercise.

*Level 1:* 5 repetitions

*Level 2:* 10 repetitions

*Level 3:* 15 repetitions

Starting Pose

Level 1, 2, 3



**Recovery**

The recommended exercise frequency is 3 to 5 times per week with light activity days to rest and recover. Common mistakes in fitness programs include:

- Participating in the same work out for an extended period of time. For example: exercising on the stationary bike or elliptical for 20 minutes, 3 times per week for 8 weeks or more. The body will adapt and you may not see continued improvements. Vary workouts and continue to challenge the body with increased intensity to see improvements in fitness.
- Failing to prepare for the APFT. Participating in cardiovascular and strength training workouts at least 3 times per week is adequate to prepare most officers to pass the APFT. Only participating in running, crunches, and sit ups may not yield fitness improvements. There are more effective ways to improve your APFT score without overusing the same muscle groups.
- It is acceptable and encouraged to participate in a light walking program and stretching on recovery days.

## Cool-down

The purpose of the cool-down period is to gradually lower the heart rate and respiratory rate to pre-activity levels. Eliminating the cool-down can cause blood to pool in the lower extremities decreasing the body's ability to return blood to the heart and brain. This can cause an irregular heart-beat, dizziness, nausea and fainting. For a proper cool down, use the last 3 to 5 minutes of the workout to reduce the intensity and slowly lower the heart rate.

## Recommended Stretches

Flexibility is an important but often overlooked component of an exercise program. It is recommended to include exercises geared toward improving flexibility into each physical training session. A static stretching exercise session is best after the physical training session as muscles are warmer and more pliable following exercise.

Activity	Time (Minutes)
Dynamic Warm-up	5 – 10
Physical Training Session	20 – 40
Cool-down	5
<b>Stretching</b>	<b>5 – 10</b>



Use static (slow and controlled) stretches instead of ballistic (fast and/or bouncing) stretches. The optimal hold time for static stretches is 15 to 30 seconds (8 to 15 count). The following are static stretches that an officer can perform following their cool down period.



### Posterior Shoulder Stretch

Raise one arm in front of your body with your thumb pointing up. Using your other arm, reach under your elbow and gently bring your top arm across your body until you feel a stretch along the back of the shoulder of the upper arm that is across your body.

### Quadriceps Stretch

While standing bring your heel to your bottom by bending your knee until a gentle stretch is felt in the front of your thigh. You may hold onto a stable surface for balance. Ensuring that your standing leg is not locked at the knee, remain standing upright keeping your bent knee under your hip so that your knee does not swing out to the side. You can also perform this stretch while lying on your side.



### High Hamstring and Calf Stretch

In a standing position, bring one leg out in front of you, keeping your knee straight and toes pointed upward with your heel digging into the ground. Bend your opposite knee and bring your hips back. Gradually reach with both arms toward your toes until you feel a stretch in the back of the straight leg in front of you. Keep your back straight as you stretch forward.

### Low Back Stretch

Begin by lying on your back and slowly bring one knee toward your chest with your hands until you feel a stretch in your low back and buttocks. Keep your other leg and back flat on the ground.





### Outer Hip and Low Back Stretch

While sitting on the ground with your legs parallel in front of you, bend one knee toward your body. Place your foot flat on the ground over the straight leg. Rotate your upper body toward your bent knee, pressing your elbow against the knee while your other arm props you up. You should feel a stretch on the outside of your hip and in your back.

### Hamstring and Hip Adductor Stretch

Start by sitting on the floor with your legs in a v-position. Gently lean forward bending at your hips and reach your arms out in front of you until you feel a stretch in the back and inside of your legs.



### Trunk Rotation Stretch

Begin by lying flat on your back with your arms out to your side in a “T” position with your legs straight. Bend one knee and bring it up toward your chest and then across your body, slowly bringing it to the ground on the side of your straight leg. Try to keep your arms and shoulders on the floor in the “T” so you can feel a stretch through your chest and low back.

### Piriformis Stretch

Start by lying on your back with both legs bent. Lift one leg up placing that ankle on your opposite knee to make a figure four position. Place your hands behind the thigh of the leg that is supporting your ankle and gently bring your leg toward your chest maintaining the figure four position. Gradually bring your legs closer to your chest until you feel a stretch in your buttock.





### Cat and Camel Stretch

While on your hands and knees, slowly raise up your back and arch it towards the ceiling. Next, slowly lower and then arch your back the opposite direction. Hold each position for 10 – 15 seconds and repeat 5 times.

### Calf Stretch (Gastrocnemius)

Standing next to a wall or fixed object, place one foot behind the other. With your back leg straight and heel on floor, lean into wall until a stretch is felt in calf. Be sure toes are pointed forward.



### Calf Stretch (Soleus)

Standing next to a wall or fixed object, place one foot behind the other. Keep back leg slightly bent at the knee and keep heel flat on floor. Lean into wall until stretch is felt in lower calf.



## APFT Monthly Tracking Log<sup>8</sup>

<b>Week 1</b>	<b>Date:</b>
<b>Activity Performed (Strengthening/Cardio/Flexibility)</b>	<b>Min/Hours</b>
MON	
TUE	
WED	
THU	
FRI	
SAT	
SUN	
Weekly Results: Weight:      Push Ups:      Core:      Cardio:	
<b>Week 2</b>	<b>Date:</b>
<b>Activity Performed (Strengthening/Cardio/Flexibility)</b>	<b>Min/Hours</b>
MON	
TUE	
WED	
THU	
FRI	
SAT	
SUN	
Weekly Results: Weight:      Push Ups:      Core:      Cardio:	
<b>Week 3</b>	<b>Date:</b>
<b>Activity Performed (Strengthening/Cardio/Flexibility)</b>	<b>Min/Hours</b>
MON	
TUE	
WED	
THU	
FRI	
SAT	
SUN	
Weekly Results: Weight:      Push Ups:      Core:      Cardio:	
<b>Week 4</b>	<b>Date:</b>
<b>Activity Performed (Strengthening/Cardio/Flexibility)</b>	<b>Min/Hours</b>
MON	
TUE	
WED	
THU	
FRI	
SAT	
SUN	
Weekly Results: Weight:      Push Ups:      Core:      Cardio:	
<b>*Monthly Body Composition Assessment (BCA): Weight:      Neck:      Ab:      Hips:      Body Fat %:</b>	
<b>Monthly APFT Results:      Push Ups:      Core:      Cardio:</b>	

*\*See ACSM Guidelines Manual<sup>9</sup> for BCA procedures or a qualified fitness professional for a BCA assessment.*



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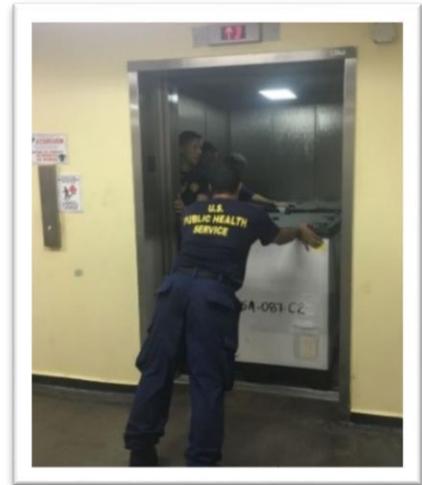
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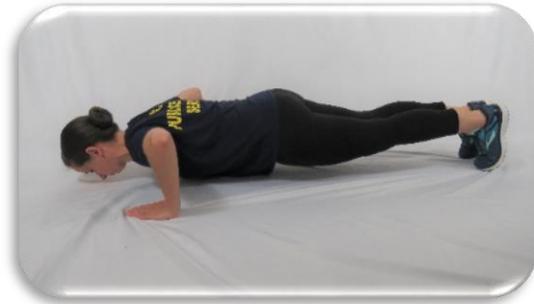


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## APPENDIX: APFT Testing Exercises

### Push-ups



### Plank

Side View



Front View



## Side Plank



## Sit-ups



## Flexibility: Toe Touch

