NAVY
PHYSICAL
READINESS
PROGRAM

2016

Guide 13

Command Fitness Guide

Command/Unit
Physical Training (PT)
and
Fitness Enhancement Program (FEP)

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CHAPTER 1

Command Physical Readiness Program Overview

1. Overview

The command physical fitness program is the command's action plan to maintain and/or improve the fitness and health of the entire crew.

2. Program Strategies

Key program strategies enhance opportunities for physical activity, increase knowledge, increase availability/access to nutritious foods and decrease availability to foods with high calories and low nutrients. Environmental and policy strategies that target the entire command and community (not just individuals) help support healthy behaviors. These strategies are likely to be sustained for a longer period of time than individually oriented strategies.

3. Medical Screening

All members must complete required medical screening to monitor their health status and screen for risks factors. All members participating in command/unit Physical Training (PT) must have answered "Yes" to question 1 of the Pre-physical Activity Questions (Is your PHA current?) and have answered "No" to questions 2-4. The four questions are to be asked prior to every command/unit PT session.

4. Command/Unit PT

Command/Unit PT is any command led fitness activity. Command/unit PT must be lead by a qualified Command Fitness Leader (CFL), Assistant Command Fitness Leader (ACFL) or Morale Welfare Recreation (MWR) Specialist per OPNAVINST 6110.1 series. All participants must wear the Navy blue and gold physical training uniform (PTU).

5. Procedures

Follow the below are the procedures for an effective command/unit PT session:

a. Schedule a location and time for command members to meet.

b. Publish location and time to all participants.

c. Instruct all participants to bring water (if water is not readily available).

d. Always have a plan. Know in advance what exercises will be used in the PT session.

e. Ensure ACFLs know their role during the sessions.

f. Take muster before and after.

g. Read out loud the 4 Pre-physical Activity questions before Command/unit PT.

h. Start with a 5-10 minute dynamic warm-up exercise (Chapter 5, Dynamic Warm-up).

i. Provide directions on alternate options for personnel with limited exercise capabilities.

j. End the session with a cool down and stretches for 5-10 minutes (see recommended stretches).

6. Command/Unit PT Guidelines

a. Activity Guidelines (Chapter 3), provides details on designing PT programs.

b. Command/Unit PT Components (Chapter 4), provides details on the command PT component. CFLs and ACFLs need to familiarize themselves with this information prior to conducting Command/Unit PT or Fitness Enhancement Program (FEP).

7. Quality Over Quantity

Monitor participants during activity. Perform movements in a controlled manner. Remember quality over quantity. When form declines (to the point of volatile fatigue), it is time to stop the movement.

8. Commercial Programs

The Navy does not endorse any commercialized fitness programs. CFLs/ACFLs are not authorized to display videos of programs during PT sessions. These programs do not take into account different fitness levels at command PT.

9. Emergency Response Plan

A safety plan must be in place for summoning emergency assistance. Consult local medical facilities for guidance. At a minimum, the plan will include telephone numbers, location of nearest AED and procedures for summoning aid and clear directions for emergency response personnel to avoid confusion and ensure their prompt arrival. Include guidance for contacting base security personnel to assist with rapid access of emergency personnel to test site.

CHAPTER 2

Fitness Enhancement Program (FEP) Overview

1. Overview

Per OPNAVINST 6110.1 series, "Commanding officers (COs) must establish and monitor a Fitness Enhancement Program (FEP)."

2. Program Administration

a. Program Management. FEP is managed by the CFL on behalf of the CO. The CFL is responsible for administering all aspects of the program. ACFLs play an important role in assisting the CFL in conducting FEP activities, documenting participation, and monitoring progress.

b. Program Participation. The FEP is a command-wide program to improve fitness and nutrition. Any member that fails to meet Physical Fitness Assessment (PFA) standards is required to be formally enrolled into a monitored FEP. For command-directed enrollment for other than official PFA failure, local written policies (to include check-in (BCA) failures and borderline PFA status) are strongly recommended.

c. Program Requirements. Mandated FEP requirements are:

(1) Written Counseling for FEP Enrollment. Enlisted members are to be issued a NAVPERS 1070/613 (page 13) and officers are to be issued a Letter of Notification (LON) to officially inform them of FEP and nutrition requirements. The Page 13 will be generated via NSIPS and may be edited to reflect command specific program requirements. The LON will be generated via PRIMS or manually.

(2) FEP PT. FEP sessions will only be led by designated CFLs, trained ACFLs or MWR Fitness Specialists. It is the CFL's responsibility to ensure ACFLs administering FEP are familiar with the OPNAVINST 6110.1 series requirements and the contents of this guide.

(3) FEP Hours. Unless otherwise directed by command mission/commitments, FEP activities are to be conducted during normal working hours (a minimum of 3 times, maximum of 5 times, per week for a total of at least 150 minutes).

(4) FEP Nutrition. Nutrition plays an important role in a member's performance, weight management, and disease prevention. Each member enrolled in FEP must select a nutrition option based on individual needs. Each option must include goal setting, long-term behavior modification and ongoing support. See

Nutrition Resource Guide for more detailed information. CFLs will select the nutrition option in the FEP section of PRIMS.

(a) Shipshape: Complete the approved course requirements.

(b) Registered Dietitian (RD): Meet with an RD and follow-on sessions as indicated by the provider. Medical Nutrition Therapy for weight management recommends one initial appointment and 3 follow-up visits at a minimum.

(c) Approved Commercial Programs: Participate in a national weight loss program/center that incorporates a support component (at own expense).

d. FEP Documentation. All FEP records are the property of the command and are to be maintained for 5 years. FEP documents include:

(1) Weekly PT sessions

(2) Weekly body weight

(3) Monthly mock PFA, including BCA and PRT

(4) Nutrition education. Maintain documentation of any courses/programs offered, completed and declined.

e. FEP Participation and Monitoring.

Members are required to remain enrolled in FEP until passing one mock or official PRT and be within the Navy graduated BCA standards. If member is waived from the BCA and/or the same PRT event for which member failed, he/she will remain on FEP until the member is able to successfully pass the failed event during a mock or official PFA. Monthly FEP PFAs, including BCAs, do not constitute an official PFA and may not be used to determine duty screening eligibility or enlistment/extension eligibility.

f. Progress. Progress may be assessed via program participation records and monthly mock PRT and BCA results. The progress of each member will vary and will depend on members' age, health status, and beginning fitness and body composition levels.

(1) PRT. Improved mock scores are the number one indicator of improvement for fitness. For specific details on progress see, "Assessment of Progress" section of Chapter 3.

(2) BCA. Members assigned to FEP due to BCA failure must participate in the FEP mock PRT. Training emphasis should focus on decreasing body fat versus weight loss. Adequate progress is 1-2 pounds per week or 1-2% body fat per month and should not exceed more than 5% of body weight in any week. Males tend to lose at the higher rate of 1-2 pounds per week due to higher amounts of lean body mass, where

females should anticipate ½ to 1 pound per week. Progress should be evaluated utilizing weight loss OR decreases in body fat composition as they may not occur at the same rate. Early decreases in body fat percentage may be minimal or delayed despite weight loss of 1-2 lbs per week due to individual variance in fat deposition.

g. Nutrition and Weight Management

CFLs and ACFLs need to have a basic understanding of general nutrition resources to only provide general guidance to command members. The CFL has an important role in making referrals to nutrition experts. CFLs and ACFLs do not provide diets, recommend calorie intakes or provide nutrition counseling. The Nutrition Resource Guide provides available and credible nutrition resources for members to utilize to develop their individual plan.

h. FEP Session Uniform Requirements.

(1) Uniform. The blue and gold Navy PTU is the official uniform for command/unit PT, the PFA and FEP.

(2) Footwear. Running shoes will be comfortable and support the planned exercise. Athletic socks must be worn and shall not extend above mid-calf. Low cut socks are permitted. CO has final authority to ensure safety of the command.

(3) Local Resources. Command CFLs, ACFLs, Dietitians, local health promotions, medical department representatives, Shipshape facilitators, and MWR fitness professionals can aid in structuring a member's individual program to produce the greatest benefit. See the Navy Physical Readiness Nutrition Resource Guide (NPRNRG) for more details.

3. Lessons Learned/Best Practices.

a. Each member requires an individualized plan. The member should play an active role in developing their plan for obtaining a healthier lifestyle, as well as meeting Navy fitness standards. Monthly data is recorded in PRIMS. Review each member's progress at least monthly. An FEP plan provides at a minimum:

(1) Exercise goals: How will the member acquire the recommended amount of exercise each week?

(2) Nutrition goals: What nutrition resources will be utilized and what are the goals within that program?

(3) Progress monitoring: FEP tracking logs with weekly PT and body weight and monthly BCA and PRT scores reviewed monthly.

b. Partner with MWR for assistance with command/FEP PT. MWR fitness specialists are the experts in the field and trained to assist with group and individualized programs.

c. Promote additional calorie expenditure outside of FEP PT. Members 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 facilities is limited. For example, participate in the “10,000 Steps Challenge” by using a pedometer to track daily steps. Walking 10,000 steps per day equals 5 miles and ~500 calories burned per day. This equates to 3500 calories burned per week, the amount required to lose one pound of body fat.

d. Group PT Guidance.

(1) Chapter 3 Provides group exercise guidance.

(2) Limit formation runs. Large running groups alter stride lengths, over-training the least fit and under-training the most fit. Use PRT run times to group members into 3-4 like-fitness levels.

(3) Avoid fitness programs that over-train, increasing the risk of overuse injuries to muscles and joints. Limit long runs and incorporate speed work to improve run performance.

(4) Avoid contraindicated exercises (Chapter 4) at all command led PT sessions.

(5) Promote a variety of activities beyond regimented, group calisthenics and formation runs and incorporate appropriate rest and recovery periods.

(6) Provide members with the knowledge and skills, command direction, and monitoring to maintain a healthy lifestyle and mission accomplishment.

Chapter 3

Activity Guidelines

1. Purpose

This resource has been developed to assist commands in conducting a safe effective fitness program.

2. Resources

There are many fitness resources available to assist with fitness enhancement. In addition to weekly PT sessions, MWR fitness professionals are available at military installations to assist in designing and/or conducting command/FEP sessions. MWR fitness professionals are your exercise specialists qualified to provide individual plans to members. Contact your local MWR for available services.

3. Program Design

All command led PT sessions consist of the following components in this order:

a. Pre-physical Activity Questions	
b. Dynamic Warm-up	5 - 10 minutes
c. Pre-planned PT Session	20 - 45 minutes
d. Cool-down	3 - 5 minutes
e. Stretching	5 - 10 minutes

More detailed descriptions are found in “Command PT Components,” Chapter 4.

4. Contraindicated Exercises. Contraindicated movements are potentially dangerous to the body. Any exercise that incorporates extreme movements that cause extension or flexion of a joint beyond its normal range, involves excessive, rapid or repetitive twisting around a fixed base, and/or requires advanced skills/strength to perform correctly is considered to be contraindicated for command led PT. More effective and safer exercises exist; therefore contraindicated exercises are to be avoided at all command led PT sessions. See Chapter 4,”Contraindicated Exercises” for a list of exercises and stretches.

5. Basic Fitness Terms: The FITT Principle (Frequency, Intensity, Time and Type) is the basis for fitness program design. For a list of exercise-related terms, refer to Appendix C.

a. Frequency: the number of training sessions conducted per week. The frequency of sessions is largely dependent upon the intensity exerted (i.e. higher intensity is performed less frequent than lower intensity)

(1) Cardiorespiratory training may be conducted for at least 30 minutes at a moderate intensity, 5 days a week *or* 25 minutes at a high intensity 3 days per week.

(a) Examples of moderate intensity activities include: brisk walk (3 mph or faster), bicycling (slower than 10 mph), and water aerobics.

(b) Examples of high intensity activities include: jogging/running, swimming laps, jumping rope, and circuit training.

(2) In addition to cardiorespiratory training, perform strength training consisting of 8 to 10 exercises, focusing on major muscle groups, 2 or more days per week.

(a) Strength training can be conducted using free weights/machines or using body weight, resistance bands or body bars.

(b) A sample circuit training plan is provided in Appendix A.

b. Intensity: The level of physical effort required to perform an activity at any given time. There are several ways to measure intensity: Target Heart Rate Training Zones, Borg Rate of Perceived Exertion (RPE), or the talk test.

(1) Target Heart Rate. Calculate maximum heart rate (220-age = beats per minute (bpm). Target heart rate training zone is 50-85% of the maximum heart rate.

Determining Training Heart Rate Zones Based on Age and Exercise Intensity					
Age in years	Maximum Heart Rate (bpm)	Target Heart Rate for Moderate Intensity (50-70% of max)	Moderate Intensity (10 sec count)	Target Heart Rate for Vigorous Intensity (70-85% of max)	Vigorous Intensity (10-sec 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

(2) The Borg RPE scale ranges from 1 to 10, with a score of “1” representing very light exertion and a score of “10” representing maximum effort. Members should be

exercising between an RPE of 4-6 during low to moderate intensity training sessions and 8–9 during high intensity training sessions.

Rate of Perceived Exertion (RPE) Chart	
1	**Very Light Activity** (Anything other than sleeping, e.g., watching TV, riding in a car, etc.)
2-3	**Light Activity** (Feels like you can maintain for hours, e.g., easy to breathe and have a conversation)
4-6	**Moderate Activity** (Feels like you can exercise for hours, e.g., breathing heavily, can hold a short conversation)
7-8	**Vigorous Activity** (On the verge of becoming uncomfortable, e.g., short of breath, can speak a sentence)
9	**Very Hard Activity** (Very difficult to maintain exercise intensity, e.g., can barely breathe or speak a single word)
10	**Max Effort Activity** (Feels almost impossible to keep going, e.g., completely out of breath and unable to speak)

(3) Talk Test is the simplest 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. 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.

3. Time: The number of minutes of activity.

(1) The amount of time depends on the intensity. The more intense the exercise, the shorter the time may be.

(2) Consistent, daily exercises is required to maintain a healthy weight, consistent daily exercise is required to lose body fat. All members should strive to increase activity outside of FEP. The recommended minutes of moderate activity per week for different levels of weight loss are provided:

(a) 150 min for minimal weight loss (<5 lbs)

(b) 150-225 min for moderate weight loss (5-10 lbs)

(c) 225-420 min for significant weight loss (11-20+ lbs)

Examples of training types and duration:

	Intensity Level (High/Moderate/Low)	Recommended Duration	Recommended Rest
Interval	High	20-30 min	3-5 min between intervals
Circuit Training	Moderate to High	20-30 min	30 sec – 90 sec min between sets
Strength Training	Moderate	30 min	30 sec - 2 min between sets

d. Type: The actual activity performed.

(1) To prevent boredom and injuries associated with overtraining, incorporate a variety of different exercises throughout the week.

(2) Be creative, use team competitions designed to challenge members to increase intensity.

Examples of cardiorespiratory and strength training exercises:

	Aerobic	Strength Training Circuit w/o Resistance	Strength Training Circuit w/ Resistance	Calisthenics
Total Body Exercises	Running Elliptical Rower Swimming Metabolic Circuit	Plyometrics Plank	Squats Deadlifts Powercleans Push Press	Jumping Jacks Grapevine Steam Engines Knee Blocks
Upper Body Exercises	Speed Bag Jabs Hooks Uppercuts	Push up Dips	Chest Press Seated Row Overhead Press Bicep Curl Triceps Extension	Straight Jabs Hooks Uppercuts
Lower Body Exercises	Cycling	Squat Glute Bridge Lunge	Squat Lunge Side Lunge	Split Squats Alternate Lunge High Knees Box Step

6. Warm-Up and Cool-down

Each PT session shall begin with a warm-up and end with a cool-down period.

a. 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 5-10 minutes, starting with low intensity and gradually increasing in intensity as the warm-up progresses. Eliminating the cool down can lead to increased wear and tear on muscles, increased risk for injury, and decreased performance. Take time to warm-up. Benefits include:

(1) Reducing the potential for muscle and connective injuries.

(2) Increasing blood flow to exercising muscles. The more blood that reaches the muscles, the easier the delivery of nutrients required for energy production.

(3) Increasing oxygen delivery to the muscle, crucial during a workout.

(4) Increasing blood flow to the heart which leads to reduced risk for exercise-induced cardiovascular events.

b. 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 (dropping to the deck after cardio) 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. Using the last 3 to 5 minutes of the workout, gradually reduce the intensity to lower the heart rate, followed by stretching.

7. Recommended Stretches

a. Flexibility is an important but often overlooked component of exercise. Include exercises geared towards improving flexibility into each PT session.

b. A static stretching exercise session will be led after the PT session because muscles are warmer and more pliable after exercise.

c. Use static (slow and controlled) stretches instead of ballistic (fast and/or bouncing) stretches. The optimal hold time for static stretches is 15-30 seconds (8-15 echo count).

8. Overload

In order to make improvements in fitness, you must physically work at a level beyond what you are accustomed to. The three factors that are manipulated to induce exercise overload, frequency, intensity, and time.

9. Progression

a. 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.

b. Pay specific attention to time and intensity when starting a workout program.

(1) 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, this may be a walking, walk/run, or alternate cardio program.

(2) Always increase time first when increasing overload, then increase intensity (e.g. a member able to jog for 15 minutes per session should increase the time gradually to 30 minutes before increasing speed).

(3) Increase in 5-10% increments per week. For example, if a member is running 1 mile, do not increase above 1.1 miles the following week or if jogging 15 minutes, do not increase the following week to 16.5 minutes.

(4) More is not always better. After a certain weekly amount of exercise, fitness improvements are negligible and the potential for injury increases. Members exhibiting signs of tendonitis, continuous ankle, knee, or other pain, and feel fatigued on a regular basis, may be exercising too much and should seek medical advice.

10. Assessment of Progress

There are three levels of progression for fitness.

a. Phase 1: Initial Stage. The goal of the initial stage is to adapt the body to exercise and focus on proper form. Typically consists of lower intensity activity for shorter duration (e.g., run/walk). Programs initiated too aggressively may result in increased injuries. If a member is actively participating in activity three or more times per week without progress, refer to medical for evaluation.

b. Phase 2: Improvement Stage. The goal of the improvement stage is to increase overall exercise stimulus, following the FITT principles, to allow for significant improvements. Individuals may progress quickly during this phase with solid preparation in phase 1.

c. Phase 3: Maintenance Stage. The goal is to maintain achieved levels of fitness once goals are achieved. Re-evaluate fitness goals at this time. Diversification in training is important for long term success to prevent overuse injuries and maintain members' interest in activity.

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

Training Progression for Sedentary Individuals

Program Stage	Week	Exercise Frequency	Exercise Intensity (%HRR)	Exercise Duration (min)*
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	65-75	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 ,8th Edition
* Pre-planned PT session not including time for warm-up, cool down and stretching.

11. Recovery

The recommended time to work out is 3-4 times per week with light activity days to rest and recover. Common mistakes in fitness programs include:

a. Participating in the same work out. For example: exercising on the stationary bike or elliptical for 20 minutes 3 times per week. The body will adapt and you will not see improvements. Vary workouts and continue to challenge the body with increased intensity to see improvements in fitness.

b. Failing to prepare for PFA. Participating in cardio and strength workouts at least 3 times per week is adequate to prepare most members to pass the PFA.

c. Only participating in running, crunches, and sit ups. There are more effective ways to improve your PRT score without overusing the same muscles. See Appendix A.

12. Overcoming Obstacles to Physical Activity

The following tips are provided for assisting with PT obstacles.

Obstacle	Strategy
I do not have time (work, family)	Plan ahead. Make time and mark it on your calendar. Aim for earlier in the day to prevent last minute commitments from becoming an excuse.
I do not have anyone to go with	Develop a buddy system. Members are more likely to PT on off days if someone else is waiting for them.
I am so tired after work	Schedule activity early in the day. Look at eating patterns. Have you fueled properly during the day to give you consistent energy? Look at sleep habits as well. Can you go to bed one hour earlier?
I have small children that I have to get home to	Trade babysitting with a friend. Do exercises with your children – walking with a stroller, have them ride a bike while you walk or jog.
The weather…	Use the confined spaces workout indoors.
I do not have access to a gym	A gym is not required. Body weight, resistance bands and work out videos can be used.
I have to…..	Lose the excuses! This is a priority. Rate it that way in your day. Once a routine is established, it becomes second nature like brushing teeth and getting dressed in the morning.

Chapter 4

Command/Unit Physical Training (PT) Components

This chapter provides the components of command/unit PT to facilitate a safe and effective PT program per OPNAVINST 6110.1 (series). The Physical Readiness Program and CNIC fitness professionals work closely to develop curriculum and train CFLs and ACFLs in proper program design and execution. The 5-day CFL course provides the tools and resources for conducting diverse and challenging command PT sessions. The following information is provided as a reference.

An additional tool for CFLs/ACFLs is the Navy Operational Fitness and Fueling Series (NOFFS). The NOFFS work outs were developed by industry experts, The Athletic Performance Institute, to provide comprehensive workouts to removes the guess work. Each workout is designed with a warm up (pillar prep and movement prep), strength, cardio, and stretching (flexibility) component. Certified NOFFS instructors located throughout the fleet received training on this program and can assist in incorporating it into your PT. Visit http://www.navyfitness.org/ for more information.

Pre-physical Activity Questions

(1) Do you have a current PHA? If no, you may not participate today.

(2) Do you have chest pain (with or without exertion), bone or joint pain, high blood pressure or high cholesterol? If yes, have you been cleared, by your medical provider, to participate in PT?

(3) Have you had a change in your medical status since the last time you were asked these questions?

(4) Are you ill today or know of any medical condition that may prevent you from participating in physical activity today?

For PRT Only:

(5) Did you complete the PARFQ? If yes, did you receive medical clearance if indicated as required? If no, you may not participate today.

In addition to asking the above questions, CFLs are also responsible for the following during the PRT:

Prohibit participation if recovering from illness/surgery or if health changes have occurred since completing the PARFQ.

Direct any member who experiences chest pain, shortness of breath, arm, and/or neck pain, to withdraw from the test and call or escort the member to medical.

Ensure drinking water is readily available at test site. Identify if any member has sickle-cell traits. If so, 8 oz. of clear fluids must be administered before, during, and after the test.

Ensure all members are dressed appropriately and wearing proper footwear.

2016
Dynamic Exercise Illustrations

Dynamic Warm-Up Exercises

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Pillar Bridge (30 Sec Hold)

- Push up tall on your elbows & tuck chin so head is in line with body
- Maintain a straight line from ears to ankle
- Feet shoulder width apart
- Hold for 30 Seconds

Pillar Bridge w/ Arm Lift

- Assume pillar position with feet wider than shoulder width apart
- Engage torso & alternate reaching up & out with arms – 2 second hold
- Keep shoulders & hips square to deck with arm reach

Pillar Bridge w/ Alternating Hip Flexion

- Start in push-up position with hands directly below shoulders & feet shoulder width apart
- Keeping your hips & torso still, draw one knee towards your chest keeping your back leg straight
- Return to starting position & repeat with opposite leg for prescribed reps on each leg, one foot should always be in contact w/ the deck
- Move with control & alternate sides each rep

Lateral Pillar Bridge (30 Sec Hold)

- Lie on your side with forearm on the deck under your shoulder – feet stacked together
- Keep body in a straight line from your ear to your ankles
- Hold for 30 seconds
- Complete for time, repeat on opposite side

Dynamic Lateral Pillar Bridge

- Lie on your side with your forearm on the deck under your shoulder – feet stacked together
- Push your hips off the deck, creating a straight line from ear to ankle, hold for 1-2 sec & return to starting position
- Repeat for reps & repeat on opposite side

Pillar Bridge w/ Abduction

- Lie on side with forearm on deck, feet stacked together
- Keep elbow under shoulder, push your hip off the deck, straight line from ankle to shoulder
- Lift your top leg into the air as if you were doing a lateral jumping jack
- Complete reps, repeat on opposite side

Glute Bridge (30 Sec Hold)

- Lift hips to create a line through knees, hips & shoulders
- Keep back flat & torso engaged throughout the movement
- Keep toes pulled up to your shins
- Hold for 30 seconds

Glute Bridge w/ Knee Extension

- Lift hips to create a line through knees, hips & shoulders
- Alternate extending knees – hold 2 sec. ea
- Keep back flat & torso engaged & head on the deck throughout the movement

Glute Bridge Marching (Hip Flexion)

- Lift hips to create a line through knees, hips & shoulders
- Lift one knee towards your chest, hold 2 sec. Alternate legs for prescribed reps with each leg
- Keep back flat & torso engaged & head on the deck throughout the movement

Y's (Bent Over)

- Hinge at waist, back flat & chest up
- Glide shoulder blades back & down & raise your arms over your head to form a Y
- Initiate movement with shoulder blades, not arms & keep thumbs up throughout
- Lower arms back to start & repeat for reps

T's (Bent Over)

- Hinge at waist, back flat & chest up
- Glide shoulder blades back & down & raise your arms over your head to form a T
- Initiate movement with shoulder blades, not arms & keep thumbs up throughout
- Lower arms back to start & repeat for reps

Chest Press / Shoulder Press

- Simulate you are performing a push-up in the air in front of your body.
- Once you get back to the starting position, then proceed into an overhead should press.
- Make sure you use a narrow hand-stance and keep elbows tucked in during the shoulder press to ensure you are engaging the triceps (back arm) muscle.

Reverse Lunge, Elbow to Instep (Kneeling)

- Kneeling, take half step forward with left foot
- Place right hand on deck & left elbow inside of left foot
- Hold for 2 sec.
- Place left hand outside foot & push hips to the sky
- Complete reps, then repeat on opposite side

Reverse Lunge, Elbow to Instep (In Place)

- Place right hand on deck & left elbow inside of left foot. Hold for 2 sec.
- Place left hand outside foot & push hips to the sky
- Keep back knee off deck & contract rear glute
- Alternate sides each rep

Reverse Lunge, Elbow to Instep (In Place w/ Rotation)

- Place right hand on deck & left elbow inside of left foot. Hold for 2 sec.
- Next, rotate right arm & chest to the sky as far as you can. Hold for 2 sec & return
- Place left hand outside foot & push hips to the sky
- Alternate sides each rep

Basic Squat

- Stand with feet slight wider than shoulder width apart.
- Squat down to a comfortable depth (this will vary from member to member)
- Do not go below thighs parallel to the deck (i.e., a 90 degree bend in the knees)
- Return to starting position
- To make this exercise more difficult, perform a 3 count down and a one count up
- The 3 countdown will also be slower and will allow the members to focus on good technique (knees remains above the ankle and all movement will be performed at the hips/buttock lowering down)

Split Squat

- Take a low split position with your weight primarily supported on your front leg
- Keep your torso engaged, tall posture and don't let knee touch the deck
- Alternate legs every 5 seconds until working time elapsed

Lateral Squat

- Stand with feet wider than shoulder width apart, shift hips to the side and down
- Push through your hip to return to start position
- Keep your opposite leg straight, back flat and chest up
- Alternate sides each rep

Knee Blocks/ Alternating Knee Blocks

- With both arms raised above your head, contract your abs and lower both arms to your right knee to perform a knee block
- Perform a certain number of repetitions
- Repeat on left side
- Perform alternating knee block by alternating from right to left side after one repetition

Three Side Steps Touch the Deck

- In the defensive position, take 3 side steps to the right and touch the deck
- Make sure to maintain a partial squat and remain low
- Return to defensive position and take 3 side steps to the left and touch the deck
- This completes one repetition

Quick Feet / High Knees

- Start In the defensive position (feet slightly wider than shoulder width and hands at waist level)
- Perform a quick shuffle of feet until call for high knees (run in place)
- Gradually increase the height of the knees and exercise tempo
- To increase difficulty, count down from 10 in high knees position

Jumping Jacks

- Stand with arms at your sides, feet straight and close together
- Bend knees and jump up while spreading arms and legs at the same time.
- Lift arms to ears and open your feet to wider than shoulder width
- As you return from jumping up bring your arms back down to your sides and at the same time bring your feet back together
- Perform basic jumping jacks using the 4 count military cadence

Jump Rope

- Simulate jumping rope to prepare the body for high impact activity
- This should NOT be one of your first warm-up exercises
- Vary this exercise by using the following techniques: double jump, single foot, and alternating feet/shuffle.

Squat Jumps

- This exercise will be used to introduce the member to plyometric moves
- Stand with feet slight wider than shoulder width apart.
- Squat down to a comfortable depth (this will vary from member to member)
- Do not go below thighs parallel to the deck (i.e., a 90 degree bend in the knees)
- Perform a vertical jump
- Emphasis should be on proper form and technique NOT how high the member can jump or the number of repetitions
- Please remind them that they will land with “soft knees” and with as little impact as possible

Standardized PRT Warm-Up

This standardized dynamic warm-up is designed to target all the muscles used during the Navy PRT. If performed correctly, it will prepare the muscles for the test by increasing the range of motion, temperature, and blood flow to the muscles. This standardized warm-up should NOT fatigue the individual and will actually improve his/her performance on the test. Highly recommend you explain this to your command before conducting the standardized PRT warm-up.

Exercises:

1. 10 military four-count Pec Fly w/ Overhead Raise
2. 10 military four-count Chest Press / Shoulder Press
3. 10 military four-count Basic Squat
4. 10 military four-count Calf Raise
5. 10 military four-count Knee Blocks to the right
6. 10 military four-count Knee Blocks to the left
7. 10 military four-count 3 Side-Step Touch the Deck *
8. 30 seconds of Quick Feet followed by 30 seconds of High Knees *

* If the member has lower body joint problems and should not do high-impact exercises, they can perform the Basic March in lieu of 3 Side-Step Touch the Deck (#7) and/or perform High Marching in lieu of Quick Feet / High Knees (#8).

- After performing the standardized warm-up, give individuals 5 minutes to perform an individual warm-up and stretching as needed.

- After the Navy curl-up, have all members perform a hip flexor stretch to relax the hip flexors for the run.

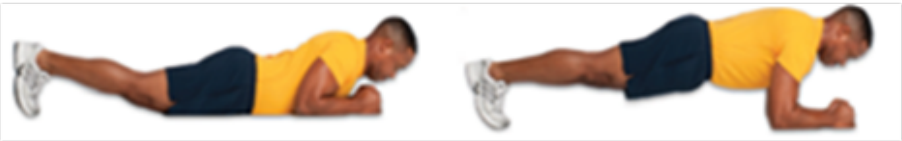
- After the run, have all members walk for 5-10 minutes as a cool-down. Take all members through the 12 flexibility exercises (30 second hold using an echo count) after the cool-down. Encourage members to hydrate well after the PRT.

2016

Dynamic Exercise Quick Reference Guide

Dynamic Warm-Up (Level 1)

Pillar Bridge



Reverse Lunge, Elbow to Instep (Kneeling)

Lateral Pillar Bridge

Basic Squat

Glute Bridge

Knee Blocks

Chest Press / Shoulder Press

Jumping Jacks

Dynamic Warm-Up (Level 2)

Pillar Bridge w/ Arm Lift

Reverse Lunge, Elbow to Instep (In Place)

Dynamic Lateral Pillar Bridge

Split Squat

Glute Bridge w/ Knee Extension

3 Sidestep Touch the Deck

Y's (Bent Over)

Jump Rope

Dynamic Warm-Up (Level 3)

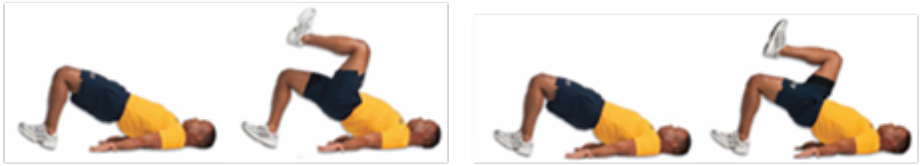
Pillar Bridge w/ Alternating Hip Flexion

Reverse Lunge, Elbow to Instep (In Place w/ Rotation)

Pillar Bridge w/ Abduction

Lateral Squat

Glute Bridge Marching



Quick Feet / High Knees

T's (Bent Over)

Squat Jumps

Navy Selected Top 12 Stretches

Stretch 1: Chest Stretch

Description: In a standing position, gently clasp both of your hands and place them on the back of your neck. Slowly pull your elbows back until you feel a stretch on your chest. Do not pull your head forward or place tension on the neck

Caution: You can do this as a partner assisted stretch but they should not force the stretch by aggressively pulling back on the elbows.

Stretch 2: Posterior Shoulder Stretch

Description: Place your left hand on the back side of your right arm above your elbow on the front of your body and gently pull your arm across your body. You should feel a stretch on back side of your shoulder and upper arm. Repeat to stretch opposite side of your body.

Stretch 3: Triceps Stretch

Description: Take your left arm and reach behind your back. By placing your right hand on the back side of your left arm, gently push back to achieve a stretch on the left triceps muscle. Repeat on opposite side.

Stretch 4: Hip Flexor Stretch

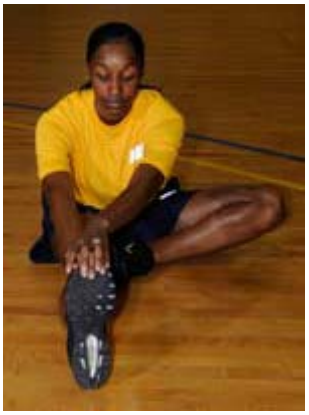
Description: In a standing position, place your right foot approximately 3 to 4 feet in front of your left foot (like a lunge). Slowly bend both knees until you lower your body towards the ground. Your left knee should almost be at 90 degrees. Gently push your left hip forward to feel the stretch in the front of your hip. If you don't feel the stretch, gently lean your upper body back.

Tip: Since you use this muscle group during the Navy Curl-Up, this stretch should be performed after the curl-up event to prevent cramping and prepare this muscle group for the cardio event

Stretch 5: Groin or Butterfly Stretch

Description: While sitting with the upper body nearly vertical and legs straight, bend both knees, and bring the soles of the feet together. Pull feet toward your body. Gently place your hands on your feet and your elbows on your knees. Pull your upper body slightly forward as your elbows push down. You should feel a stretch in your groin area.

Stretch 6: Modified Hurdler Stretch



Description: While sitting in a v-position, gently pull your left foot towards your groin area. Your right leg will remain straight with a slight bend in the knee. Gently lean forward and reach for your toes on your right leg to stretch out your hamstring.
Note: The stretch will be more difficult if you try to perform the hamstring stretch if you pull your toes back towards your body (vs. pointed).

Stretch 7: Outer-Hip-and-Low-Back-Stretch

Description: While in a long sitting position (legs in front of you with knees straight), cross your right leg over the left. Your right foot should be on the ground at approximately your left knee level. Take your left elbow and place it on the outside of your right knee and gently push your knee towards the left side of your body. You should feel a stretch on the outer portion of your right hip and in your low and mid back region. Repeat to opposite side.

Stretch 8: Piriformis Stretch

Description: While you are lying on your back, gently cross your right leg over your left thigh (both knees are bent at 90 degrees). Take both hands and place on the back side of your left thigh. Gently pull towards your chest until your feel slight tension in your right buttock and outer thigh. Repeat on opposite side.

Note: If you are experiencing low back pain after performing physical activity, seek medical assistance. This exercise should be performed to increase flexibility in this region and may assist in decreasing pain.

Stretch 9: Low Back Stretch

Description: While lying on your back, gently pull one or both knees to your chest. You should feel a stretch in your low back and buttocks.

Stretch 10: Quadriceps Stretch

On-the-Ground Description: While lying on your side, with a slight bend in your left knee, grabs your right ankle with your right hand and maintains your balance. Gently pull your right foot towards your buttocks while making sure your knees is aligned with the body (make sure knee is not sticking out and it is directly below your hip. Repeat to opposite side.

Standing Description: In a standing position, with a slight bend in your left knee, grab your right ankle with your right hand and maintain your balance. Gently pull your right foot towards your buttocks while making sure your knees is aligned with the body (make sure knee is not sticking out and it is directly below your hip). You can also stretch out your trapezius (neck) muscles during this quadriceps stretch (neck muscles) by bringing your chin to the opposite side of your chest. Repeat to opposite side.

Note: If you are having difficulty balancing you can hold on to a wall or perform this stretch while lying on your side.

Stretch 11: Abdominal Stretch

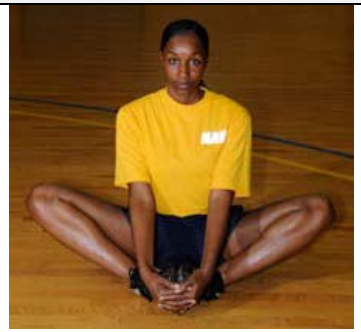
Description: On your stomach, place your hands beneath your shoulder and gently push up until you feel a stretch on your abdominal muscles. Do not fully lock out your elbows and hyperextend your back.

Note: If you feel any discomfort in your low back while performing this exercise, you can reduce the tension by using the "propped on elbow" position.

Stretch 12: Calf Stretch

Description: In a push-up position, cross the left foot over the right. With the right knee straight, gently push the right heel toward the deck. You will feel a stretch in the right calf. Hold for 15 seconds. Repeat to opposite side.
Note: Your body should remain in a straight line from your shoulders to your ankle to prevent low back injury and to strengthen your core muscles.

Top 12 Navy Stretches Quick Reference Guide

Stretch 1: Chest	Stretch 2: Posterior Shoulder	Stretch 3: Triceps	Stretch 4: Hip Flexor
Stretch 5: Groin or Butterfly	**Stretch 6: Modified Hurdler**	**Stretch 7: Outer Hip/ Low Back**	**Stretch 8: Piriformis**
			
Stretch 9: Low Back	**Stretch 10: Quadriceps**	**Stretch 11: Abdominal**	**Stretch 12: Calf**

Things to Avoid While Stretching

1. Avoid extreme hyperextension of the spine (arching the back).

2. Avoid locking any joint and always keep a slight bend in the knee when performing standing stretches.

3. Never force a movement.

4. Avoid forward flexion of the spine.

5. Avoid spinal rotations, they are bad for the back.

6. Do not perform circular motions.

Things to Avoid While Stretching

It is best to completely avoid *contraindicated* positions or stretches. Although it is not guaranteed that an injury will result, the chances are much increased. There are safe and effective alternatives to contraindicated stretches. Even if you do not feel pain while performing a contraindicated stretch, damage may occur, which will show up later.

This stretch may cause an individual to get dizzy (extreme hyperextension)	Deep squats put too much pressure on the knees	Leaning too far forward places excessive pressure on lower back
This stretch puts too much stress on the knees and ligaments	Avoid the knee extending beyond the toes	The Hurdler's stretch places excessive pressure on the tendons and ligaments of the bent knee

Contraindicated/High-Risk Exercises

Contraindicated Exercises	Rationale	Alternative Exercise
Donkey Kicks	Places excessive pressure, hyperextension of low back	Glute Bridge
Deep Knee Bends	Overstretches ligaments of the knee	Reverse Lunges
Deep Knee Lunges	Places excessive pressure on the forward knee	Reverse Lunges
Windmill	Places a tremendous amount of stress on the low back and supporting muscles	Toe Tap to the Front / Toe Tap to the Rear
Cherry Pickers	Places excessive pressure on the low back and supporting muscles	Bicep Curls Knee Blocks Steam Engines
Flutter Kicks	Place excessive pressure on low back and/or cervical spine	Bicycles/ Plank/Isometric hold
Hello Dollies	Places excessive pressure on the low back	Bicycles/Plank
Jack Knives	Places excessive pressure on the low back	Bicycles/Plank
8-Count Bodybuilders	Can lead to increased compression of the spine, potentially leading to stress fractures and/or muscles strains	Plank/Side Bridges/ Alternating Superman
Mountain Climbers	Increased compression of the spine during rotation.	Plank / Side Bridges
Ballistic Wood Chops	Incorporates ballistic/bouncing movements which are considered a contraindicated movement	Knee Blocks/Steam Engines/Standing Side Crunch
Star Bursts	Ballistic movement	Jumping Jacks/ Plyo-Jacks
Simultaneous arm and leg lifts on stomach or swimmers	Hyperextends the back and places pressure on spine	Alternate opposite arm, opposite leg/ Bird dog (alternate on hands and knees)
Hurdler's Stretch	Places excessive pressure on flexed knee joint	Modified Hurdler's Stretch
Standing Hamstring Stretch	Places excessive pressure on the low back	Modified Hurdler's Stretch
Quadriceps Stretch (sitting on knees) and lying back	Places excessive pressure on both knee joints	Standing Quadriceps Stretch / Lying Quadriceps Stretch

Contraindicated Stretches	Rationale	Alternative Exercise
Sit and Reach (Hamstring)	Places excessive pressure on low back	Modified Hurdler's Stretch
Standing Toe Touch	Extreme unsupported lumbar flexion, increases pressure on back and small muscles	
Yoga Plow	Places excessive pressure on cervical intervertebral disks	Superman (alternating arms)
Neck Hyperextension and Neck Rolls	Can pinch anterior cervical nerves and over compress cervical intervertebral disks	Gently lower your chin to your chest (Do not perform neck circles)
Lumbar Rolls	Can over compress the lumbar intervertebral disks	Toe Tap to the front/ Toe Tap to the rear
Swimmer's Arm Stretch (clasp hands behind back and lift)	Could lead to shoulder instability and predisposition to injury as well as places excessive pressure on low back	Standing Chest Stretch (using a doorway)
Chest Fling Backs	Involves ballistic, controlled movements	Standing Chest Stretch (using a doorway)
Wide Circle Sun Gods	Overstretches ligaments of the shoulder and could possibly damage shoulder cartilage	Pec Fly w/Overhead Raise

NAVY
PHYSICAL
READINESS
PROGRAM

Appendix A

Sample Workouts

Sample Training Schedules

Sample 3-Day Per Week Command/Unit PT/FEP Training Schedule					
	Monday	Tuesday	Wednesday	Thursday	Friday
Dynamic Warm-up	5 min		10 min		10 min
Pre-Planned Activity	20 min LSD	-	30 min Total Body Metabolic Circuit	-	20 min Interval *or* Repetition
	20 min Strength Circuit	-		-	
Cool Down	5 min		5 min		5 min
Stretch	5 min		5 min		10 min
Total Time:	55 min		50 min		45 min

Sample 5-Day Per Week Command/Unit PT/FEP Training Schedule					
	Monday	Tuesday	Wednesday	Thursday	Friday
Dynamic Warm-up	10 min	5 min	5 min	5 min	5 min
Pre-planned Activity	20 min Sprints* *or* High Intensity Circuit*	30 min Total Body Metabolic Circuit	15 min Pace/Tempo Training *or* Mock PRT	30 min Total Body Metabolic Circuit	30 min 3 mile LSD *or* Fartlek Training
Cool-down	5 min	5 min	5 min	5 min	5 min
Stretch	5 min	5 min	5 min	5 min	5 min
Total Time:	40 min	45 min	30 min	45 min	45 min
* Limit high intensity workouts to no more than 2 times per week.					

Sample Circuit Training Layout

Sample Strength Training Exercises

Activity	Beginner Level	Intermediate Level	Advanced Level
Push-ups	Push-up on Knees	Regular Push-up	3-Count Down Push-up
Squats	¼ Squats	3-Count down Squat	Squat w/ Body Bar or Tubing
Curl-ups	Basic Curl-up (until fatigue then proceed to crunch)	Basic Curl-up	Reverse Curl-up or Curl-up w/ Medicine Ball
Triceps Super Set (10 push-ups,10 military presses. Repeat cycle for entire circuit)	Push-up on knees (w/ narrow hand stance) Military Press (w/out resistance)	Regular Push-up (w/ narrow hand stance) Military Press (w/out resistance)	3-Count Down Push-up (w/ narrow-hand stance) Military Press (w/ no resistance or w/ tubing)
Lunges	¼ Lunge	Stationary Lunge (w/ or w/out body bar)	Reverse Lunge (may use body bar)
Core Strength: (20 seconds each) Plank R Side Plank L Side Plank	Exercises performed on elbows	Exercises performed w/ arms straight (slight bend in elbow)	Incorporate Push-up in exercise (e.g., Push-up, R Side Plank, Push-up, L Side Plank, Push-up)
Dips (on step or bench)	Basic Dip	3-Count Down Dip	3-Count Down Dip (w/ 10 second isometric hold in down position after each set of 10 reps)
Calf Raises	Basic Calf Raises	1 Leg Calf Raises or use Body Bar	Simulate Jump Shot

Activity	Beginner Level	Intermediate Level	Advanced Level
Core Strength: Back Strength	Basic Bridge for 20 to 30 second hold (Repeat)	Basic Bridge w/ 1 leg straight (Hold 20 to 30 second each side)	Basic Bridge w/ 1 leg straight (Switch sides every 10 seconds)
Step-up (One foot remains on top of platform to reduce injury)	1 Level Step-up 30 seconds each leg	2-3 Level Step-up 30 seconds each leg (May use body bar)	2 Level Step-up (Add hand weights to increase difficulty or jump shot after each step up)
Step-Squat-Step	Side Step w/out band or light resistance(yellow or red)	Side Step w/ medium resistance band (blue band)	Side Step w/ heavy resistance circle band (black or grey band)
Bicep Curl	Low Resistance Tubing	Medium Resistance Tubing	Heavy Resistance Tubing w/ 3 Count Down

Sample Cardiovascular & Plyometric Exercises

Activity	Beginner Level	Intermediate Level	Advanced Level
Football Player Shuffle (Quick Feet and High Knees)	Beginner will only raise their knees to parallel and time will be limited in high knee position (5 to 10 seconds)	Participants will raise knees to chest and high knee position will last 10 to 20 sec	Participants will raise knees to chest and high knee position will last (20 to 30 seconds) and participants will call out time (in seconds)
Jumping Jacks	Low Impact Jumping Jack (only using arms)	Regular Jumping Jack	Jack-Jab Series Ex: Jack-Right Jab-Jack-Left Jab
Jump Rope (simulate jumping rope)	Basic move w/ 2 feet on ground	Alternate Feet	Same exercise as Intermediate
Line Jumping (Side-to-Side)	Both Feet	Both Feet (20 sec) Right Foot (10 sec) Left Foot (10 sec)	Hop the Fence (Exaggerated movement)
Box Drill	Same Exercise Increased Rest Period	Same Exercise	Same Exercise
Speed Bag	Same Exercise	Same Exercise	Same Exercise
3 Side-Step and Touch the Deck	Same Exercise	Same Exercise	Same Exercise

Sample Metabolic Circuit Exercises

Activity	Beginner Level	Advanced Level
Upper-body Strength	Push-up on ground followed w/ Military Press in air	Add a body bar to this exercise.
Plyometrics	Line Hopping Side-to-Side	Incorporate Hurdles (Members will jump over these sideways)
Core Strength	Basic Bicycle	Bicycle on exercise ball
Lower-body Strength & Cardio	Steam Engines	Same exercise as Beginner
Upper-body Strength	Chest Press w/ Tubing (use partner if even numbers)	Same exercise as Beginner
Core Strength	Basic Plank	Walking Plank (Plank on elbows to push-up position and return to elbows)
Plyometrics/Footwork	Carioca Ladder (or alternating wide march-narrow march at fast pace)	Carioca Ladder (Incorporate high knees, in/out (hop scotch), etc).
Core Strength	Superman (5 sec hold w/ alternating arm and leg).	Superman - Alternate arms and legs (not at the same time)
Cardio	Jumping Jack	Jack-Jab or Jumping Jack w/ Plyo Jump
Upper-body Strength	Bent Over Row (w/ tubing or body bar)	Increase difficulty w/ tubing or bar weight
Cardio and Plyometrics	Box Step	Box Step w/ Plyometric Jump
Upper-body Strength	Bicep Curls w/ Tubing or Body Bar	Increase tube resistance or bar weight
Cardio	Mock Jump Rope	Same exercise as Beginner
Core Strength	Side Plank	Side Plank w/ Oblique Twist
Plyometrics	Box Step	Same exercise as Beginner
Upper-body Strength	Triceps Dip on Bench	Use 3 Count Down
Lower-body Strength	Stationary Lunges	Stationary Lunges w/ Medicine Ball Chop
Core Strength	“In and Outs” in the V position	Jack Knives or Pikes on Medicine Ball
Cardio and Plyometrics	Low Impact Speed Skater	High Impact Speed Skater (Hop side to side)
Core Strength	Basic Bridge	Bridging w/ one leg or doing a hamstring curl or exercise ball
Cardio	Side Shuffle (w/ boxer Crossover Punch)	Same exercise as Beginner

Sample Circuit Training Exercises for Confined Spaces

Activity	Beginner Level	Advanced Level
Upper Body	Basic Push-Up	Negative Push-up, Altered Hand Stance, Resistance Push-up, etc.
Cardio	Jump Rope (Both feet jumping)	Jump Rope: One Foot Jump Rope or Jump Rope Shuffle/Alternating Kicks
Core	Crunches	Crunches on an Exercise Ball
Plyometrics	Side to Side Line Jumping w/ Both Feet	Side-to-side Jumping (over Hurdles)
Core Strength	Back Extension Prone (on belly). ** If this hurts member's back, have them do Superman (alternating opposite arm and leg in the prone position).	Back Extensions on Exercise Ball
Plyometrics	Dot Jumping: Hop Scotch. Dots will be placed in the order of "5" on a die. The exercise sequence: (start w/ 2 feet wide on the bottom dots- Hop forward w/ feet together to middle dot and hop forward w/ feet wide to top 2 dots. Return to start by going backwards.	Same exercise as Beginner
Lower-body Strength	Basic Squats	3-Count Down Squat or use Body Bar or Tubing w/ Squat
Upper-body Strength	Bicep Curls (w/ tubing or weights)	Increase difficulty w/ resistance of tubing or weight of body bar/dumb bells
Cardiovascular	Glute Kickers	Pick up the Tempo (but make sure you maintain good form)
Core and Lower Body	20 Degree Side Bends/Standing Side Crunches (knee goes to elbow)	Same exercise as Beginner
Upper-body Strength	Overhead Tricep Extension (w/ tubing or body bar, keep Elbows tucked in). Can modify this exercise to a supine (on back position) and perform "Skull Crushers"	Increase difficulty w/ resistance of tubing or weight of body bar
Cardiovascular	Box Step	Perform a Lower Box Step to Engage more of the Legs. Can also add a Plyo-Jump at the end of the Box Step.
Lower-body Strength	Side-lying Leg Raises (for outer hip)	Side-lying Leg Raises w/ tubing or ankle weights

Cardiovascular	Quick Feet/ High Knees	Same exercise as Beginner
Upper-body	Front and Lateral Raises for Shoulders	Increase difficulty w/ resistance of tubing or amount of hand weights.
Cardiovascular & Lower Body	Steam Engines	Same exercise as Beginner
Upper-body Strength	Chest Press (w/ tubing)	Increase difficulty w/ resistance of tubing
Core Strength	Obliques: Bicycle	Bicycle on Exercise Ball

Appendix B

Improving PRT Scores

Training Methods for Improving the 1.5 Mile Run		
Training Method	Benefit	Example
Long Slow Distance (LSD)	Builds aerobic base	3 mile or 30 minute run at members own pace
Pace/Tempo	Train at and improve 1.5 mile race pace	To determine appropriate treadmill setting (mph), divide 90 by your desired 1.5 mile run time. Ex: For a 12:30 run time, divide 90 by 12.5 which equates to 7.2 mph setting on the treadmill.
Interval Sample 1: High Intensity Cardio Circuit*	Improves aerobic power and enhances anaerobic metabolism	Step 1: Jumping Jacks for 30 sec Step 2: Quick Feet/High Knees for 30 sec Step 3: Cross Country Skiing for 30 sec Step 4: Rest for 2 min Step 5: Push-Ups for 30 sec Step 6: Crunches for 30 sec Step 7: Glute Bridge/Plank hold for 30 sec Step 8: Rest for 2 min Repeat 3 times
* As member progresses, periodically increase the allotted time for each event (e.g., from 30 sec to 45 sec), decrease the amount of time for rest (e.g., from 2 min to 1 min), and/or increase the number of cycles completed (e.g., from 3 to 5 cycles).		
Interval Sample 2: “FEP for Five”		5 regular push-ups 5 curl-ups or crunches Plank position (count up to 5 using a military four count) Bridging (count up to 5 using a military four count) Superman (alternating arm with leg, not at same time)
Perform each exercise for 5 repetitions using a military four count. As member progresses, periodically increase the number of repetitions (e.g., 3 to 5) and/or the cycles completed (e.g., from 2 to 3).		
Repetition	Improves running speed, running economy (form), and anaerobic metabolism	Sprint 50 yards* at 50-60% max intensity Sprint 50 yards* at 60-70% max intensity Sprint 50 yards* at 70-80% max intensity Sprint 50 yards* at 80-100% max intensity
* As member progresses, periodically increase the sprint distance (e.g., from 50 to 75 yards) and/or increase the number of cycles completed (e.g., from 3 to 5).		

Training Methods for Improving Push-ups		
Training Method	Benefit	Example
Upper-body Strength Training	Improves upper- body strength and endurance	Bench Press* (1-3 sets of 8-12 reps) Shoulder Press* (1-3 sets of 8-12 reps) Tricep Extension* (1-3 sets of 8-12 reps)
* The amount of weight is determined by how many reps the member is able to complete using proper form. Optimal reps: 8-12. If the member is able to perform 12 or more reps, increase the weight in 5 pounds increments. If the member is only able to perform 8 or fewer reps, decrease the weight in 5 pound increments.		

Training Methods for Improving Curl-ups		
Training Method	Benefit	Example
Core Strength Training	Improves abdominal, low back, and hip	Knee Lifts* (2 sets of 15-25 reps) Plank* (30 sec hold for 2 sets)

	flexor strength and endurance	Side plank (R&L) hold for 30 sec Bicycle* (2 sets of 15-25 reps) Crunches* (2 sets of 15-25 reps)
* As member progresses, periodically increase the number of sets performed (e.g., from 2 to 3) and/or the allotted amount of time (e.g., from 30 sec to 45 sec).		

Appendix C

FEP Monthly Tracking Log

FEP Monthly Tracking Log

Week 1		**Date:**
	Activity Performed / Location	**Hours**
MON		
TUES		
WED		
THURS		
FRI		
Weekly Results: Wgt: P/U: C/U: Cardio:		
Week 2		**Date:**
	Activity Performed / Location	**Hours**
MON		
TUES		
WED		
THURS		
FRI		
Weekly Results: Wgt: P/U: C/U: Cardio:		
Week 3		**Date:**
	Activity Performed / Location	**Hours**
MON		
TUES		
WED		
THURS		
FRI		
Weekly Results: Wgt: P/U: C/U: Cardio:		
Week 4		**Date:**
	Activity Performed / Location	**Hours**
MON		
TUES		
WED		
THURS		
FRI		
Weekly Results: Wgt: P/U: C/U: Cardio:		
Week 5		**Date:**
	Activity Performed / Location	**Hours**
MON		
TUES		
WED		
THURS		
FRI		
Weekly Results: Wgt: P/U: C/U: Cardio:		
Monthly BCA Results: Wgt: Neck: Ab: Hips: BF%:		
Monthly PRT Results: P/U: C/U: Cardio:		

_____ _____ _____ _____

Member's Signature Date CFL/ACFL Signature Date

Appendix D

Glossary of Terms

Glossary of Terms

1. Ballistic Stretching. Forcing a limb into an extended range of motion including bouncing or jerking motions.

2. Cardiorespiratory. The ability of the circulatory (blood) and respiratory (lungs) to supply oxygen to the skeletal muscles during sustained physical activity.

3. Circuit Training. Combines high-intensity aerobic and resistance training that is designed to be easy to follow, target fat loss, muscle building, and cardiorespiratory fitness. A “circuit” is one completion of all exercises in the program. Time between exercises is short with rapid movement to the next exercise.

4. Concentric and Eccentric Contractions. Concentric is when the muscle shortens to lift a load. Eccentric is when the muscle fiber lengthens to lower a load. Strength training programs should include both movements.

5. Contraindicated Exercise. A movement that is potentially dangerous to the body. These exercises are not to be performed as a part of any command led PT.

6. Core. The muscles that stabilize the body located in the abdominal region and lower back. Functional movements are highly dependent on the core, and lack of core development results in a predisposition to injury.

7. Dynamic Warm-up. A 5-10 min period designed to prepare the body for the demands of a work out or practice. These movements progress from low to high intensity and include all planes of motion.

8. Fartlek Training. This term is Swedish for “speed play.” A less structured approach to interval training comprised of speed and fun. The session may be made up as you go along including jogging, running, and sprints.

9. FITT Principle. The FITT principle (Frequency, Intensity, Time, and Type) is the fundamental framework for designing physical activity programs. These four principles are applicable to exercising at low to moderate levels and are used to establish guidelines for both cardiorespiratory and resistance training.

10. FEP for Five. A Navy concept used to slowly introduce exercises whether to deconditioned members or new exercise programs that utilizes small repetitions (no more than 5 repetitions) within a set of 5 exercises.

11. Flexibility. This is the range of motion of a joint that may increase by stretching. Stretch after your workout when your muscles are warm and pliable.

12. Functional Movement. These are movement patterns used on a daily basis. Specific exercises can assist in preparing our body and preventing imbalances (e.g., plank is a functional movement that engages entire core vice crunches).

13. Interval Training. Training that involves bursts of high- intensity work. High-intensity work (near-maximum effort) for 3-5 minutes (may start off at 1 minute for FEP) is alternated with periods of rest or low-intensity activity. Work-to-rest ratio should be 1:1 so a 3 minute run should be followed by a 3 minute walk.

14. Isometric Exercise. This is a type of strength training where the contraction of the muscles occurs without any visible movement in the angle of the joint (vice concentric or eccentric). Isometrics are done in static positions (e.g., plank).

15. Long Slow Distance (LSD). Running slowly or running for a set amount of time or distance without regard to time.

16. Overload. Greater than normal stress on the body is required for training adaptations/improvements to be made. Increased stress can refer to additional weight (as in resistance training) or speed or distance (as in aerobic conditioning).

17. Pace/Tempo Training. Aerobic training at a intensity slightly higher than race pace. This can be accomplished by setting the treadmill at a desired PRT speed with focus on increasing duration at that speed. The benefits include improved race pace and running economy (form).

18. Progression. This is a periodically increase in training stimulus in order for training improvements to continue over time. The principle of progression states that there is an optimal level of overload and an optimal time frame for this overload to occur. Too much overload too soon can lead to injury and too little overload not often enough can lead to training plateaus.

19. Repetition Training. This is the most intense form of aerobic training. Work intervals are usually only 60-90 seconds separated by rest intervals of 5 minutes or more. Typical work-to-rest ratio is 1:5. Repetition training helps to improve running speed and running economy.

20. Static Stretching. These are techniques that gradually lengthen a muscle to an elongated position (to the point of discomfort). Stretches (e.g., hamstring stretch) are performed after the body is warmed up vice prior to beginning exercise.