

# CADET PHYSICAL FITNESS PROGRAM

CIVIL AIR PATROL

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*Table of Contents***CADET PHYSICAL FITNESS PROGRAM**

CAPP 52-18

<b>CHAPTER 1</b>	<b>THE CADET PHYSICAL FITNESS PROGRAM</b>	
	Cadets' Introduction	4
	Physical Fitness in the Cadet Program	4
<b>CHAPTER 2</b>	<b>LEADING CADETS IN THE PHYSICAL FITNESS PROGRAM</b>	
	Leadership Responsibilities	5
	Principles of Exercise	5
	Physical Fitness Categories	6
	Implementing the Program	7
	Cadet Leadership	7
	Demonstration / Performance Method	7
	Uniforms	8
	Senior Member Participation	8
	Training in Hot Environments	8
<b>CHAPTER 3</b>	<b>NUTRITION</b>	
	Introduction	9
	Food Pyramid	9
	Balance, Variety, and Moderation	10
	Excessiveness in Weight: Obesity and Thinness	10
	Water	11
	Alcohol	11
	Conclusion	11
<b>CHAPTER 4</b>	<b>FITNESS TRAINING</b>	
	Training Regimens	12
	Warming Up & Cooling Down	12
	Stretching Exercises	13
	Circuit Training	14
	Team Sports	14
	Calisthenics	14
	Grass Drills	18
<b>CHAPTER 5</b>	<b>FITNESS TESTING</b>	
	Introduction	21
	Test Administration	21
	Standards	22
	How to Administer the Cadet Physical Fitness Test	23
	Squadron Physical Fitness Award	28
	Individual President's Challenge Awards	29
<b>ATTACHMENT 1</b>	<b>CADET PHYSICAL FITNESS TEST WAIVER REQUEST</b>	30
<b>ATTACHMENT 2</b>	<b>SAFETY GUIDELINES FOR HOT ENVIRONMENTS</b>	31
<b>ATTACHMENT 3</b>	<b>CADET PHYSICAL FITNESS TEST REQUIREMENTS</b>	32

## THE CADET PHYSICAL FITNESS PROGRAM

### CADETS' INTRODUCTION

The goal of the cadet physical fitness program is to make you physically fit and to motivate you to develop a lifelong habit of exercising regularly.

You're going to need strength, flexibility, and endurance to meet the challenges of being a cadet in the Air Force Auxiliary. The physical training you accomplish as a cadet will also improve your self-confidence, build teamwork, and instill in you a sense of determination.

More importantly, we want you to become fit so that you will have the energy to achieve your goals. Research has proved that people who are physically fit feel better about themselves and live longer than those who don't exercise.

When you recite your Cadet Oath, you pledge to "prepare yourself to be of service to your community, state, and nation." You must first become physically fit to begin your service and fulfill your Oath.

### PHYSICAL FITNESS IN THE CADET PROGRAM

Physical fitness is one of the four components of the Cadet Program. There are two facets to this physical fitness program:

- ◆ **Training.** Fitness training includes stretching, calisthenics, fitness drills, circuits, team sports, and any activities that are fun but still physically challenging. As a cadet you're expected to give your fullest effort because you're not really exercising if you're not training hard. Your training will also include briefings on the basic principles of exercise, why fitness is important, and how to exercise safely (these are discussed in chapter 4). Don't limit yourself to the training done in your squadron - we expect you to use your self-discipline by exercising on your own, too.
- ◆ **Testing.** Because it is vital to be physically fit, passing the Cadet Physical Fitness Test (CPFT) is one of your promotion requirements. For every achievement, you must take and pass all four elements of the CPFT. Just as you prepare for aerospace and leadership tests, you'll want to prepare for the CPFT by exercising three times per week. The CPFT is described in detail in chapter 5.

## LEADING CADETS IN THE PHYSICAL FITNESS PROGRAM

### LEADERSHIP RESPONSIBILITIES

Effective leadership is crucial to the success of the cadet physical fitness program. Commanders and the leaders they designate to supervise this program must emphasize the value of physical training and clearly explain the objectives and benefits of the program. Leaders must be familiar with the principles of exercise and the correct techniques for each exercise described in chapters 4 and 5 to ensure the training is productive and safe.

*Individual Differences.* Leaders must closely observe cadets during physical training. Especially watch for cadets who are struggling with one or all of the activities; help these cadets attain the standards of the four CPFT events. Leaders must also understand the physiological differences between male and female cadets and the developmental stages of younger and older cadets in their unit. No two cadets are alike in ability, but under the right leadership every cadet will give fitness training their fullest effort. Encouraging each cadet in a manner that motivates, not humiliates, can go a long way in bringing them up to the standard.

*Prohibitions.* Physical exercise in the Cadet Program will be used only to further the goal of improving physical fitness while increasing confidence, teamwork, and determination. Commanders, activity directors, and ranking cadets will not use physical training as a form of punishment or remedial discipline.

### PRINCIPLES OF EXERCISE

If you want your fitness training to be effective and safe, you have to adhere to certain basic exercise principles whether you are an Olympic athlete or a cadet. Those principles include:

- ◆ **Regularity:** For training to be productive, cadets must exercise regularly. Exercising only once in a while can do more harm than good. Regularity is also important in resting, sleeping, and following a good diet.
- ◆ **Progression:** The intensity (how hard) and/or duration (how long) of exercise must gradually increase to improve the level of fitness.
- ◆ **Balance:** To be effective, a program should include activities that address all the fitness components – strength, flexibility, cardiovascular endurance -- since overemphasizing any one of them may hurt the others.
- ◆ **Variety:** Providing a variety of activities reduces boredom and increases motivation and progress. Exercise is hard work. Cadets will stick with a program only if it's lively and fun.
- ◆ **Specificity:** Training must be geared toward specific goals. For example, cadets who need to lower their mile run time will become better runners if their training emphasizes running. Although swimming is a great exercise, it does not improve the 1-mile run time as much as a running program does.

- ◆ **Recovery:** A hard day of training for a given component of fitness should be followed by an easier training day or rest day for that component and/or muscle group(s) to help permit recovery. Another way to allow recovery is to alternate the muscle groups exercised every other day, especially when training for strength and/or muscle endurance.
- ◆ **Overload:** The workload of each exercise session must exceed the normal demands placed on the body in order to bring about a training effect.

## PHYSICAL FITNESS CATEGORIES

While we want our cadets to perform to their maximum potential, leaders must be aware of the limitations some cadets have and how it affects their performance. Upon joining CAP, each cadet will initially be assigned to one of the physical fitness categories described below, depending on the information included on the CAPF 15, *Application for Cadet Membership*. **Use of these categories is mandated by CAPR 52-16, Cadet Program Management.**

**Category I - Unrestricted.** A cadet in this category is determined to be in good health and may participate in the physical fitness program without restriction.

**Category II - Temporarily Restricted.** A cadet in this category is determined by the squadron commander to be temporarily restricted from parts or all of the CPFT due to a condition or injury of a temporary nature. Temporary conditions include broken bones, post-operative recovery, obesity, and illness. Cadets normally will not exceed six months in this category without reevaluation. Cadets temporarily restricted from a portion of the CPFT are still required to complete and pass the events they are not restricted from. Cadets in this category will not attempt the CPFT required for the Wright Brothers, Mitchell, Earhart, or Eaker Awards, or be administered the Spaatz examination until they return to Category I or are determined by a physician to meet the Category III or IV conditions listed below.

**Category III - Partially Restricted.** A cadet in this category is determined to be indefinitely or permanently restricted from a portion of the cadet physical fitness program due to a medical condition or injury chronic or permanent in nature as certified by a physician. Cadets are still required to complete and pass the CPFT events they are not restricted from. A cadet placed in Category III will attach a certification of the medical limitation from a physician with an endorsement from the squadron commander to the CAPF 52-1, 52-2, 52-3, 52-4, or Spaatz examination when submitted to national headquarters. Use of the CPFT waiver request included in CAPP 52-18 is suggested.

**Category IV- Indefinitely Restricted.** A cadet in Category IV is determined to be indefinitely or permanently restricted from participation in the entire physical fitness program due to a medical condition or injury of a permanent nature as certified by a physician. Cadets in this category are exempt from all CPFT requirements indefinitely. A cadet placed in Category IV will attach a certification of the medical limitation from a physician with an endorsement from the squadron commander to the CAPF 52-1, 52-2, 52-3, 52-4, or Spaatz examination when submitted to national headquarters. Use of the CPFT waiver request included in CAPP 52-18 is suggested.

## IMPLEMENTING THE PROGRAM

A good fitness training program requires sound leadership and effective management. The same principles used in conducting other CAP training applies to fitness training as well. Here are some principles that will help you build a successful program.

1. Set realistic goals for the unit based on each individual cadet's needs.
2. Determine training objectives that are specific and measurable.
3. Select stretches, calisthenics, circuits, drills, sports, and briefings that fulfill the training objectives.
4. Watch each cadet closely and correct improper techniques.
5. Create a training environment where each cadet is encouraged to perform to his or her maximum potential.
6. Add cadences, battle-cries, and motivational checks to get cadets into the spirit of rigorous exercise.

## CADET LEADERSHIP

Cadet officers or NCOs should lead the unit during fitness training. The training plan devised by a ranking cadet and the exercises he or she selects should first be reviewed by the squadron leadership officer to ensure the intended program conforms with the guidelines found throughout this pamphlet. To ensure junior cadets will receive proper instruction, the cadet in charge should demonstrate to the leadership officer how each exercise is correctly performed. Finally, good leadership means leading by example. Ranking cadets should be in good shape themselves. Only if junior cadets perceive that cadet officers and NCOs exercise regularly will they follow suit.

## THE DEMONSTRATION / PERFORMANCE METHOD

One of the best ways to instruct cadets how to perform an exercise is to use the demonstration / performance method. Listed below are the steps cadet NCOICs and OICs should follow.

1. State the name of the exercise and its purpose (i.e.: curl-ups build abdominal strength; push-ups build upper-body strength).
2. Have an experienced cadet serve as the demonstrator while you describe the exercise.
3. Show the starting position of the exercise, and note any special rules about the position.
4. Have the demonstrator perform the first count of the movement. Identify one-by-one the techniques required to perform the exercise correctly.
5. Show the finishing position of the exercise. Be sure to describe how a correct repetition differs from an incorrect repetition (i.e.: for curl-ups, you must touch your thighs with your elbows, going only half-way up doesn't count).
6. Have the demonstrator *slowly* perform the exercise from start to finish.

7. As the demonstrator is slowly performing the exercise, ask cadets to recall each technique required to perform the exercise correctly.
8. Ask if there are any questions.
9. Have each cadet pair up with another cadet and perform the exercise. Observe their performance and make corrections as needed.

## UNIFORMS

You may want to have your cadets train and test in appropriate attire, such as shorts, a t-shirt, and sneakers. Cadets do not have to exercise in a CAP uniform. Still, commanders should not require cadets to purchase special gear simply to participate in the program.

## SENIOR MEMBER PARTICIPATION

Senior members may participate with cadets during fitness training activities, using good judgment and common sense. When exercising, they must follow the same safety guidelines required of cadets.

## TRAINING IN HOT ENVIRONMENTS

For all cadet activities, commanders must adhere to the fluid replacement and work load limitations described in Attachment 2. These policies are based on USAF guidelines and require commanders to monitor the wet-bulb globe temperature (WBGT). The WBGT index is a combination of temperature measurements that considers dry air temperature, relative humidity, and radiant heating. Any local weather station can provide you with the WBGT, or you can compute it yourself at <http://marineweather.com/wxcalc.html>. *Compliance with these policies is mandated by CAPR 52-16, Cadet Program Management.*

**Water Intake.** Adequate water intake is essential to make up for water lost during exercise. Encourage cadets to begin hydrating several days prior to a lengthy and/or high performance exposure to hot conditions. Attachment 2 provides guidelines for fluid replacement based on the WBGT and activity level.

- ◆ **Drink Frequently.** It is better to drink small amounts of water frequently than to drink larger amounts less frequently. If cadets are going to be exercising or training in the field for a prolonged time, they should carry a canteen of water with them. Keep drinking for another hour after exercising, but don't drink more than 1½ quarts of water per hour, or 12 quarts per day.
- ◆ **Avoid Soda.** Cadets should not drink caffeinated and carbonated beverages such as soda during exercise or if they will be exercising later. Instead, drink water or isotonic beverages (sports drinks).

**Work and Exercise Intensity.** When the WBGT is high, it's important that cadets don't over-exert themselves, even if they stretch and drink plenty of water. Attachment 2 categorizes different types of exercise as easy, moderate, or hard, and limits the activities that may be performed in hot environments.

**Heat-Related Injuries.** Safety is everyone's job. Commanders, trainers, and cadets should be taught how to recognize and initiate first aid treatment for heat-related injuries. Attachment 2, table 3 identifies symptoms of heat stress and required actions.



## Chapter 3

**NUTRITION****INTRODUCTION**

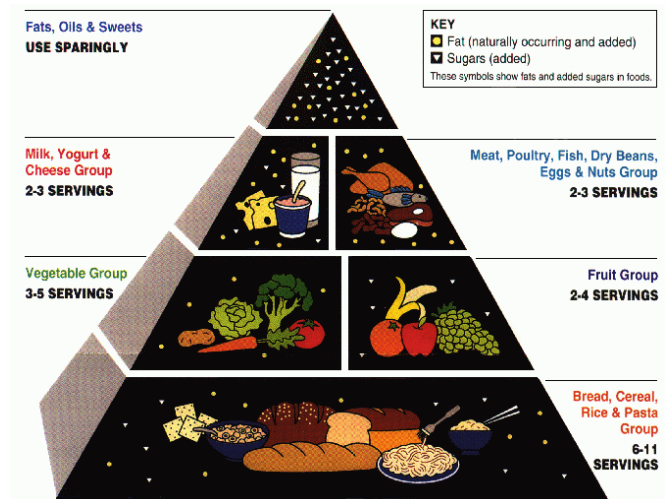
During ages 10-20, the body goes through tremendous changes. Males are basically adding muscle and blood volume and possibly overeating to satisfy their appetites. Females are adding some extra fat, which often motivates them to diet unnecessarily to stay slim. Unfortunately, male overeating and female dieting can lead to health problems down the road. Food choices made during this time can have an enormous effect on how you currently feel and affect your health and well-being.

What sort of decisions should cadets make regarding nutrition? Choose foods that can have a positive effect on your health. Start by following the dietary guidelines set by the U.S. Departments of Agriculture (DOA) and Health and Human Services (HHS):

- ◆ Eat a variety of foods
- ◆ Balance the food you eat with physical activity – maintain or improve your weight
- ◆ Choose a diet with plenty of grain products, vegetables, and fruits
- ◆ Choose a diet low in fat, saturated fat, and cholesterol
- ◆ Choose a diet moderate in sugars, salt, and sodium
- ◆ Choose a diet that provides enough calcium and iron to meet your growing body's requirements
- ◆ Avoid alcoholic beverages – as a cadet and adolescent, it is not only illegal, it is a health hazard.

**THE FOOD PYRAMID**

The food pyramid is a general guide you can use to make daily food choices. It divides the five basic food groups into four different levels.



**Figure 3-1.**  
The Food Pyramid

*The bottom level* is the bread, cereal, rice and pasta group. These are complex carbohydrates or starches and your primary source of energy.

*The second level* contains the fruit and vegetable groups. These are simple carbohydrates loaded with vitamins, minerals, and other nutrients.

*The third level* is comprised of the milk, yogurt, and cheese group and the meat, poultry, fish, dry beans, eggs and nuts group. These foods provide protein and are the building blocks of the body.

*The apex* of the pyramid includes fats, oils, and sweets and should be used sparingly.

## **BALANCE, VARIETY, AND MODERATION**

When considering how to apply the Food Pyramid and the DOA/HHS guidelines to your life, three basic ideas should be kept in mind for healthy eating: balance, variety and moderation.

**Balance.** A simple way to look at balancing a meal or a substantial snack is to choose something from each of the bottom three levels of the pyramid. You can create a meal or snack that is balanced but not excessive. Another recommendation for balancing meals is to eat small balanced meals throughout the day. You definitely do not want to skip meals as it can lead to overeating at the next meal. Those who skip breakfast or other meals tend to have poorer nutrition than those who eat regular meals throughout the day.

**Variety.** The second key idea in healthy eating is “variety.” No one food has all the nutrients a person needs. So the greater the variety of foods you choose in your diet, the greater the vitamins, minerals and other nutrients you consume. Let’s break it down into the levels of the pyramid again. Carbohydrates are powerhouses for vitamins, minerals, fiber and energy. Always choose whole grains when possible and fruits and vegetables rich in color. Protein foods are also very rich in vitamins and minerals. Always choose lean meats and dairy products and prepare them in low fat ways. Fats also provide needed nutrients but should not make up more than 30% of your total calories per day. Sugars provide a lot of calories with very little nutrients.

**Moderation** The third key ingredient to a healthy diet is “moderation.” This is where we take a look at serving sizes. The Food Pyramid offers a range of servings recommended from each food group. The smallest number of servings equals the minimum needed to obtain the nutrients that the body requires. A general rule of thumb for a serving is ½ cup. So, if you eat 1½ cups of pasta you have consumed 3 servings. Standardized nutrition labels, called “Nutrition Facts,” are found on most packaging and can be helpful in determining how much is in a serving. How many servings you need depends on your age and activity level. Active teenage boys need about 2800 calories per day and should eat the highest range of servings. Active teenage girls require about 2200 calories per day and should eat the middle range of servings. Those who are inactive and/or overweight should eat the lowest range of servings.

## **EXCESSIVENESS IN WEIGHT: OBESITY AND THINNESS**

Many teens have a difficult time projecting a healthy weight for themselves. Girls especially may think they need to be thinner than they are, or should be. Extraordinary concern or obsession for thinness leads some teens to the eating disorders of *anorexia nervosa* (dieting to starvation) or *bulimia* (overeating and then vomiting).

To determine a healthy weight it is important to consult a health professional such as your family doctor or a registered dietitian. Often, if an adolescent needs to lose weight, the only change necessary is to increase exercise or activity. Remember, it is important to continue eating a variety of foods while cutting down on

fats and sugars. Losing weight quickly on a very-low-calorie diet is never a good idea for anyone. Athletes especially need to be aware that very-low-calorie diets can affect athletic performance. Under no circumstances should you drink less fluid in an attempt to lose weight.

## **WATER**

Another essential ingredient for a healthy diet, but not represented in the Food Pyramid, is water. Water is the beverage of champions. Eight to ten glasses of water are needed each day. Water makes up a large percentage of every part of your body and has many vital functions. It is the vehicle for flushing out waste products. It works as a mild laxative and is the only liquid consumed that does not require extra work to metabolize or excrete it. Water is essential for maintaining proper fluid balance and muscle tone. It also works to keep the skin healthy and resilient. Drinking water is habit forming; the more you drink the more you want.

## **ALCOHOL**

Another item needing special attention regarding adolescent nutrition is alcoholic beverages. Adolescents who drink alcoholic beverages are subject to major health risks. Adolescents who drink alcohol risk impaired judgment in social relationships and can endanger many lives by driving after drinking. Heavy drinking can lead to poor nutrition, especially if alcohol is replacing needed nutrients. Cadets should remember the CAP Core Value of *Integrity First* by choosing to abstain from alcohol.

## **CONCLUSION**

One of the most difficult challenges during the adolescent years is recognizing that nutrition decisions made during this time have tremendous implications for one's future health and well-being. Applying the DOA/HHS and Food Pyramid's guidelines can pave the way for optimal health both now and in the future. Eating balanced, varied meals or snacks throughout the day provides your body with the right nutrients so that it can do exactly what it was designed to do. Being careful not to overeat nor undereat can also ensure that your body gets the required calories for optimal performance. By all means, don't forget the most important fuel: water.

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## FITNESS TRAINING

### TRAINING REGIMENS

Developing a good Cadet Physical Fitness Program in your squadron involves more than simply administering the CPFT. You have to educate your cadets why exercise is important, instruct them how to perform a variety of exercises that condition their entire body, and have them exercise regularly at squadron meetings, weekend activities, encampments, and at home.

Even if your training regimen adheres to sound principles, cadets can lose interest. Listed below are examples of stretches and calisthenics, which are the mainstays of fitness programs, but also circuit drills and intensive grass drills that will challenge cadets of every ability and keep them motivated.

### WARMING-UP AND COOLING-DOWN

Make sure cadets warm-up before exercising, and cool-down as they finish. Listed below are instructions for cadets to follow during fitness training and testing.

**Warming-up** will increase your body's internal temperature and heart rate. Injuries can be avoided when your heart, muscles, ligaments, and tendons are prepared for exertion. Suggested warm-ups include:

- ◆ Slowly jogging-in-place or walking for one or two minutes. This gradually increases your heart rate, blood pressure, circulation and the temperature of the active muscles.
- ◆ Slowly rotate your limbs and joints. This increases your range of motion and limbers your body. Work each major joint for 5 to 10 seconds.
- ◆ Slowly stretch the muscles that you'll be using. Don't stretch to the point that you feel pain. The purpose of stretching is to activate your muscles, not to put stress on them. Hold each stretch for 5 to 10 seconds and do not bounce or bob.

**Cooling-down** will slow your heart rate and control the flow of blood. As your muscles relax after a workout, your blood will tend to pool in your extremities. If you don't cool-down properly, you could faint. Some suggested cooling-down techniques include:

- ◆ Keep exercising, but don't stop suddenly. Instead, simply lower the intensity of the exercise. For example, after running a mile walk until your heart rate is lowered to 100 BPM.
- ◆ Repeat the stretches you did to warm-up. This will help ease muscle tension and any immediate feelings of muscle soreness. Hold stretches for 30 seconds, but be careful not to over-stretch. The muscles are warm from activity and can possibly be over-stretched to the point of injury.

## STRETCHING EXERCISES

**Hamstring Stretch.** Sit on the ground with both legs fully extended in front of you. Keep your feet upright and about 6 inches apart. Put your hands on your toes. Then bend at your hips, keeping your back and head in a comfortable but straight line. Hold this position for 10 to 15 seconds.

**Calf Stretch.** Stand with your feet shoulder-width apart and your left foot slightly forward. Then bend forward at your waist. Reach down and pull the toes on your left foot forward toward the shin. Hold this position for 10 to 15 seconds and then repeat with the other leg.

**Overhead Arm Pull.** Stand with your feet shoulder-width apart. Raise your right arm by bending your right elbow and touching the back of your neck with your right hand. Then, grab your right elbow with your left hand and pull to the left. Hold this position for 10 to 15 seconds. Repeat with the other arm.

**Groin Stretch.** Start by sitting on the ground with the soles of your feet together. Place your hands on your feet. Then bend forward at your hips. Keep your head up. Hold this position for 10 to 15 seconds.

**Thigh Stretch.** Begin at attention. Bend your left leg back toward your buttocks. Grasp the toes of the left foot with your right hand and pull your heel toward your buttocks. Balance by extending your left arm. Hold this position for 10 to 15 seconds. Repeat with the other arm and leg.

**Neck & Shoulder Stretch.** Start by standing with your feet shoulder-width apart and your hands behind your body. Grasp your left wrist with your right hand, and pull your left arm down and to the right. Also tilt your head to the right. Hold this position for 10 to 15 seconds. Repeat with the other arm.

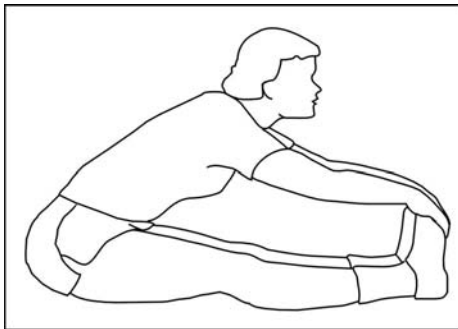


Figure 4-1. Hamstring Stretch

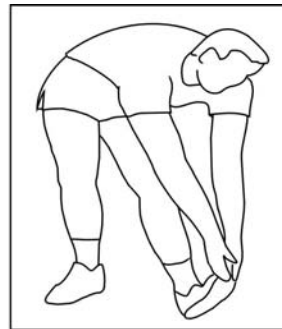


Figure 4-2. Calf Stretch

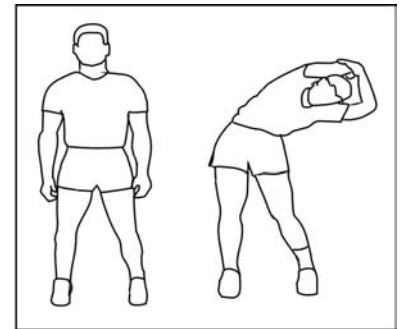


Figure 4-3. Overhead Arm Pull



Figure 4-4. Groin Stretch

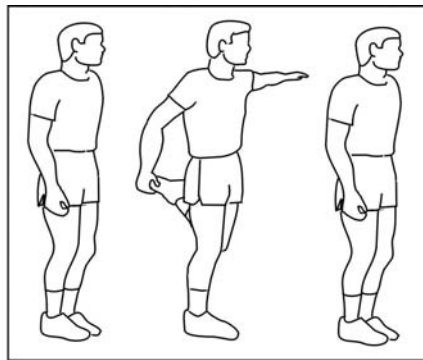


Figure 4-5. Thigh Stretch

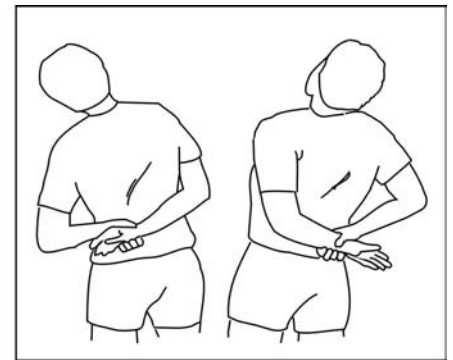


Figure 4-6. Neck and Shoulder Stretch

## CIRCUIT TRAINING

Circuit training is a fun and effective way to exercise. A circuit is a group of stations where specific exercises are performed. The intensity is set by each cadet. Almost any area can be used – you can spread out the circuit across a large open field and have cadets run between twenty stations, or you can set up a handful of stations indoors. Any number of cadets can work their way through the circuit one or more times. When designing a circuit, be sure to include a good mix of exercises to build strength, endurance, flexibility, and speed. A little imagination can make circuit training an excellent addition to a unit's physical fitness program.

- ◆ **Free Circuits.** Cadets work at their own pace. There's no set time for staying at each station, and no signal to move from one station to the next. Cadets can perform a fixed number of repetitions, or simply try to conquer their personal best. Because cadets decide how hard and how long to exercise, leaders at each station should closely monitor the techniques used; the quality of the repetitions is what's most important.
- ◆ **Fixed Circuits.** The circuit leader determines how long cadets will remain at each station. Time is monitored with a stopwatch, and cadets rotate through the circuit on command.

Walk cadets through the circuit at the outset. Assign a leader to each station who knows how to correctly perform each exercise. Station leaders can be senior members or mature cadets. Their main job is to make sure cadets exercise safely, but they also should coach and motivate the cadets. Brief cadets how to perform the exercise at each station using the demonstration/performance method (see chapter 2). You may want to post signs to identify each station.

## TEAM SPORTS

Cadet physical fitness programs may be complemented by team sports, but they should not replace instruction on fitness fundamentals and conditioning exercises. When selecting a sport, ensure it is appropriate for both males and females and the youngest and oldest cadets in the squadron. Avoid sports that require specialized skills and equipment that some cadets may not have. Some good examples of team sports include: volleyball, ultimate Frisbee, soccer, tug-o-war, and basketball.

## CALISTHENICS

These exercises are the staples of any good fitness training program. Cadets can perform calisthenics on their own, but traditionally these exercises are done in formation with the leader calling a numeric cadence and the cadets counting the repetitions.

When planning a calisthenics workout, mix the exercises to provide greater intensity based on the fitness level of the cadets. Choose and sequence the exercises so that you alternate the muscle groups being worked.

Described below are callisthenic exercises appropriate for most cadets. Remember to also include the CPFT exercises, which are listed in chapter 5.

***Bend and Reach.*** Start by standing with your feet a little wider than shoulder-width apart and fully extend your arms above your head, with your palms facing each other. Then bend at the knees and waist, slowly bringing your arms down and reaching between your legs as far as possible. Recover slowly to the start position. Repeat in slow cadence.

***Mule Kick.*** Start by standing with your feet shoulder-width apart. Jump up while kicking your heels against your buttocks. Repeat in moderate cadence.

***Ski Jump.*** Start by standing with your feet together and place your hands behind your head, with your fingers interlaced. Then, while keeping your feet together, jump sideways to the left and then to the right. Repeat in moderate cadence.

***The Engine.*** Start by standing with your arms extended in front of your chest. Keep them parallel to the ground, with your palms down. Raise your left knee up to your left elbow, then return to the start position and raise your right knee up to your right elbow. Repeat in moderate cadence.

***Knee Bender.*** Start by standing with your feet shoulder-width apart, hands on your hips, thumbs in the small of your back, and your elbows back. Then bend at the knees while leaning slightly forward. Keep your head up. Slide your hands down the outside of your legs to about the midpoint of your calves. Recover to the start position and repeat in moderate cadence.

***Flutter Kicks.*** Start by lying on your back, with your hands beneath your buttocks. Keep your head raised off the ground and your knees slightly bent. Raise and lower each leg, one at a time, so that your feet are 6 to 18 inches off the floor throughout. Use a moderate cadence.

***Side-Straddle Hop.*** Start by standing with your feet together and your arms at your side, palms facing in. Jump while moving your feet shoulder-width apart. Also move your arms out sideways and up until your hands touch above your head. Then return to the start position. Repeat at moderate cadence.

***Squat Bender.*** Start as you do with the knee bender. Then bend at the knees to lower yourself into a half-squat position while maintaining balance on the balls of your feet. Lean slightly forward and thrust out your arms forward at shoulder level, palms down, and elbows locked. Return to the start position. Next, keep your knees slightly bent and bend forward at your waist to touch the ground in front of your toes. Return to the start position. Repeat at moderate cadence.

***Supine Bicycle.*** Start by lying on the ground. Lift your thighs, bend your knees, and lift your feet off the ground. Place your palms on top of your head and interlace your fingers. Then bring your left knee up and curl your trunk up to touch the right elbow with the left knee. Return to the start position and repeat with the left elbow and right knee. Use a slow cadence.

***The Swimmer.*** Start by lying prone with your feet together and arms fully extended forward. Keep your arms and legs fully extended throughout this exercise. Move your right arm and left leg up. Return to the start position and then move your left arm and right leg up. Repeat at moderate cadence.

***High Jumper.*** Start by standing with your feet shoulder-width apart. Flex your knees and lean forward slightly with your arms fully extended but slightly behind you. Jump and fully extend your arms in front of your chest at shoulder level. Return to the start position and then repeat the first step, except this time fully extend your arms above your head. Repeat at moderate cadence.

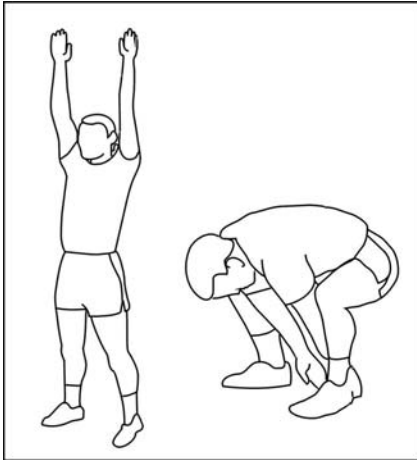


Figure 4-7. Bend and Reach

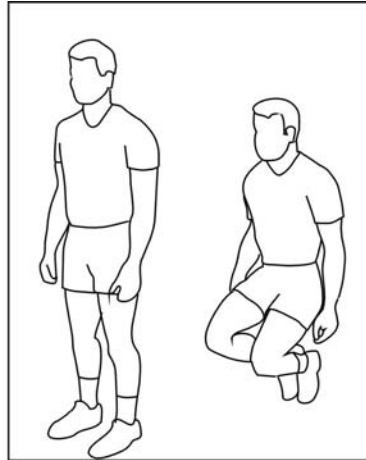


Figure 4-8. Mule Kick

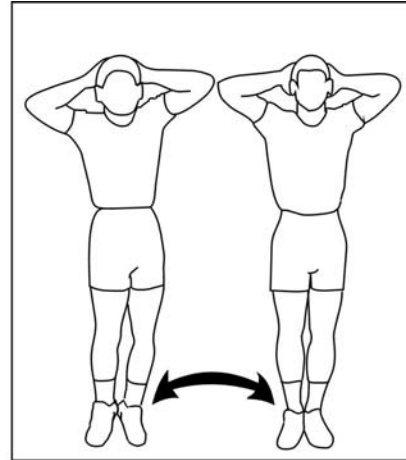


Figure 4-9. Ski Jump

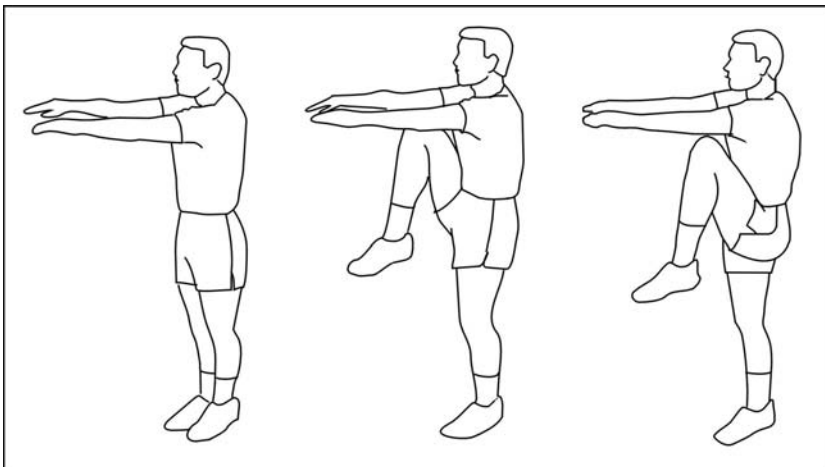


Figure 4-10. The Engine

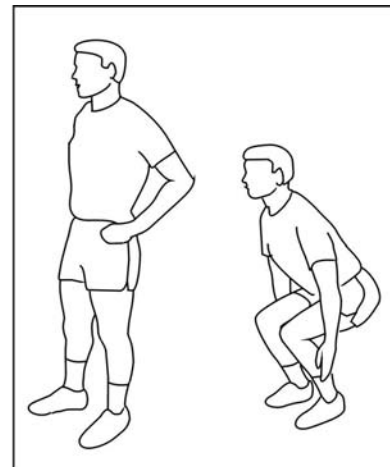


Figure 4-11. Knee Bender

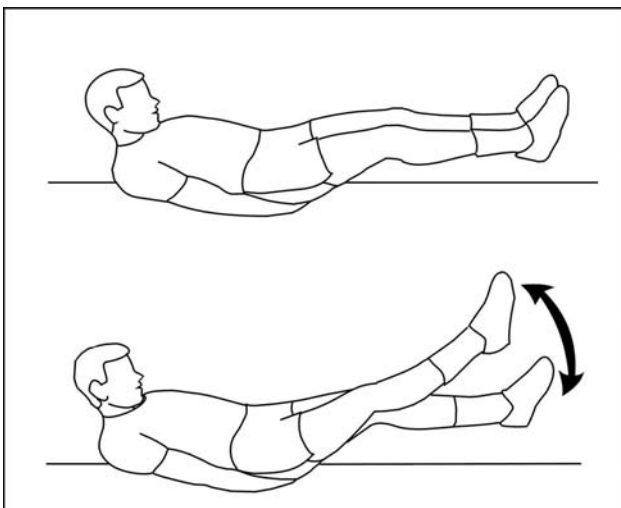


Figure 4-12. Flutter Kick

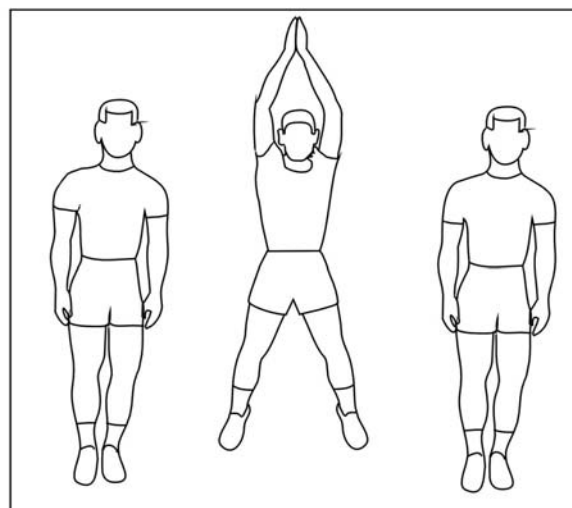


Figure 4-13. Side-Straddle Hop



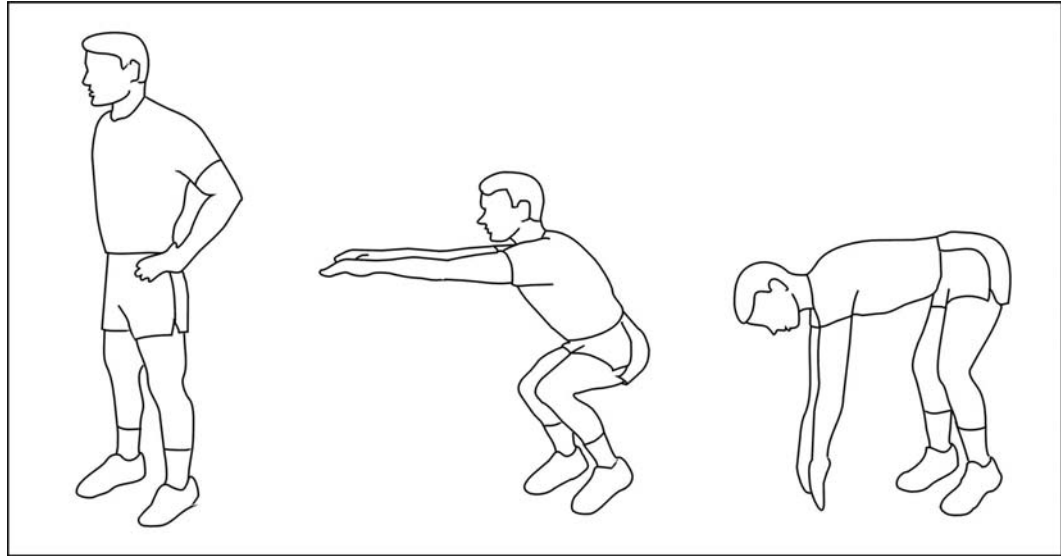


Figure 4-14. Squat Bender

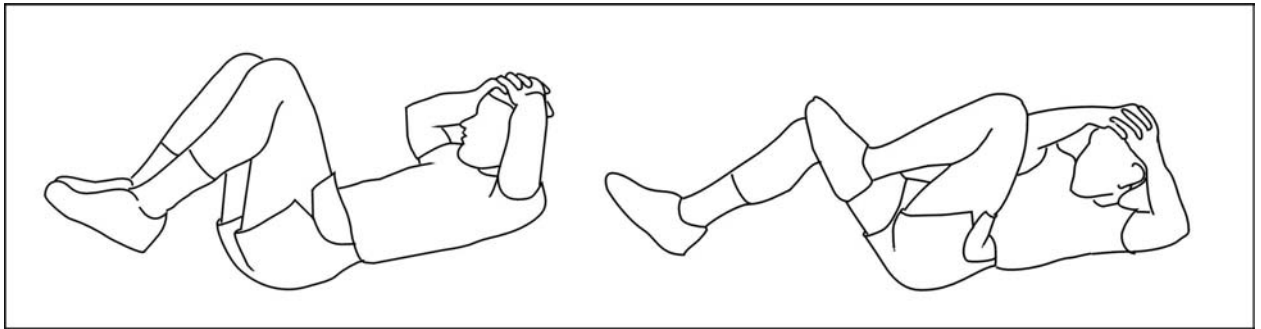


Figure 4-15. Supine Bicycle

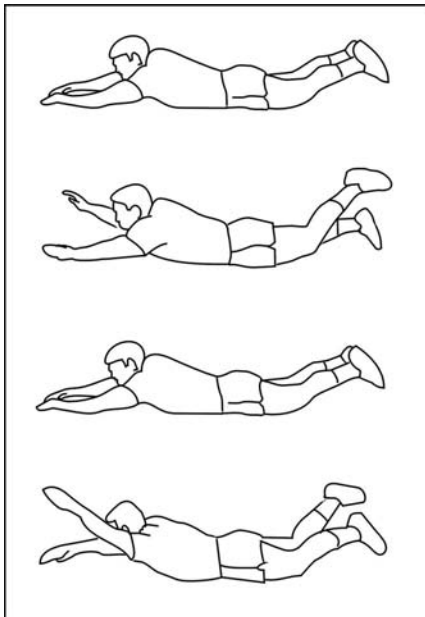


Figure 4-16. The Swimmer

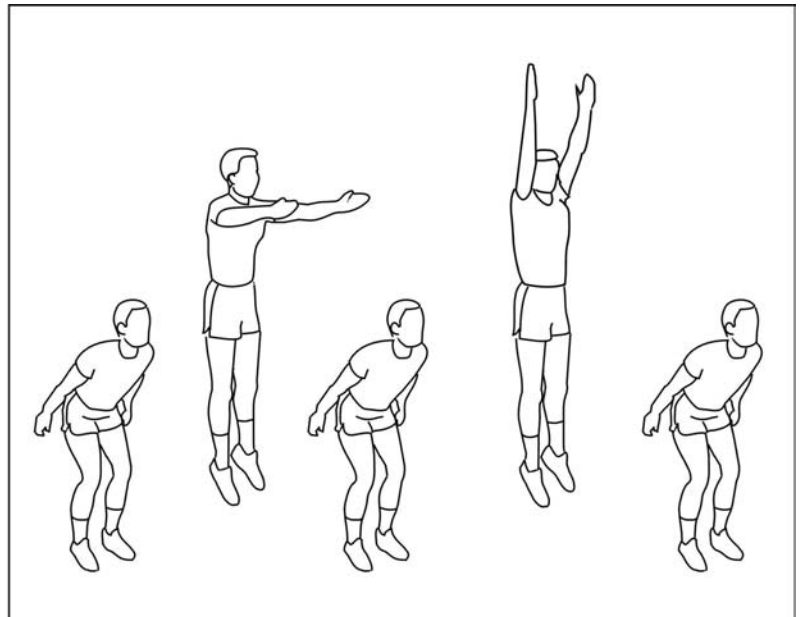


Figure 4-17. The High-Jumper

## GRASS DRILLS

Take a handful of separate exercises, bundle them into one group such that cadets perform each exercise in rapid succession and you have the recipe for a strenuous workout. Grass drills can be created to develop strength and flexibility, but by their very nature they emphasize cardiovascular endurance. Cadets can do grass drills at their own pace, or you can assemble the entire unit and exercise in cadence. Progression with grass drills is made by gradually increasing the time devoted to the drills.

It's essential to use the demonstration/performance method for this activity. Everyone has to know how to correctly perform each exercise, and the order that they are to be done in. Because these drills are so intensive and the leader has to focus his/her attention on transitioning from one exercise to the next, a senior member must be designated to observe and make sure cadets exercise safely.

### BASIC GRASS DRILL MOVEMENTS (See Figure 4-18).

The drills begin with the command GO. Other basic commands are FRONT, BACK, and STOP (See Figure 4-18).

- ◆ GO: This involves running in place at top speed on the balls of the feet. Raise your knees high and pump your arms.
- ◆ BACK: Lie flat on your back with your arms extended along your side, palms down. Keep your legs straight and together and feet facing the leader.
- ◆ Change positions rapidly to assume the FRONT or BACK position from the standing GO or STOP positions.
- ◆ To change from the FRONT to the BACK position, lift your arms on the side toward which your feet move, take several short steps to the right or left, and thrust your legs vigorously to the front.
- ◆ To change from the BACK to the FRONT position, sit up quickly and place both hands on the ground to the right or left of your legs. Then take several short steps to the rear on the side opposite your hands. When your feet are opposite your hands, thrust your legs vigorously to the rear and lower your body to the ground.

### GRASS DRILL #1 (See Figure 4-19)

*The Swimmer.* From the FRONT position, extend your arms forward. Move the right arm and left leg up and down; then, move the left arm and right leg up and down. Continue in an alternating manner.

*Bounce & Clap.* The procedure is almost the same as for the bouncing ball in grass drill two. However, while in the air, clap your hands. This action requires a more vigorous bounce or spring. The push-up may be substituted for this exercise.

*Leg Spreader.* From the BACK position, raise your legs until the heels are no higher than six inches off the ground. Spread the legs apart as far as possible, then put them back together. Keep your head off the ground. Throughout, keep your hands under the upper part of your buttocks and slightly bend your knees to ease pressure on the lower back. Open and close your legs as fast as possible. The curl-up may be substituted for this exercise.

*Forward Roll.* From the STOP position, place both hands on the ground, tuck your head, and roll forward. Keep your head tucked while rolling.

**Stationary Run.** From the position of ATTENTION, start running in place at the GO command by lifting the left foot first. Follow the instructor as he/she counts two repetitions of cadence. For example, "One, two, three, four; one, two, three, four." The instructor then gives informal commands such as the following: "Follow me," "Run on the toes and balls of your feet," "Speed it up," "Increase to a sprint, raise your knees high, lean forward at your waist, and pump your arms vigorously," and "Slow it down."

**GRASS DRILL #2** (See Figure 4-20)

**Bouncing Ball.** From the FRONT position, push up and support your body with your hands (shoulder-width apart) and your feet. Keep your back and legs generally in line, and keep your knees straight. Bounce up and down in a series of short, simultaneous, upward springs from the hands, hips, and feet.

**Supine Bicycle.** From the BACK position, flex your hips and knees. Place your palms directly on top of your head and interlace your fingers. Bring the knee of one leg upward toward your chest. At the same time, curl your trunk and head upward while touching the opposite elbow to the elevated knee. Repeat with the other leg and elbow. Continue these movements as opposite legs and arms take turns.

**Knee Bender.** From the position of ATTENTION, do half-knee bends with your feet in line and your hands at your sides. Make sure your knees do not bend to an angle less than 90 degrees.

**Roll Left and Right.** From the FRONT position, continue to roll in the direction commanded until another command is given. Then return to the FRONT position.

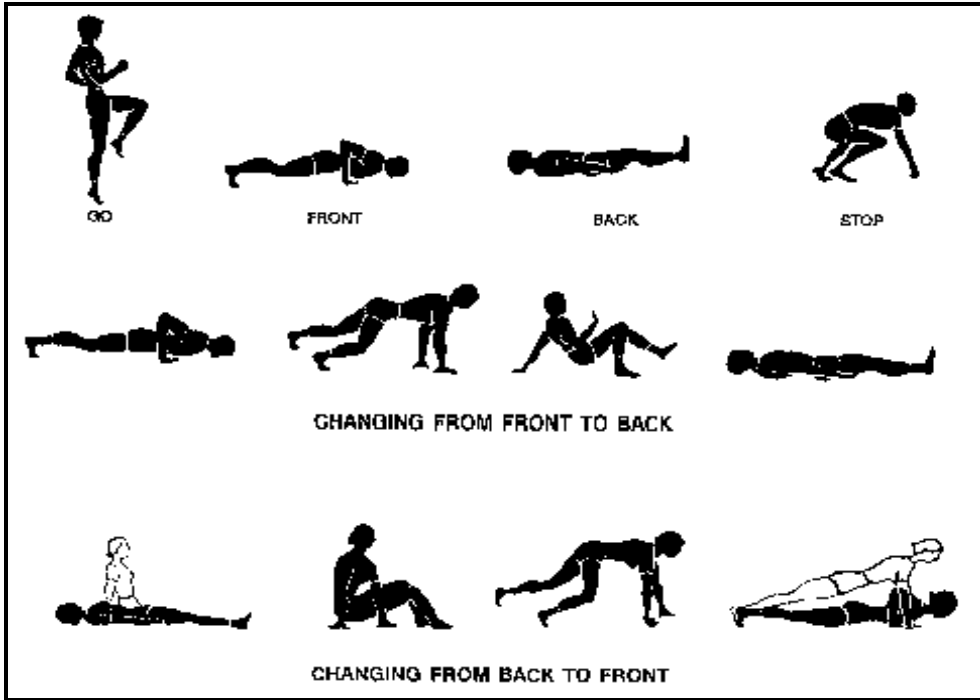


Figure 4-18.  
Starting  
Positions

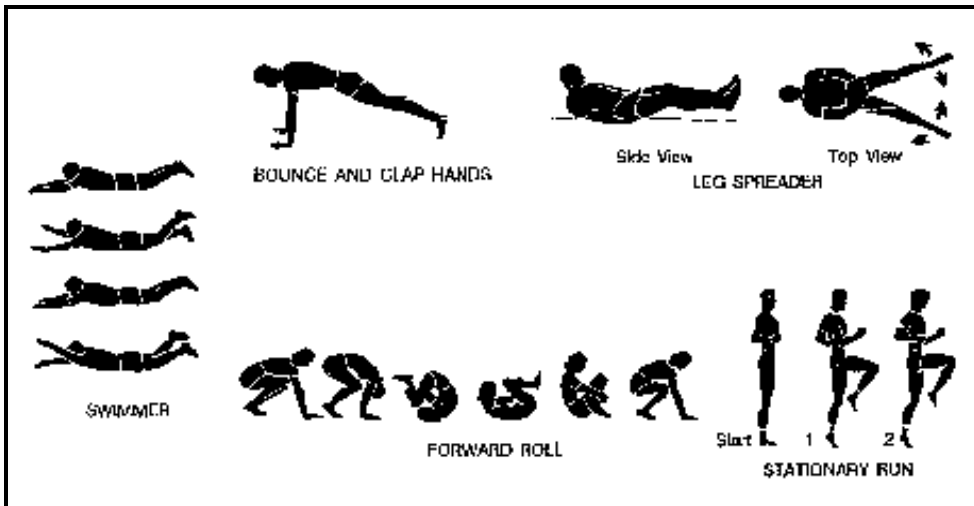


Figure 4-19.  
Grass Drill #1

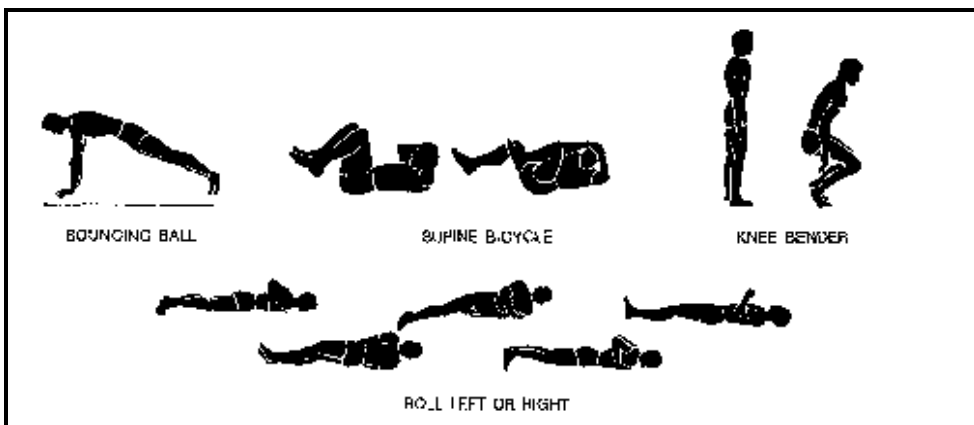


Figure 4-20.  
Grass Drill #2

## Chapter 5

## FITNESS TESTING

## INTRODUCTION

The Cadet Physical Fitness Test (CPFT) is a four event test that measures flexibility, strength, and endurance. To become promotion eligible, cadets in physical fitness Category I, II, and III must complete and pass all CPFT events required of their physical fitness category once per achievement. Tests may not be “banked;” tests completed during a previous achievement are not applicable to future achievements. Test requirements are specified by CAPR 52-16, *Cadet Program Management*; ***compliance with these instructions is mandatory.***

## TEST ADMINISTRATION

**Events.** The CPFT consists of four events:

- ◆ *The Sit and Reach* tests flexibility of the lower back and hamstrings.
- ◆ *Curl Ups* test abdominal strength and endurance.
- ◆ *Push Ups* test upper body strength and endurance.
- ◆ *The Mile Run or Shuttle Run* tests heart and lung endurance. Cadets may choose to test in either or both events. If they fail the mile, they may then attempt the shuttle run instead, or vice versa. In inclement weather, commanders may stipulate that only the shuttle run be administered.

**Test Period.** Test administrators will manage the testing process expeditiously so that each cadet completes the CPFT in about one hour. Cadets must do all four events in the same test period.

**Test Administrators.** The CPFT must be administered by a senior member, who need not be the unit’s testing officer; a CAP-USAF member; or with the unit commander’s approval, a physical education teacher. Cadets may assist in proctoring the CPFT under the supervision of the test administrator.

**Scoring.** For cadets assigned to Physical Fitness Category I, the rule is “run plus two out of three.” These cadets must meet or surpass the standards for their age and gender in the mile run or shuttle run, plus two of the three remaining events to fulfill promotion requirements. Cadets assigned to Physical Fitness Category II, III, or IV are waived from one or more CPFT events due to a medical condition. Testing officers score each waived event as a “pass.” For example, a cadet waived from the push-up need only pass the mile run or shuttle run, plus the curl-up or sit-and-reach (the push-up being scored as a “pass”). Cadets do not need to declare in advance which events they hope to pass.

**Failures.** If a cadet fails the CPFT, they may retest on another date. For retests, all four events must be completed and passed.

**Recording results.** While administering the test, record the raw scores on any piece of paper. Once the test has been completed, determine which cadets passed by comparing their raw scores against the appropriate table in Attachment 3. Then update the CAPF 66 *Cadet Master Records* of the cadets who passed to indicate that they have completed the CPFT for their achievement.

## STANDARDS

The CPFT is aligned with the President’s Challenge, a physical activity and fitness program sponsored by the President’s Council on Physical Fitness and Sports (PCPFS). The CPFT standards are derived from the PCPFS’s latest survey of fitness among the American youth population.

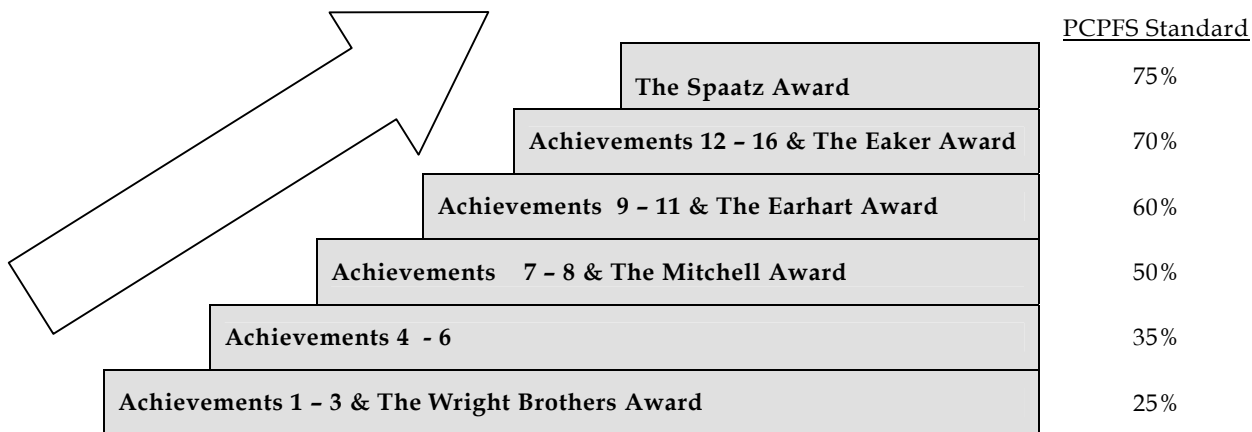
*Phase I Cadets* are assumed to have little, if any, prior physical training. New cadets especially need help getting started if they are to acquire the habit of exercising regularly. The standards for Phase I correspond to the 25<sup>th</sup> percentile of the PCPFS survey. In other words, only 25% of the general youth population are unlikely to meet this standard for their age. Many cadets will easily exceed the CPFT standards, but some will require coaching and encouragement.

*Phase II Cadets* have at least 6 months experience participating in a physical fitness program. Therefore, these cadets are expected to perform at a higher standard than cadets of the same age and gender who are just beginning the Cadet Program. The standards for achievements 4 - 6 correspond to the 35<sup>th</sup> percentile of the PCPFS survey, while the standards for achievements 7 - 8 and the Mitchell Award correspond to the survey’s 50<sup>th</sup> percentile.

*Phase III Cadets* have at least 18 months experience participating in a physical fitness program. Therefore, they are expected to out-perform junior ranking cadets, and most other youth of the same age and gender in the general population. The standards for Phase III correspond to the 60<sup>th</sup> percentile of the PCPFS survey. In other words, 40% of the general youth population are likely to meet this standard for their age.

*Phase IV Cadets* are among the most experienced cadets in CAP, having participated in a physical fitness program for at least the past 26 months. They are expected to meet or surpass the standards at the 70<sup>th</sup> percentile of the PCPFS survey. That means they will out-perform seven out of ten of their peers in the general population.

*Cadets attempting the Spaatz Award examination* must demonstrate the highest level of fitness. Spaatz cadets must meet or surpass the standards at the 75<sup>th</sup> percentile of the PCPFS survey for their age and gender. In other words, only a rare individual will be able to out-perform cadets who have attained the Cadet Program’s ultimate award.



**Figure 5-1.**  
CPFT Standards

## HOW TO ADMINISTER THE CADET PHYSICAL FITNESS TEST

Listed below are instructions on how to prepare to administer each event, the proper techniques required to perform each exercise correctly, and the scoring criteria.

### SIT & REACH

**Objective:** To measure the flexibility of the lower back and hamstrings.

**Equipment:**

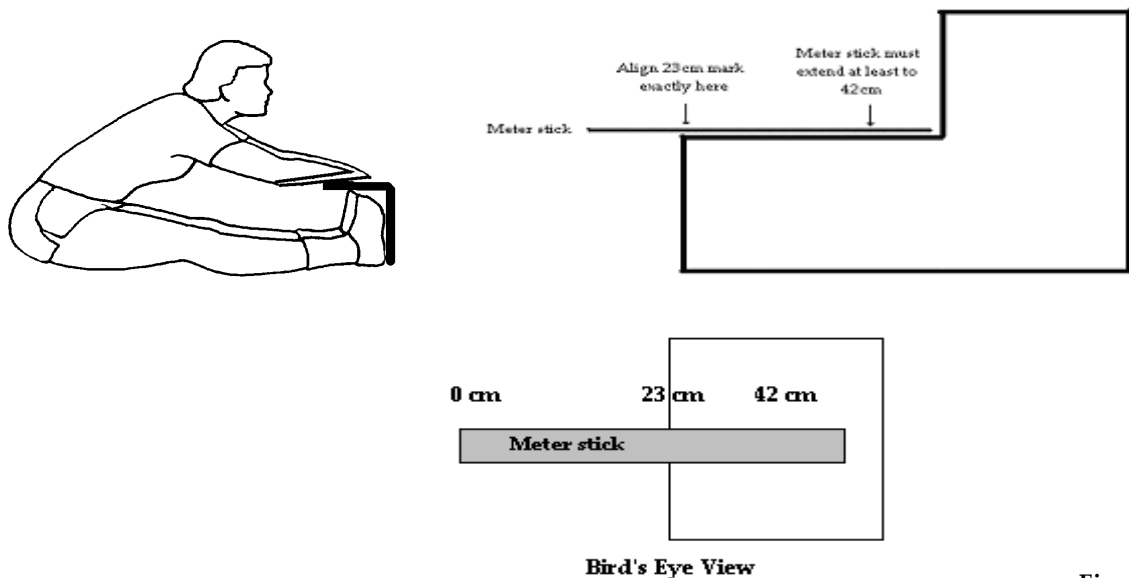
- ◆ Tape a meter to a stair step so that the 23cm mark is exactly in line with the vertical plane of the stair step. The lower numbers on the meter should hang over the edge of the stair step. Usually the meter will be too long for the stair; simply cut the meter to fit, but ensure it extends at least to 42cm, the maximum distance required for any cadet.

**Testing:**

1. Cadets remove their shoes and sit on the floor with their knees fully extended. Feet should be shoulder-width apart and the soles of the feet must be held flat against the stair step (or special box).
2. With hands on top of each other, palms down, and legs held flat, the cadet reaches along the meter as far as possible, without bouncing.

**Scoring:**

- ◆ After three practice reaches, the fourth reach is held for at least one second while the distance is recorded. Scores are recorded to the nearest centimeter.



**Figure 5-2.**  
Sit & Reach

## CURL-UPS

(Also known as "sit-ups")

**Objective:** To measure abdominal strength and endurance.

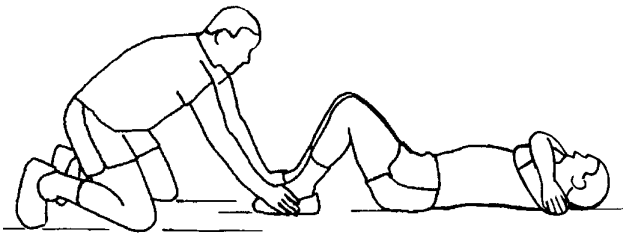
**Equipment:** Stopwatch, or a wristwatch with a second hand.

**Testing:**

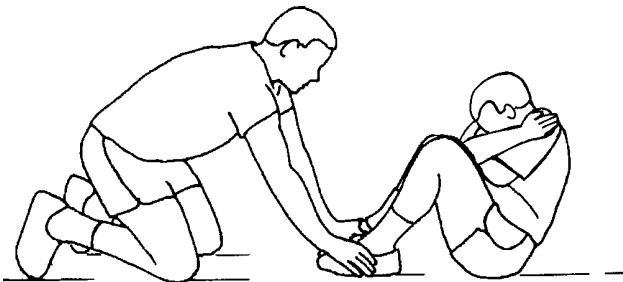
1. Conduct the test on a flat surface, preferably one that is clean and cushioned.
2. Have each cadet lie on their back, with their knees flexed and feet about 12 inches from their buttocks.
3. A partner must hold the feet of the cadet being tested.
4. Have the cadet cross their arms and place their hands on opposite shoulders, while holding their elbows close to their chest.
5. Keeping this arm position, the cadet raises their trunk by curling up to touch their thighs with their elbows. Then the cadet lowers back to the floor so that the shoulder blades touch the ground.
6. **This is a one minute test.** To start the test, a timer calls out, "Ready . . . GO!" The timer will call out when 30 seconds remain, and again when 10 seconds remain in the test. At precisely 60 seconds, the timer calls out "Stop!"

**Scoring:**

- ◆ A senior member or the cadet's partner may keep score. Score one repetition every time the cadet correctly raises their trunk by curling up to touch their thighs with their elbows and returns to the starting position. Count the repetitions aloud.



Starting Position & Down Position  
(The down position scores one repetition)



The Up Position  
(This completes one half a repetition)

**Figure 5-3.**  
Curl-Ups



## RIGHT ANGLE PUSH-UPS

**Objective:** To measure upper body strength and endurance.

**Equipment:** Metronome, drum, or someone to clap their hands or call cadence.

**Testing:**

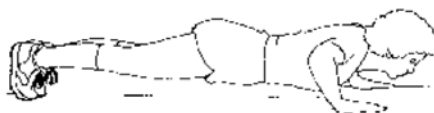
1. **Test Surface.** Conduct the test on a flat surface, preferably one that is clean and cushioned.
2. **Stance.** The cadet lies face down, with hands under shoulders, arms straight, fingers pointed forward, and legs straight, parallel and slightly apart (approximately 2-4 inches) with toes supporting the feet.
3. **Performing the Exercise.** To complete a push-up, the cadet must straighten their arms, keeping their back and knees straight. Then, the cadet must lower their body, while keeping their back and knees straight, until there is a 90-degree angle at the elbows, with their upper arms parallel to the floor.
4. **Judging Performance.** To judge if the cadet lowers their body enough, a partner holds out his or her own hands to a point such that when the cadet being tested touches their shoulders against the partner's hands, a 90-degree angle is formed at the cadet's elbows.
5. **Cadence.** The push-ups are done to an audible cadence (clapping, drum, metronome, oral command, etc.) with the cadet completing one (and only one) push-up every three seconds, and continuing until they can do no more in rhythm (having not done the last three in rhythm). The cadet may halt when he or she reaches the required number of repetitions for their achievement.
6. **Resting.** The cadet is free to take as long as they wish to reach the up position, and as long as they wish to reach the down position, provided they begin a new push-up every 3 seconds. The cadet may rest in the up or down position, but the President's Challenge recommends cadets remain in motion throughout the entire 3-second interval to achieve the best results.

**Scoring:**

- ◆ The test administrator controls the metronome, or marks cadence orally or by clapping their hands. Each cadet's partner should judge if the repetitions are being done in rhythm, and count them aloud.
- ◆ Record only those push-ups done in proper form and rhythm.
- ◆ Score one repetition for every instance when the cadet correctly straightens their arms and lowers their body until there is a 90 degree angle at the elbows.



Starting & Up Position  
Note: Arms must be fully extended



Down Position  
Note: 90 degree angle at the elbows  
(This completes one repetition)

**Figure 5-4.**  
Right Angle Push-Up

## SHUTTLE RUN

(An alternative to the mile run)

**Objective:** To measure speed and coordination.

**Equipment:**

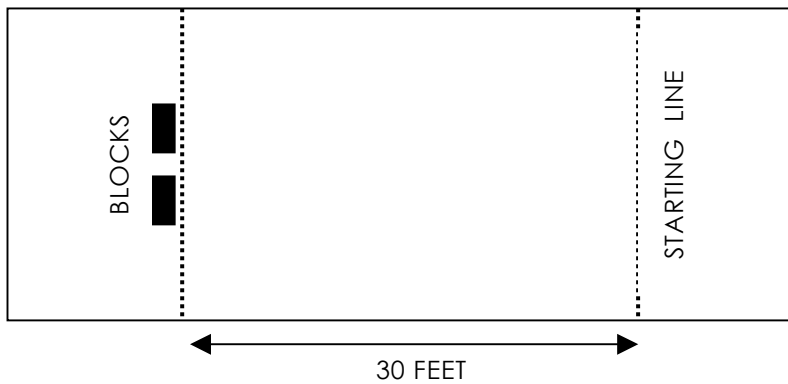
- ◆ Two chalkboard erasers, blocks of wood, or any similar item measuring approximately 2"x2"x4".
- ◆ Tape measure.
- ◆ A digital stopwatch or wristwatch that measures time to the hundredth of a second.

**Testing:**

1. Mark two parallel lines 30 feet apart. Place two blocks (or similar objects) immediately behind one of the lines.
2. Have the cadet start behind the line opposite from where the blocks are.
3. Each timer may test only one cadet at a time.
4. On the signal, "Ready, GO!" the cadet runs to the opposite line, picks up one block, runs back and crosses the starting line, drops the block behind the starting line, and then repeats the process.

**Scoring:**

- ◆ Blocks may not be thrown across the lines.
- ◆ Start the stopwatch on the command "GO!" Stop timing when the cadet crosses the starting line with the second block. Record the time to the nearest tenth of a second.
- ◆ Cadets may attempt this event twice during the test period. Record the fastest time.



**Figure 5-5.**  
Shuttle Run

**MILE RUN**

(An alternative to the shuttle run)

*Objective:* To measure cardiovascular endurance.*Equipment:*

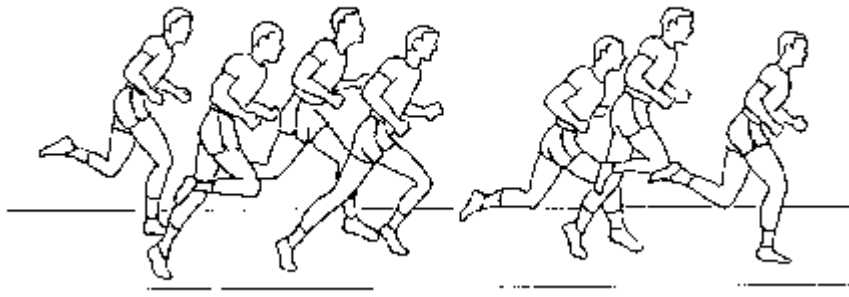
- ◆ Stopwatch or a wristwatch with a second hand.
- ◆ An oval-shaped track is the preferred course for this event.
- ◆ If a track is unavailable, a road course may be used if it is reasonably flat, has a wide shoulder, and does not require cadets to make numerous turns down different streets.

*Testing:*

1. Up to 25 cadets may be tested at the same time, provided that one senior member acts as the timer and another acts as the recorder. If only one senior member or CAP-USAF member is available, then no more than 10 cadets may be tested at the same time.
2. Have the cadets being tested ready themselves behind the starting line. Faster cadets should be positioned in the front of the pack.
3. At the command, "Ready, GO!," cadets start running and timing begins.
4. Supervisors should be stationed at the half-mile mark of road courses, or as the situation warrants, to ensure each cadet reaches the waypoint. Supervisors must remain alert to potential safety hazards and monitor cadets for potential injuries or exhaustion.
5. Cadets may run, jog, or walk during this event.

*Scoring:*

- ◆ The timer will call out the time when each cadet crosses the finish line for the recorder to log.



## SQUADRON PHYSICAL FITNESS AWARD

National headquarters will recognize squadrons that make physical fitness a cornerstone of their Cadet Program. The Squadron Physical Fitness Award is a voluntary program open to every cadet unit twice per year. This program is governed by CAPR 52-16, *Cadet Program Management*.

In May and/or November, simply administer the CPFT. If 70% of the cadets in your squadron can perform at the 50<sup>th</sup> percentile of the PCPFS survey (or higher) for their age and gender, your unit qualifies for the award. The requirements of the gold, silver, and bronze awards are shown below. The award program itself is simple, but fulfilling the standards will be a challenge.

<b>Award Level</b>	<b>Requirements</b>	<b>Award</b>
Gold Award	70% at 70 <sup>th</sup> percentile	Trophy
Silver Award	70% at 60 <sup>th</sup> percentile	Certificate
Bronze Award	70% at 50 <sup>th</sup> percentile	Certificate

**Test Periods.** In May and/or November, conduct the CPFT as you normally would.

**Award Requirements.** At least 70% of the total cadet membership must meet or surpass the award standards to earn an award at any level. Total membership means the number of cadets who are official CAP members on the first day of May or November, according to the HQ CAP database. For example, for a squadron with 30 cadets on the membership rolls, 21 (70%) must meet the award standards. If only 25 cadets happen to test, 21 still need to pass.

**Standards.** How do you know what the 50<sup>th</sup>, 60<sup>th</sup>, or 70<sup>th</sup> percentile's standards are? Simply refer to Attachment 3. The requirements for the Mitchell Award correspond to the 50<sup>th</sup> percentile, the Earhart Award corresponds to the 60<sup>th</sup> percentile, and the Eaker Award corresponds to the 70<sup>th</sup> percentile. Remember that a cadet's CAP grade is irrelevant as far as the Squadron Physical Fitness Award is concerned.

**Reporting.** To apply for the Squadron Physical Fitness Award, download an application by visiting [www.cap.gov](http://www.cap.gov) and clicking "Cadet Programs" and "Physical Fitness Awards". Award applications are due by 15 June (for the May test) and 15 December (for the November test). Follow the on-line instructions to submit completed award applications electronically, or mail them to the address below:

HQ CAP / CP  
105 South Hansell St  
Maxwell AFB AL 36112-6332  
Attention: Fitness Awards

## INDIVIDUAL PRESIDENT'S CHALLENGE AWARDS

Cadets can earn individual fitness awards from The President's Challenge, a program sponsored by the PCPFS.

The *National Award* is for cadets who meet or surpass PCPFS standards at the 50th percentile, which correspond to the Mitchell Award requirements.

The *Presidential Award* is for cadets who meet or surpass PCPFS standards at the 85th percentile. The performance requirements can be found on-line at [www.indiana.edu/~preschal/index.shtml](http://www.indiana.edu/~preschal/index.shtml).

**Eligibility.** Any cadet in physical fitness Category I may earn a President's Challenge award, but they must meet the CPFT standards described above for their age and gender, regardless of their CAP grade. Further, they must pass both the mile run and the shuttle run to qualify for a President's Challenge award.

**Schedule.** Cadets may attempt the award in May and/or November each year. When your unit attempts the Squadron Physical Fitness Award, simply use those CPFT scores to determine which cadets qualify for a National or Presidential award.

**Ordering Awards.** Squadron commanders may order the awards directly from The President's Challenge at [www.indiana.edu/~preschal/index.shtml](http://www.indiana.edu/~preschal/index.shtml). Please avoid ordering awards in small quantities; batches of 10 or more are preferred. President's Challenge patches may not be worn on the uniform.

**Attachment 1**

<b>CADET PHYSICAL FITNESS TEST WAIVER REQUEST</b>			
<p>Physical fitness is a component of the Civil Air Patrol cadet program. Unless restricted by a physician, cadets participate in a variety of calisthenics, sports, and other exercises. Periodically, in their quest to earn awards, cadets attempt a physical fitness test.</p> <p>Please check the appropriate box to let CAP know that your patient is able to participate in, or is restricted from, these activities.</p>			
<p><b><u>Not Restricted.</u></b> Cadet is determined to be in good health and may participate in physical fitness exercises without restriction.</p>			
<p><b><u>Temporarily Restricted.</u></b> Medical condition or injury is temporary in nature. Normally, cadets will remain in this category for six months or less.</p>			
<p><b><u>Permanently Restricted.</u></b> Medical condition or injury is chronic or permanent in nature. The cadet is indefinitely restricted from the activity.</p>			
TEST EVENT	NOT RESTRICTED	TEMPORARILY RESTRICTED	INDEFINITELY RESTRICTED
Sit and Reach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Curl-Ups (Sit-Ups)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Push-Ups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mile Run	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shuttle Run (30'x4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Please explain the nature of any permanent restrictions.</p>			
<p>Are there any other activities this individual is restricted from? Please explain.</p>			
<p><i>The information on this request may be shared with Department of Defense agencies. By submitting this form, the cadet and cadet's parent(s) authorize CAP to discuss the information above with the physician.</i></p>			
Physician's Name:		Physician's Telephone:	
Physician's Signature		Date:	
Cadet's Name:		CAPID:	
<p><i>Note: This optional form is intended only for cadets requesting a CPFT waiver when applying for the Wright Brothers, Mitchell, Earhart, Eaker, or Spaatz Awards. In such cases, attach this completed request to the CAPP 52 or to the memo requesting permission to take the Spaatz Award exams.</i></p>			

## Attachment 2

## SAFETY GUIDELINES FOR HOT ENVIRONMENTS

HEAT STAGE	TEMPERATURE RANGE	FLAG COLOR	WORK PERMITTED	EASY WORK (QTS/HOUR)	MODERATE WORK (QTS / HOUR)	HARD WORK (QTS/HOUR)
1	78 - 81.9° F WBGT	White	Easy, Moderate & Hard	1/2	1/2	3/4
2	82 - 84.9° F WBGT	Green	Easy, Moderate & Hard	1/2	3/4	3/4
3	85 - 87.9° F WBGT	Yellow	Easy & Moderate	3/4	3/4	1
4	88 - 89.9° F WBGT	Red	Easy	3/4	1	1
5	90° F + WBGT	Black	No prolonged physical exertion	1	1	1

Table 1. Work Restrictions and Fluid Replacement.

EASY WORK	MODERATE WORK	HARD WORK
<ul style="list-style-type: none"> <li>◆ Walking on level terrain or hiking with ≤ 15 lb. load</li> <li>◆ Drill and ceremonies</li> <li>◆ Marksmanship training</li> </ul>	<ul style="list-style-type: none"> <li>◆ Walking on rolling terrain or hiking with 15-25 lb load</li> <li>◆ Calisthenics, team sports, CPFT</li> <li>◆ Rappelling</li> </ul>	<ul style="list-style-type: none"> <li>◆ Hiking on steep terrain or with ≥ 25 lb. load</li> <li>◆ Obstacle courses</li> <li>◆ Intense fitness drills</li> </ul>

**Table 2. Work Categories.** It would be impossible to create an exhaustive list of every activity and catalog each as easy, moderate, or hard work. This table provides a basis for commanders to make sound decisions. They must use good judgment in classifying the particular activities of their unit as easy, moderate, or hard work, and then follow the appropriate guidelines.

HEAT STRESS & WATER INTOXICATION WARNING SIGNS & SYMPTOMS			
EARLY SIGNS & SYMPTOMS		ACTIONS	
<ul style="list-style-type: none"> <li>◆ Dizziness</li> <li>◆ Headache</li> <li>◆ Dry mouth</li> </ul>	<ul style="list-style-type: none"> <li>◆ Unsteady walk</li> <li>◆ Weakness</li> <li>◆ Muscle cramps</li> </ul>	<ul style="list-style-type: none"> <li>◆ Remove from training</li> <li>◆ Rest in shade</li> <li>◆ Sip water</li> </ul>	<ul style="list-style-type: none"> <li>◆ If symptoms do not improve in 15-30 minutes, transport to medical facility</li> </ul>
LATER SIGNS & SYMPTOMS		IMMEDIATE ACTIONS	
<ul style="list-style-type: none"> <li>◆ Hot body, high temperature</li> <li>◆ Confusion; unresponsiveness</li> <li>◆ Vomiting</li> </ul>	<ul style="list-style-type: none"> <li>◆ Involuntary bowel movements</li> <li>◆ Convulsions</li> <li>◆ Weak or rapid pulse</li> </ul>	<ul style="list-style-type: none"> <li>◆ Call ambulance immediately</li> <li>◆ Lay victim down in shade</li> <li>◆ Elevate feet</li> <li>◆ Give <u>sips</u> of water</li> </ul>	<ul style="list-style-type: none"> <li>◆ Begin active cooling if skin is hot</li> <li>◆ Undress as much as possible</li> <li>◆ Pour cool water over victim</li> </ul>

Table 3. Heat Stress &amp; Water Intoxication.

**CADET PHYSICAL FITNESS TEST REQUIREMENTS**

<b>PHASE I ACHIEVEMENTS 1 – 3 &amp; THE WRIGHT BROTHERS AWARD</b>																
AGE	MALES								FEMALES							
	10	11	12	13	14	15	16	17+	10	11	12	13	14	15	16	17+
SIT & REACH	20	21	21	20	23	24	25	28	24	24	25	24	28	31	30	31
CURL UPS	30	31	34	36	39	38	38	38	25	27	29	30	31	30	30	28
PUSH UPS	10	11	12	16	18	22	24	26	10	10	9	9	9	11	11	12
SHUTTLE RUN	12.4	12.0	11.2	10.8	10.5	10.2	10.0	9.9	13.1	12.5	12.1	11.8	11.9	11.7	11.7	11.7
MILE RUN	11:40	11:25	10:22	9:23	9:10	8:49	8:37	8:06	13:00	13:09	12:46	12:29	11:52	11:48	12:42	12:11

President's  
Challenge  
**25<sup>th</sup>**  
percentile

<b>PHASE II ACHIEVEMENTS 4 – 6</b>																
AGE	MALES								FEMALES							
	10	11	12	13	14	15	16	17+	10	11	12	13	14	15	16	17+
SIT & REACH	22	23	23	23	25	27	27	31	26	26	27	27	30	32	32	33
CURL UPS	32	34	37	39	41	41	40	40	27	29	31	33	34	32	32	30
PUSH UPS	11	12	14	18	20	25	26	30	10	11	10	10	10	12	13	14
SHUTTLE RUN	12.0	11.5	11.0	10.6	10.2	10.0	9.7	9.6	12.6	12.1	11.7	11.5	11.6	11.4	11.4	11.3
MILE RUN	10:58	10:25	9:40	8:54	8:30	8:08	7:53	7:35	12:08	12:21	12:01	11:40	11:10	11:00	11:24	11:20

President's  
Challenge  
**35<sup>th</sup>**  
percentile

<b>PHASE II ACHIEVEMENTS 7 – 8 &amp; THE MITCHELL AWARD</b>																
AGE	MALES								FEMALES							
	10	11	12	13	14	15	16	17+	10	11	12	13	14	15	16	17+
SIT & REACH	25	25	26	26	28	30	30	34	28	29	30	31	33	36	34	35
CURL UPS	35	37	40	42	45	45	45	44	30	32	35	37	37	36	35	34
PUSH UPS	14	15	18	24	24	30	30	37	13	11	11	11	11	15	12	16
SHUTTLE RUN	11.5	11.1	10.6	10.2	9.9	9.7	9.4	9.4	12.1	11.5	11.3	11.1	11.2	11.0	10.9	11.0
MILE RUN	9:48	9:20	8:40	8:06	7:44	7:30	7:10	7:04	11:22	11:17	11:05	10:23	10:06	9:58	10:31	10:22

President's  
Challenge  
**50<sup>th</sup>**  
Percentile

<b>PHASE III ACHIEVEMENTS 9 – 11 &amp; THE EARHART AWARD</b>																
AGE	MALES								FEMALES							
	10	11	12	13	14	15	16	17+	10	11	12	13	14	15	16	17+
SIT & REACH	26	26	27	27	30	32	32	36	29	30	32	32	35	37	36	37
CURL UPS	38	39	43	45	48	49	48	46	32	35	38	40	40	39	37	36
PUSH UPS	16	18	22	28	28	34	35	42	14	14	14	15	15	16	17	19
SHUTTLE RUN	11.2	10.8	10.4	10.1	9.7	9.5	9.2	9.2	11.8	11.2	11.0	10.9	10.9	10.7	10.7	10.7
MILE RUN	9:11	8:45	8:14	7:41	7:19	7:06	6:50	6:50	10:52	10:42	10:26	9:50	9:27	9:23	9:48	9:51

President's  
Challenge  
**60<sup>th</sup>**  
Percentile

<b>PHASE IV ACHIEVEMENTS 12 – 16 &amp; THE EAKER AWARD</b>																
AGE	MALES								FEMALES							
	10	11	12	13	14	15	16	17+	10	11	12	13	14	15	16	17+
SIT & REACH	27	28	28	29	32	33	35	39	30	31	33	34	37	40	38	39
CURL UPS	40	42	46	48	51	52	50	49	35	38	40	41	42	42	40	39
PUSH UPS	19	22	25	32	34	37	38	46	16	16	16	17	17	18	20	22
SHUTTLE RUN	10.9	10.5	10.2	9.9	9.5	9.3	9.0	9.0	11.5	10.9	10.8	10.7	10.7	10.5	10.5	10.5
MILE RUN	8:40	8:20	7:55	7:25	6:59	6:51	6:38	6:35	10:28	10:10	9:48	9:15	8:58	8:58	9:12	9:14

President's  
Challenge  
**70<sup>th</sup>**  
Percentile

<b>SPAATZ AWARD</b>																
AGE	MALES								FEMALES							
	10	11	12	13	14	15	16	17+	10	11	12	13	14	15	16	17+
SIT & REACH	28	29	29	30	33	34	36	40	31	32	34	36	38	41	39	40
CURL UPS	41	43	47	50	52	53	51	51	37	39	41	42	43	44	41	40
PUSH UPS	20	24	27	35	36	39	40	49	18	17	18	19	19	19	21	23
SHUTTLE RUN	10.7	10.4	10.0	9.8	9.4	9.2	8.9	8.9	11.3	10.8	10.7	10.5	10.5	10.3	10.4	10.3
MILE RUN	8:19	8:00	7:41	7:11	6:45	6:38	6:25	6:23	10:08	9:44	9:15	8:49	8:36	8:40	8:50	8:52

President's  
Challenge  
**75<sup>th</sup>**  
Percentile

**NOTE:** Use the table corresponding to the promotion being attempted. For example, a cadet attempting to meet C/CMSgt promotion requirements would use the table for Achievement 7.





CIVIL AIR PATROL  
NATIONAL HEADQUARTERS  
MAXWELL AFB AL 36112-6332

CHANGE 1  
CAP PAMPHLET 52-18  
1 OCTOBER 2006

## **Cadet Programs**

### **CADET PHYSICAL FITNESS PROGRAM**

CAPP 52-18, 1 April 2003, is changed as follows:

Page-Insert Change.

<b>Remove</b>	<b>Insert</b>
21/22	21/22
25/26	25/26

Note: Shaded areas identify new or revised material.

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OPR: CP

Distribution: In accordance with CAPR 5-4.