

<b>East Lake Tarpon Special Fire Control District</b>		
	<b><i>SOP 307 Annual Fitness Evaluation</i></b>	
	<b>Implementation Date: 11/2000</b>	<b>Revision Date(s): 08/26/2014</b>
	<b>Reviewed Date(s):</b>	
	<b>Forms or Attachments: None</b>	

## PHYSICAL FITNESS EVALUATION

After the medical examination has been completed and the medical clearance and informed-consent forms have been received, the participant is ready for the physical fitness evaluation. This evaluation will be done by the department fitness specialist or the department's designee.

Participants should be informed of the following guidelines before they report for fitness testing:

1. Wear exercise clothing and shoes for the test.
2. Do not eat for 2 hours before testing (this includes drinking coffee or tea).
3. Do not consume alcohol for 24 hours before testing.
4. Do not smoke for 2 hours before testing.
5. Do not exercise on the day of testing.

The four areas of physical fitness selected for evaluation are body composition, cardio-respiratory endurance, flexibility, and muscular strength and endurance. The tests are administered in the following order:

1. Standing height (if taken)
2. Weight
3. Resting heart rate
4. Resting blood pressure
5. Body composition
6. Cardiovascular evaluation
7. Flexibility measurement
8. Muscular strength and endurance

The Physical Fitness Evaluation Profile form rates all results on a scale from one to three.

## Physical Fitness Award

\$250 per fiscal year for a weighted average score of 80 to 84.9 percent

\$500.00 per fiscal year for a weighted average score of 85 percent or greater

**STANDARD MEASUREMENTS:** Measurements of height, weight, and resting heart rate and blood pressure provide a baseline for measuring improvement and evaluating changes.

**STANDING HEIGHT:** The participant should stand barefoot with the heels together, and then stretch upward to the fullest extent. Heels, buttocks, and upper back should touch a vertical upright such as a wall. The chin should not be lifted. Measurement is recorded in inches to the nearest quarter inch.

**WEIGHT:** Weight should be recorded with the individual wearing gym shorts, t-shirt, and no shoes; record weight to the nearest quarter pound.

**RESTING HEART RATE:** The resting heart rate should be counted when the individual is sitting (as for a blood pressure test) and should have had an adequate rest period prior to this test. Adequate rest is indicated when the heart rate has stabilized at a low rate and has not changed.

**RESTING BLOOD PRESSURE:** The individual should be in a relaxed and comfortable sitting position and should be allowed to relax for a few minutes in this position before the blood pressure is taken.

## **BODY COMPOSITION**

Body composition refers to the lean body weight plus the fat weight, which together make up total body weight.

## **ESTIMATION OF BODY FAT BY SKINFOLDS**

The method of estimating body fat involves the measurement of skin folds in various body locations.

## **SKIN FOLD MEASUREMENTS: Test One**

Skin fold measurements are used to determine the percent body fat. The skin fold measurements as raw scores are also valuable and should supplement the information on percent of body fat and target weight. Very often a participant in an exercise program reduces the subcutaneous fat in a number of locations, and these individual changes may not be identified in the estimation of percent fat alone. The skin fold measurement is an actual measurement and not a prediction and is therefore valuable in showing body-composition change.

Descriptions of the location of skin fold measurements and the technique used in measuring are given next. Although only 3 or 4 sites are used in the prediction of percent body fat, other sites may be useful to measure for the skin fold profile.

### **Test Administration**

Skin folds will be taken prior to active tests, as sweating and increased blood flow to the skin make measurement more difficult. Men can wear gym shorts for the test; women should wear shorts and a loose-fitting, sleeveless blouse or T-shirt that is also loose at the waist or the top to a two-piece swimsuit. A skin fold caliper will be used to measure the percentage of body fat. All measurements will be on the person's right side unless there is a physical abnormality in which case the left side may be used. The fold of skin will be firmly grasped between the left thumb and four fingers and lifted up. The fold should be lifted several times to be certain that no muscle is grasped.

## **CARDIORESPIRATORY EVALUATION: Test Two**

The Gerkin Protocol or Bruce Protocol Test using a treadmill is used for individual cardio respiratory fitness testing, with the understanding that the participant has received clearance to participate by a physician. The measurements resulting from the test reflect the cardio respiratory response of the individual and should be used to show changes in endurance during the exercise training. The test shows the relationship of heart rate to work and thereby can predict the workload that an individual would be capable of handling at maximum heart rate. It can also be used to predict an individual's maximum oxygen uptake. As the workload increases, the heart rate and the oxygen uptake increase. This relationship allows the prediction of a maximum oxygen uptake from the maximum heart rate.

## **FLEXIBILITY MEASUREMENT: Test Three**

**Trunk Flexion** is used as a general test of flexibility. It is recommended that a short warm-up of stretching exercised precede the actual measurement and that the test be performed slowly and cautiously to avoid injury.

## **MUSCULAR STRENGTH AND ENDURANCE MEASUREMENT: Test Four**

### **Bench Press Test:**

The participant should lie on the bench in a supine (face up) position, with the knees bent and feet on the floor. An 80 lb. barbell should be used for men; 35 lb barbell for women. The participant should grip the bar with elbows flexed, palms up (down position), with hands shoulder-width apart. The participant should then press the barbell upward to extend the elbows fully. After each extension the participant should return the barbell to the original down position. Participants should breathe regularly and not strain during the test. The test is terminated when a participant is (a) unable to reach full extension of the elbows or (b) breaks cadence and cannot keep up the rhythm.

## **TEST FIVE**

**Half Sit-Ups (Abs-Crunch)** are fairly standardized with respect to technique.

If your blood pressure exceeds 160/100, it is considered high. You will be referred to the Department Physician for release prior to further testing.