

GUIDE 9

COMMAND/UNIT PHYSICAL TRAINING (PT) AND FITNESS ENHANCEMENT PROGRAM (FEP)

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Table of Contents

Section 1: Command Physical Readiness Program Overview	Page
1. Overview	3
2. Program Strategies	3
3. Medical Screening	3
4. Command/Unit Physical Training (PT).....	3
5. Procedures	3
6. Commercial Programs	4
7. Emergency Response Plan (ERP).....	4
 Section 2: Fitness Enhancement Program (FEP) Overview	
1. Overview	5
2. Program Administration	5
3. Lessons Learned/Best Practices.....	7
 Section 3: Components of Fitness and Physical Training	
1. Purpose	8
2. Components of Fitness	8
3. Command/Unit PT Components	9
 Section 4: Basic Exercise Principles and Programming	
1. Basic Fitness Principles	14
2. Overload and Progression	15
3. Overtraining and Overreaching	16
4. Cueing Command PT	16
5. Exercise Tempo	17
6. Movement Compensations	18
7. Contraindicated Exercises and Stretches	19
8. Overcoming Obstacles to Command PT/FEP.....	19
9. Resources.....	19
 Appendices	
A. Pre-Physical Activity Questions for Command/Unit PT and FEP.....	22
B. Command PT Regeneration	24
C. Sample Workouts.....	33
D. Improving PRT Scores	38
E. FEP Monthly Tracking Log.....	40
F. Glossary of Terms.....	42

Section 1: Command Physical Readiness Program Overview

1. Overview. The Command Physical Readiness Program is the command's action plan to maintain and improve the overall health and fitness of the Sailors.
2. Program Strategies. Program strategies include increased opportunities for physical activity and resources. Program strategies that target the entire command are more likely to be sustainable and promote healthy lifestyle behaviors.
 - a. Command/Unit Physical Training (PT) Guidelines for developing PT programs are provided in Section 4 of this guide.
 - b. Command/Unit PT Components (Section 3), provides details on the command PT components. Command Fitness Leaders and Assistant Fitness Leaders (CFL/ACFLs) need to familiarize themselves with this information before conducting Command/Unit PT or the Fitness Enhancement Program (FEP).
3. Medical Screening. All members must complete the required medical screening to confirm health status and screen for physical activity risk factors. CFL/ACFLs must ask the five Pre-physical Activity Questions before every Command/Unit PT and FEP session (See Appendix A).
4. Command/Unit PT. Command/Unit PT is any command-led physical activity. Command/Unit PT must be led by a certified CFL, ACFL, or Morale Welfare Recreation (MWR) Fitness Specialist per the OPNAVINST 6110.1 (series). Military personnel must wear the authorized Navy Physical Training Uniform (PTU) or the Optional PTU.
5. Procedures. 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.
 - d. Always have a PT session plan. Know in advance what space, activities, and equipment will be utilized in the PT session. If applicable, advise command members on proper attire and footwear for the planned activities.
 - e. Ensure all ACFLs know their role during the sessions.
 - f. Take muster before and after the PT session.
 - g. Read aloud the five Pre-Physical Activity questions before Command/Unit PT (Appendix A).
 - h. Start with an appropriate dynamic warm-up exercise routine.

i. Provide instruction on alternative options for personnel with limited exercise capabilities.

j. End the session with cool down and regeneration (Appendix B).

6. Commercial Programs. The Navy does not endorse any commercialized fitness programs. CFL/ACFLs are not authorized to display copyrighted programs (e.g., video, paper, social media, mobile apps) during Command/Unit PT sessions.

7. Emergency Response Plan. An Emergency Response Plan (ERP) must be in place for contacting emergency medical services when conducting Command/Unit PT on base. Consult local medical facilities for guidance. At a minimum, the ERP will include telephone numbers, location of the nearest automated external defibrillator (AED), procedures for summoning aid, and clear directions for emergency response personnel to avoid confusion and expedite response times. Include guidance for contacting base security personnel to assist with unimpeded emergency personnel access to the desired location. If conducting Command/Unit PT at a MWR facility (e.g., aquatics, fitness) default to the facility's emergency procedures.

Section 2: Fitness Enhancement Program (FEP) Overview

1. Overview. FEP is a command-wide program to improve physical activity and nutrition behaviors. Per the OPNAVINST 6110.1 (series), Commanding Officers/Officers in Charge (CO/OICs) must establish and monitor an effective 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 member progress.

b. Program Participation. Any member that is not within Physical Fitness Assessment (PFA) standards is required to be formally enrolled into FEP. Members may also participate in FEP by command- or self-referral.

c. Mandated FEP Requirements:

(1) Written Counseling for FEP enrollment. Enlisted members are issued a NAVPERS 1070/613 (Page-13) and Officers are issued a Letter of Notification (LON) to officially inform them of FEP enrollment and nutrition requirements. Refer to PRP Guide 3 for additional information.

(2) FEP PT. FEP sessions are only led by designated CFLs, ACFLs, or MWR Fitness Specialists. It is the CFL's responsibility to ensure ACFLs administering FEP are familiar with the OPNAVINST 6110.1 (series) and PRP guides. In the event a member is assigned to a joint command without a certified CFL, FEP may be administered by the Service-equivalent CFL or Fitness Specialist of the sponsoring military service.

(3) FEP Hours. Unless otherwise directed by the command's mission/commitments, FEP activities are to be conducted during normal working hours and a minimum of 3 times per week for a total of 150 minutes or more.

(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 not being within BCA [to include Age-Adjusted Standards (AAS)] and/or PRT standards. Each option must include goal setting, long-term behavior modification, and ongoing support. The CFL has an important role in making referrals to Registered Dietitian Nutritionists (RDN)/healthcare providers (HCP). CFL and ACFLs do not provide diets, recommend specific caloric intakes, or provide nutrition counseling. Detailed information regarding FEP participant nutrition education requirements and available resources are provided in PRP Guide 10. CFLs will annotate the nutrition option selected by the member in the FEP section of PRIMIS. The

FEP participant needs to provide proof of completion to the CFL for record-keeping in PRIMIS.

d. FEP Documentation. All FEP records are the property of the command and are to be maintained for no less than five years. FEP documents include:

(1) Weekly PT sessions

(2) Weekly body weight weigh-ins

(3) Monthly mock PFA results, including BCA and PRT components

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

e. FEP Participation and Disenrollment. Members are required to remain enrolled in FEP until passing one mock or official PFA with PRT scores at or above Satisfactory-Medium and be within AAS. If a member fails the BCA and/or PRT and is subsequently medically waived from an event, they will remain on FEP until they successfully pass a mock or official PFA for the events which they are medically cleared for.

f. Progress. Progress may be assessed via program participation records and monthly mock PRT and BCA results. Each member's progress will vary and depend on members' age, health status, fitness level, and body composition.

(1) PRT. Improved mock scores are the number one indicator of improvement for fitness.

(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 for body fat mass loss and weight loss is 1-2 pounds per week. Safe body weight or fat mass losses should not typically exceed more than 5% in any month.

g. FEP Session Uniform Requirements.

(1) Uniform. The Navy PTU or Optional PTU is the official uniform for Command/Unit PT, the PFA, and FEP.

(2) Footwear. Shoes will be comfortable and support the planned exercise and athletic socks are not to exceed mid-calf. Low-cut socks are permitted.

h. Local Resources. Command CFL/ACFLs, Dietitians, local health promotions personnel, medical department representatives, ShipShape facilitators, and MWR fitness professionals can help structure a member's program to produce the greatest benefit.

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 physical readiness standards. Monthly data are required to be recorded in PRIMS. Review each member's progress at least monthly. A 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 weigh-ins as well as a monthly mock PFA.

b. When possible, partner with MWR for assistance with Command PT and FEP. MWR fitness specialists are the experts in the field and trained to assist with group and individualized exercise programs.

c. Promote additional caloric expenditure outside of FEP PT. It is recommended that members focusing on weight-loss perform daily physical activity. Regular, daily exercise is required to maintain a healthy weight. All members should strive to increase activity outside of FEP.

d. Command/Unit and FEP PT Guidance:

(1) Section 4 provides group exercise guidance.

(2) Limit formation runs. Formation runs alter stride lengths, potentially over-training the least fit and under-training the fittest. Use PRT run times to group members into three to four like-fitness levels.

(3) Avoid fitness programs that promote overtraining, 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 (Section 4) at all command-led PT sessions.

(5) Promote a variety of activities beyond regimented, group calisthenics, and formation runs.

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

Section 3: Components of Fitness and Physical Training

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

2. Components of Fitness:

a. **Energy System Development**. The body's ability to uptake, transport, and utilize oxygen as fuel in working muscles during sustained exercise. Sailors should perform at least 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) per week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) per week of vigorous-intensity cardiorespiratory activity, or a combination of both. Command PT sessions should use all the body's energy systems:

(1) Anaerobic lactic & alactic systems: energy pathways used in the body when oxygen is absent.

(2) Aerobic system: energy pathway used when oxygen is present.

b. **Musculoskeletal fitness (i.e., strength training)**. The ability of muscles to exert, absorb, or neutrally produce a force on external resistance.

(1) Exercises include muscle-strengthening activities that are of moderate or high intensity. Muscle-strengthening sessions should involve all major muscle groups, being performed two or more days a week.

(2) Types of muscle contraction:

(a) Eccentric. Muscle lengthens

(b) Concentric. Muscle shortens

(c) Isometric. No change in the length

(3) Types of strength training:

(a) Power. Ability to move the weight with acceleration.

(b) Muscular Strength. Maximum amount of force that a muscle (or muscle group) can exert against an external resistance.

(c) Muscular Endurance. The ability of a muscle (or muscle group) to exert submaximal force against resistance repeatedly over time or distance.

c. **Flexibility and mobility**. The ability of a joint to move freely through its full range of motion.

(1) Flexibility is an important but often overlooked component of exercise. Include exercises focused on improving flexibility in each PT session. Sessions should involve all major muscle groups two or more days a week.

(2) A stretching session will be led after the PT session because muscles are warmer and more pliable after exercise.

(3) Stretching exercises should be slow and controlled instead of fast or bouncy.

(4) There are two forms of stretching that can be performed, static stretching, which consists of 10-30 second holds per muscle group, and Active-Isolated Stretching (AIS) that uses the principle of reciprocal inhibition and the muscle’s stretch reflex. The recommended stretches and procedures for static and AIS stretching are located in Appendix B.

d. Neuromuscular Exercise. The ability of the central nervous system to send signals to muscles to contract. Incorporation into PT sessions assist members in increasing their muscle strength, balance, and movement. Neuromuscular fitness components includes plyometric, speed, agility, and quickness.

3. Command/Unit PT Components. The Navy's operational requirements are infinite and multidimensional, requiring multiple joint movements and patterns. The movement-based approach should include a warm-up, strength training, cardiorespiratory conditioning, regeneration, and complemented by adequate fueling strategies (Refer to Guide 10). All command led PT sessions consist of the following components in the order provided in Table 3-1.

Table 3-1: Components of a PT Session Order

PT Component	
Pre-Physical Activity Questions	
Pillar Prep	
Movement Prep	
Pre-Planned PT Session	Plyometrics - Speed, Agility, Quickness
	Strength Training
	Energy System Development
Regeneration	

a. Pre-Physical Activity Questions (PPAQ). Prior to each command PT and FEP session the PPAQ must be asked. The PPAQ are located in Appendix A.

b. Pillar and Movement Prep. Each PT session shall begin with a pillar and movement prep. The purpose of pillar and movement prep is to adequately prepare the body for physical activity. The activities performed should mimic the activities that will be performed during the exercise session, lasting between 5-10 minutes, but driven by workout intensity, Sailor capacity, and session length. Movements should start with

low-intensity and gradually increase in intensity.

(1) Benefits include:

- (a) Reduced potential for muscle and connective tissue injuries.
- (b) Increased blood flow to exercising muscles.
- (c) Increased oxygen delivery to the muscle.
- (d) Increased blood flow.

(2) Pillar Prep. The pillar consists of the shoulder/scapular, torso, thoracic and lumbar spine, pelvis and hips, and connective tissue (i.e., muscle, ligaments, and tendons). Pillar prep incorporates movements to improve muscle quality (soft tissue), joint range of motion (mobility), and neuromuscular control (stability). Table 3-2 displays the components of pillar prep to include muscles/movements, volume, and focus.

Table 3-2: Pillar Prep Overview

Component	Muscles/Movements	Time/Reps	Description
Soft Tissue Enhancement	2-4 muscles	<30 seconds	Self-massage to restore tissue quality using rolling, compression, and shifting techniques
Positional Activation	2-4 movements	3-6 repetitions with 3-6 second holds (10-20% isometric contraction)	Low level, longer duration isometric contractions at an end range of motion (ROM)

(3) Movement Prep. The movement prep component of the warm-up is designed to increase core temperature, activate and elongates muscles, enhance movement pattern quality, and activate the central nervous system. Table 3-3 displays the components of movement prep to include movements, volume, and focus.

Table 3-3: Movement Prep Overview

Component	Movements	Time/Reps/Dist/Sets	Description
Dynamic Activation	2-4	4-10 reps 1-2 sets	Dynamically activating key muscle synergies to increase full ROM
Dynamic Flexibility	3-6	4-10 reps 1-2 sets	3D elongation/tensional forces that help ingrain proper movement patterns
Movement Integration	2-4	4-10 reps 10-15 yards 2-3 sets	Practice, rehearsal, and activation to enhance specific movement and skill development
Neural Activation	1-4	3-6 sec 2-3 sets	Heightens the nervous system's ability to focus and activate to be optimally reactive

c. Pre-planned PT session. This PT session can include plyometric-SAQ, strength training, and ESD. Pre-planned PT sessions should be sequenced based on the intensity and neurological demand. When performed, plyometric-SAQ exercises should

be performed first.

(1) Plyometric-SAQ:

(a) Plyometric exercises involve quick, explosive movements to enable a muscle to reach maximal force in a short time. Incorporating plyometric exercise can increase power of subsequent movements and overall speed-strength qualities. Plyometric exercise can assist in the development of power and speed, increasing the ability to recruit muscle fibers efficiently and decreasing risk of injury. When incorporated into a command PT session, they should be performed after movement prep and before the strength session.

(b) When performing plyometric exercises, ensure proper warm-up (i.e., pillar and movement prep), emphasizing proper technique during movement integration and neural activation. Sailors should maintain proper form and alignment at all times, landing softly to absorb shock. Between plyometric sessions, allow up to 72 hours for recovery. The focus is on QUALITY, not quantity.

(c) The recommended plyometric volume is based on contacts (i.e., foot contacts with floor or box). Table 3-4 provides the recommended volume of plyometric exercise based on experience.

Table 3-4: Plyometric Exercise Recommendations

Plyometric Experience	Volume
Beginner (no experience)	80-100
Intermediate	100-120
Advanced	120-140

(d) SAQ:

- i. Speed. Ability to move the body as quick as possible
- ii. Agility. Ability to change direction quickly and effectively
- iii. Quickness. Ability of the body to produce reflexive reactions

(2) Strength Training:

(a) Sailors need to strengthen muscles needed to perform on an operational platform. They should pay close attention to the quality of movement patterns and select a challenging resistance. Table 3-5 depicts the sets, repetitions, rest, intensity, and tempo for improving muscular endurance, strength, and/or power. See Section 4, Paragraph 5 for more information on Exercise Tempo.

Table 3-5: Strength Training and Tempo Recommendations

Goal	Sets	Reps	Rest	Intensity	Eccentric	Isometric	Concentric
Endurance	2-3	≥12	≤30 sec	≤65% 1RM	2-6+ sec	1-2 sec	1-2 sec
Strength	3-6	≤6	2-5 min	≥70% 1RM	1-2 sec	0-1 sec	1-2 sec
Power	3-6	1-5	2-5 min	30-80% 1RM	Explosive	N/A	Explosive

(b) The order of exercises is significant in preventing injury and capitalizing on muscle capabilities.

i. Exercises should be sequenced based on the intensity and neurological demand. Power exercises (e.g., power clean) should be the first exercises performed during strength training sessions as they require high skill and concentration.

ii. Max strength and strength endurance exercises (e.g., bench press, squat) follow power exercises as they are core exercises that generally involve multiple joints and muscles groups.

iii. Auxiliary exercises are the last exercises performed during a strength session. Auxiliary exercises are generally single-joint exercises (e.g., bicep curls, tricep curls).

(3) Energy System Development (ESD) is the process of enhancing and optimizing the ability to produce and utilize energy for any activity. The body's energy systems can be training using the following methods

(a) Metabolic Circuit. Metabolic circuits combine interval training principles with resistance training into ESD. These circuits boost fat utilization by maximizing caloric burn through multiple joints and muscle exercises with little rest between exercises. Metabolic circuits include traditional cardiorespiratory exercises (e.g., jogging), strength, endurance, explosiveness, mobility, agility, and power exercises.

(b) Linear Accelerations. Accelerations include sprint pattern drills to improve sprint and movement speed. Accelerations can be performed using the cone drills, linear accelerations, and box drills.

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

(d) Pace/Tempo Training. Pace/Tempo training is cardiorespiratory training at an intensity slightly higher than race pace. This can be accomplished by setting the treadmill at the desired PRT speed, focusing on increasing duration at that speed. The benefits include improved race pace and running economy (form).

(e) 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, to include jogging, running, and sprints.

d. Regeneration (Cool-down, Stretching, Recovery). A critical component of any training program is regeneration. It brings balance back to the body, helping to relieve tension and associated aches and pains while enhancing the body's response to the training. Regeneration activities will help relieve aches, pains, inflammation, and muscle tension while improving flexibility and tissue quality. Regeneration activities will help after training sessions, keeping the body healthy and balanced. Regeneration components of a training session include:

(1) Cool-down. The cool-down period's purpose 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 heartbeat, dizziness, nausea, and fainting. Use the last 3 to 5 minutes of the workout for a cool-down followed by massage (when time allows) and stretching.

(2) Soft Tissue Management targets overactive musculature that may be fibrotic, lacking in oxygen, and matted down due to overuse, trauma, prolonged immobility, or chronic contraction. For soft tissue management Sailors roll, compress and shift their body using a massage stick, foam roller, or other massage tool. Performance benefits can be achieved when massaging 3-4 muscles, for longer than 30 seconds and for 1-2 sets.

(3) Stretching. Stretching sessions should focus on muscles utilized during the training session to increase joint range of motion, improving mobility, increasing performance, and aid in post-workout recovery. Static and Active Isolated Stretch exercises can be found in Appendix B.

Section 4. Basic Exercise Principles and Programming

1. Basic Fitness Principles. CFL/ACFLs should use the FITT (Frequency, Intensity, Time, and Type) Principle when developing the command’s physical readiness program. For a list of exercise-related terms, refer to Appendix G.

a. Frequency. The number of training sessions conducted per day or per week. The frequency of sessions is largely dependent upon the intensity exerted. Higher intensity sessions are performed less frequently than lower intensity sessions.

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, Rate of Perceived Exertion (RPE), the talk test, and repetition max (RM).

(1) Target heart can be calculated by using the maximum heart rate (HR) equation by subtracting your age from 220. For example, a 26 year old Sailor would have a max heart rate of 194 beats/minute ($220 - 26 = 194$). An alternative equation is the Karvonen formula which takes your resting heart rate into consideration for maximum heart rate. The Karvonen formula is used to determine your target HR based on intensity level $[(\text{max HR} - \text{resting HR}) \times \% \text{Intensity}] + \text{resting HR}$. Knowing your target heart rate during training allows Sailors to match effort levels to the intended intensity.

(2) The Talk Test is a common method to monitor exercise intensity. The method entails determining the intensity of exercise based on the ease of conversation.

(3) Rate of Perceived Exertion (RPE) is an additional method in which CFLs/ACFLS can measure a Sailor’s effort by using a scale from 1-10 which measures the perceived intensity level of a physical activity.

Below is a sample Exercise Intensity chart that incorporates RPE, the Talk Test, and Target Heart Rates.

	Target	Description	Target
MAX	10/10	Maximum effort. Give it all you got!	100% Max HR
HARD	9/10	Extremely strenuous and difficult to maintain.	90% Max HR
MODERATE	7/10	Rapid breathing. Can’t talk now!	80% Max HR
EASY	5/10	Moving with purpose, but still able to talk comfortably.	65% Max HR

(4) In addition to establishing appropriate intensity levels, the work-to-rest ratio can help ensure the exercise intent matches the desired outcome. Table 4-1 depicts the amount of work (i.e., exercise) and rest.

Table 4-1: Recommended Work:Rest Ratio Based on Exercise Intensity

Intensity of Drill	Duration of Drill	Work: Rest Ratio
90-100%	0-6 seconds	1:12 to 1:20
75-90%	6-30 seconds	1:3 to 1:5
30-75%	30 seconds to 3 minutes	1:3 to 1:4
20-30%	>3 minutes	1:1 to 1:3

c. Time. The number of minutes of activity. The amount of time depends on the intensity. The more intense the exercise, the shorter the time. Examples of training types and duration is displayed in Table 4-2.

Table 4-2: Recommended Duration and Rest intervals for Training Type

Training Type	Intensity Level	Recommended Duration	Recommended Rest
Interval	High	20-30 minutes	3-5 min between intervals
Circuit Training	Moderate to High	20-30 minutes	30-90 sec between rests between sets
Strength Training	Moderate	30 minutes	30 sec - 2 min between sets

d. Type. The actual activity performed.

Table 4-3: FITT Principle for Energy System Development, Strength Training, and Flexibility Components

F.I.T.T.	Energy System Development	Strength Training	Flexibility
Frequency	3 + per week	2+ per week	2+ per week
Intensity	Moderate (5-6 RPE) Vigorous (7-8+ RPE)	1-20+ repetitions 3-6 sets	Mild discomfort
Time	150 minutes	Varies	10-30+ seconds per stretch (2-4 sets)
Type	Moderate or vigorous movement	Movement specific	Joint and muscle group-specific

2. Overload and Progression:

a. 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 are frequency, intensity, and time.

b. The rule of progression is to implement an exercise program gradually. Avoid doing too much, too soon, or too fast to minimize setbacks and injuries.

c. 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, running, or an alternate cardio option.

(2) Always increase time first when increasing overload, then increase the 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 longer than 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, muscle soreness, continuous ankle, knee, or other pain, or feeling fatigued regularly, are exercising too often, and may require medical advice.

(5) Quality over Quantity. Monitor participants during activity. Perform movements in a controlled manner, never place fitness on top of dysfunction. When form declines, stop the movement or provide an appropriate regression.

(6) After returning from periods of inactivity, it is recommended to progressively return to exercise. The [5-week reconditioning plan](#) can assist with the safe return to exercise. See Appendix E for more details.

3. Overtraining and Overreaching. When intensity, duration, frequency of training, or any combination of these factors exceeds an individual's capacity for adaptation, overreaching and overtraining may occur. Exceeding adaptation capacity without sufficient recovery, normally leads to decrements in physical performance that are based on complex interactions among several biological systems and psychological influences.

a. Overreaching refers to short-term training, without sufficient recovery, that exceeds an individual's capacity. Successful recovery from overreaching can occur within a few days or up to two weeks with an adequate recovery intervention. Without recovery periods, overreaching results in a decrement in performance and physical readiness.

b. Overtraining syndrome is more serious and results from untreated overreaching that produces long-term impairments in performance and other conditions that may require medical intervention.

4. Cueing Command PT:

a. As a CFL/ACFL, your role is to analyze and correct members' movements, providing modifications for difficult or complex movements. During PT sessions, you

should "teach by walking," correcting Sailors' form and posture as needed.

b. CFL/ACFLs are responsible for proper movement execution during command PT/FEP sessions. Verbal command strategies such as echo counts, military four counts, and count downs can be utilized to motivate Sailors. These count-based verbal command strategies must consider the tempo of each exercise to maintain the appropriate speed to achieve the desired strength adaption. During PT, provide a "mirror image" approach (e.g., "I lead right, you lead left").

c. Cues can be vocal, visual, or reactive (e.g., tactile).

(1) Vocal cues are used to announce exercise introduction, movement execution, and correct positioning. Vocal cues should be external cues as much as possible instead of internal.

(a) External = focus on the outcome of the movement. Examples of external cues include exploding, pushing, and driving (e.g., squat example, state "push the floor away").

(b) Internal = focus on the body part (e.g., squat example, state "bring your hips back and down").

(c) Vocal cues allow CFLs to convey a message through body language and proper movement patterns. These cues allow Sailors to self-correct improper movement patterns.

(2) Reactive cues: Reactive cues should be used as a last resort to correct improper movement patterns. When performing a reactive cue, ask the member for permission and inform a member of what you plan to do. An example of a reactive cue is standing in front of a Sailor to signal to them to sit backwards during their squat instead of forward or adding a mini band above the knees to correct movement dysfunction.

NOTE: CFL/ACFLs should never manipulate a Sailor into the ideal position.

5. Exercise Tempo. There are three numbers that can be indicated for exercises that should be performed at a specific tempo/count: eccentric (muscle lengthens), isometric (no movement), and concentric (muscle shortens). Maintaining exercise tempo assists in achieving the associated strength gain. For example, if the tempo is 2:1:2, the muscle will lengthen for 2 seconds (eccentric movement), pause for 1 second (isometric movement), followed by 2 seconds of muscle shortening (concentric movement). When applied to push-ups, it is 2 seconds down, 1 second hold at the bottom, and 2 seconds up to return to the starting position. The prescribed tempo for endurance, strength, and power exercises is found in Table 3-5.

6. Movement Compensations:

a. A movement compensation is any deviation from optimal patterns and recruitment strategies. Movement compensations are caused by decreased or increased muscle activation, limited joint mobility and/or stability, and inappropriate joint movement sequencing.

b. As a CFL/ACFL, your role in identifying movement compensations includes:

- (1) Recognition: Ability to identify poor movement quality.
- (2) Trial and error: Utilization of cues to correct less than optimal movement patterns.
- (3) Strategic correction: Ability to apply coaching cues to correct compensation.

c. Table 4-4 provides examples of the common compensations and sample corrective cues.

Table 4-4: Common Movement Compensations and Corrective Cues

Movement Compensation	Example	What to look for?	Corrective	Optimal Position
Weight shifts	Forward: knee-dominant squat Backward: hip dominant squat	Heels slightly lift off the ground Toe movement in the shoe Uncoordinated hip and knee flexion	Standing weight shift Cue arch Exaggerate the compensation	Weight centered on the arch of the leg with toes engaged
	Anterior tilt: extension of lower back Posterior tilt: flexion of the lower back Lateral tilt: lateral flexion of the hip	Excessive extension or flexion in low-back Excessive tone/muscle size in low-back	Cue pelvis and hinge Facilitate neutral spine Torso activation	Pelvis sitting in a neutral position
Head position	Extension of the neck	Cervical extension/flexion	Manual head tilt Remove/minimize visual	Head facing forward in a neutral position
Thoracic hinge	Thoracic extension and rib flare Slight cervical extension	Rib flare	Close down the ribs Torso activation	Neutral spine with ribs closed
Knee collapse	One or both knees collapse to the center	Knee movement during exercise	Exaggerate the compensation Sync hip/knee sequencing	Feet and knee in line, wider than hip-width

7. Contraindicated Exercises and Stretches. Contraindicated movements are potentially dangerous and may lead to increased injury risk. Exercise that incorporates movements that cause movement of a joint beyond its normal range, involves excessive, rapid or repetitive twisting around a fixed position, or requires advanced skills to perform correctly is may be contraindicated for command-led PT. Contraindicated exercises and stretches are to be avoided at all command-led PT sessions include:

- a. Inability to maintain proper body alignment
- b. Locked or hyper extended joints
- c. Uncontrollable movements (e.g., rapid, jerky)

8. Overcoming Obstacles to Command PT/FEP. CFL/ACFLs will experience obstacles when trying to assist Sailors in improving physical readiness. Tips are provided for assisting with PT obstacles in Table 4-5. CFLs should remember that when dealing with these obstacles, they should always keep their CO informed.

Table 4-5: Strategies for Overcoming Common Obstacles to PT

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. Bodyweight, resistance bands, and workout 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.

9. Resources:

a. There are many fitness resources available to assist with command physical readiness. MWR fitness professionals can assist in designing and conducting command/FEP PT sessions. MWR fitness professionals are exercise specialists trained and qualified to provide individual and group exercise plans. Contact your local MWR for available services.

b. Additional tools for CFL/ACFLs are the Navy Operational Fitness and Fueling

Series (NOFFS) courses offered aboard Navy installations. NOFFS was developed by Navy physical readiness stakeholders and industry experts to provide a comprehensive human performance training system that removes the guesswork. NOFFS is delivered through three different methods: NOFFS Pre-Designed Series (including free NOFFS Apps from your smart phone's app store), NOFFS Educational Courses, and Customized NOFFS Programming. NOFFS includes pillar prep, movement prep, plyometrics - speed, agility, and quickness (SAQ), strength training, cardiorespiratory conditioning (ESD), regeneration (stretching and flexibility), and nutrition (fueling). CFL/ACFLs have access to certified NOFFS instructors located throughout the fleet to assist in training on NOFFS and incorporation into command PT. Various NOFFS programs and courses are available including the following:

(1) The pre-designed NOFFS series:

(a) Operational Series. Designed to assist individuals with maintaining their physical fitness levels based on various space and equipment restrictions. The Operational series includes total body workouts, including cardiorespiratory training for submarines, surface ship, and large decks.

(b) Strength Series. Designed to assist individuals in developing the strength needed to perform at higher levels through three phases; Build Muscle, Get Strong, and Get Powerful.

(c) Endurance Series. Designed to assist individuals with breaking through training plateaus while decreasing injuries often associated with traditional endurance training.

(d) Sandbag Series. Designed to provide individuals with a training plan that can be performed in austere environments with limited equipment options. The Sandbag series assists in developing the raw strength and power needed to meet the performance demands placed upon Sailors in any environment. Exercise modalities (e.g., dumbbells, kettlebells) can be supplemented for a sandbag to complete the series' exercises.

(e) Aquatics Series. Provides a strength and conditioning program that can be used in water-based environments. Each training phase is designed to enhance muscular endurance, strength, and power while decreasing the stress and pressure placed upon the body. Each workout includes swim-specific conditioning that will enhance performance in the water.

(2) MWR Instructor-led NOFFS Educational Courses:

(a) NOFFS Short Course. Six-hour NOFFS Operational course designed to provide attendees with the foundation behind the methodology and movements found throughout the Operational Series.

(b) NOFFS Operational, Strength, Endurance, and Sandbag Labs. Two-hour labs for each series (Operational, Strength, Endurance, and Sandbag), designed to educate and instruct participants on the movements in each series.

(c) NOFFS Fueling Strategies. Two-hour course reviewing the fueling (nutrition) strategies found in the NOFFS system.

(d) NOFFS Operational Course. Five-day course designed to review the mission, intent, and goal of NOFFS. The course provides attendees with the tools needed to perform and execute the NOFFS Operational workouts through lectures and gym sessions.

(3) Certified MWR NOFFS instructors can develop specific NOFFS training sessions for individuals or commands to enhance physical readiness. Customized NOFFS programming needs pillar prep, movement prep, plyometric-SAQ, strength training, ESD, and regeneration components.

(4) For more information on NOFFS and other MWR Fitness programs, visit <http://www.navyfitness.org/> for more details.

APPENDIX A

PRE-PHYSICAL ACTIVITY QUESTIONS FOR COMMAND/UNIT PT AND FEP

Pre-Physical Activity Questions

1. Do you have a current PHA? If no, you are prohibited from participation 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. Do you have Sickle Cell Trait (SCT)? If yes, have you been cleared by your medical provider to participate in PT? If not, you are prohibited from participation today.
4. Have you had a change in your medical status since the last time you were asked these questions? If yes, have you been cleared by your medical provide to participate in PT? If not, you are prohibited from participation today.
5. Are you ill today or know of any medical condition that may prevent you from participating in physical activity today? If yes, have you been cleared by your medical provide to participate in PT? If not, you are prohibited from participation today.

APPENDIX B

COMMAND PT REGENERATION

Static and Active Isolated Stretching (AIS) Protocols and Recommendations



Recommended Static Stretches





The stretches listed below are designed to provide Sailors with a comprehensive, total-body stretch. However, when designing workouts using the [NOFFS framework](#), the cool-down and stretching is tailored specifically to the movements targeted during the workout.



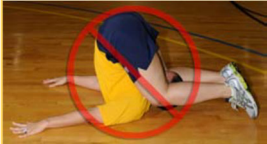
Static Stretching Protocol:


1. When applying a stretch, make sure the body is in balance.
2. Slowly lean into the stretch.
3. Stretch to mild discomfort; the stretch should not hurt. Do not bounce while stretching.
4. Aim to relax into the stretch as you breathe out.


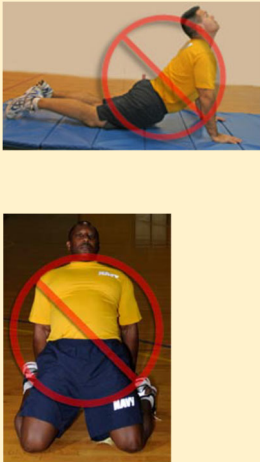

Stretch	Description & Caution	Recommended for Movement	Contraindicated Stretch
<p>Chest Stretch</p> 	<p>Description: In a standing position, gently clasp both of your hands and place them on the back of your neck. Slowly pull your elbows back until you feel a stretch on your chest. Do not pull your head forward or place tension on the neck</p> <p>Caution: You can do this as a partner assisted stretch but they should not force the stretch by aggressively pulling back on the elbows.</p>	<p>Horizontal Push (e.g., push-up, chest press)</p>	
<p>Posterior Shoulder Stretch</p> 	<p>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.</p>	<p>Horizontal or Vertical Pull (e.g., bent over row, pull up)</p>	
<p>Triceps Stretch</p> 	<p>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.</p>	<p>Horizontal or Vertical Push (e.g., bench press, overhead press)</p>	

Stretch	Description & Caution	Recommended for Movement	Contraindicated Stretch
<p data-bbox="312 326 548 354">Hip Flexor Stretch</p> 	<p data-bbox="680 256 1264 500">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.</p> <p data-bbox="680 532 1247 649">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.</p>	<p data-bbox="1289 256 1570 344">Lower Body Push (e.g., back squat, walking lunges)</p>	
<p data-bbox="268 656 590 683">Groin or Butterfly Stretch</p> 	<p data-bbox="680 656 1247 899">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.</p>	<p data-bbox="1289 656 1598 743">Lower Body Push or Pull (e.g., lateral lunge, single-leg RDL)</p>	

Stretch	Description & Caution	Recommended for Movement	Contraindicated Stretch
<p>Modified Hurdler Stretch</p> 	<p>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.</p> <p>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).</p>	<p>Lower Body Push or Pull (e.g., deadlift, RDL, squat)</p>	
<p>Outer-Hip-and-Low-Back-Stretch</p> 	<p>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.</p>	<p>Lower Body Push or Pull (e.g., deadlift, squat, lateral lunge, RDL)</p>	<p>Avoid spinal rotations, they are bad for the back</p> 

Stretch	Description & Caution	Recommended for Movement	Contraindicated Stretch
<p>Piriformis Stretch</p> 	<p>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 you 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.</p>	<p>Lower Body Push or Pull (e.g., deadlift, squat, lunge, RDL)</p>	
<p>Low Back Stretch</p> 	<p>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.</p>	<p>Lower Body Push or Pull (e.g., deadlift, squat lunge, RDL)</p>	<p>Avoid extreme hyperextension of the spine (arching the back).</p> 

Stretch	Description & Caution	Recommended for Movement	Contraindicated Stretch
<p data-bbox="310 370 554 399">Quadriceps Stretch</p> 	<p data-bbox="680 256 1243 496">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.</p> <p data-bbox="680 561 1243 893">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.</p> <p data-bbox="680 958 1243 1044">Note: If you are having difficulty balancing you can hold on to a wall or perform this stretch while lying on your side.</p>	<p data-bbox="1289 256 1566 315">Lower Body Push (e.g., squat, lunge)</p>	

Stretch	Description & Caution	Recommended for Movement	Contraindicated Stretch
<p data-bbox="310 391 548 418">Abdominal Stretch</p> 	<p data-bbox="680 254 1251 526">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.</p>	<p data-bbox="1289 254 1346 282">Core</p>	
<p data-bbox="352 753 506 781">Calf Stretch</p> 	<p data-bbox="680 753 1251 997">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.</p>	<p data-bbox="1289 753 1604 842">Plyometrics (e.g., jumping, bounding), ESD (e.g., running)</p>	

Active Isolated Stretch (AIS) Protocol:

1. Start with the muscle in a relaxed state.
2. Actively move through the range of motion (ROM) without assistance.
3. Apply no greater than one pound of pressure at the end of the ROM.
4. Provide a controlled return back to starting position.
5. The stretch should be no longer than 2 seconds.
6. Repeat the stretch 10 times, with each stretch attempting to increase ROM.
7. Always return the muscle being stretched back to the starting position.
8. Exhale during the stretch and inhale during relaxation.

Additional regeneration exercises can be found at

<https://www.navyfitness.org/fitness/noffs-training/noffs-series/regeneration-strategies>

APPENDIX C

SAMPLE WORKOUTS

Operational Workout			
Pillar Prep			
Exercise	Reps	Tempo	Sets
90/90 Stretch	4/Each	3:3	1
Glute Bridge with Leg Lock	4/Each + 3sec Hold	3:3	1
Pillar Bridge with Arm Reach	4/Each + 3sec Hold	2:2	1
"Y" Bent Over	6 + 3sec Hold	3:3	1
Movement Prep			
Exercise	Reps	Tempo	Sets
Mini Band - External Rotation	8	2:2	1
Pillar Bridge Rolling	4/Each	3:3	1
Reverse Lunge with Rotation	4/Each	2:2+2:2	1
Low Lateral Squat - Alternating	4/Each	3:3	1
Inverted Hamstring	4/Each	3:3	1
Drop Squat to 2 Inch Runs	5sec	-----	2
Strength			
Circuit 1	Reps	Tempo	Sets
Split Squat - Rear Foot Elevated (Loaded/Unloaded)	12/Each	2:2	2
Overhead Press 1/2 Kneeling (Band/DB/KB)	12	2:2	2
Romanian Deadlift - 1 Arm, 1 Leg (DB/KB)	12/Each	3:3	2
Straight Leg Lowering - Alternating	12/Each	3:3	2
Resisted Walk - Weighted 2-Arm (DB/KB/Sandbag)	30 Yds	-----	2
Circuit 2			
Deadlift (Sandbag/DB/KB/Barbell)	12	2:2	2
Push Up to Lateral Plank - Alternating	12/Each	2:2	2
Lateral Squat - Alternating (Loaded/Unloaded)	12/Each	3:3	2
Bent Over Row - 1 Arm (DB/KB/Sandbag)	6/Each	2:2	2
Deep Squat to Hamstring Stretch	12	2:2	2
Circuit 3			
Front Squat (DB/KB)	12	3:3	1
Pillar Bridge to 1-Arm Row (On Bench)	12/Each	2:2	1
Rotational Cruch - Bicycle	12/Each	-----	1
Reverse Lunge - Alternating	12/Each	2:2	1
Overhead Press - High Split Alternating	12/Each	2:2	1
Lat Stretch	12	3:3	1
ESD			
Exercise	Reps	Rest	Sets
Reaction Drills	1	1:00	4
Linear Acceleration	1	1:00	4
Cone Drills (6-Cone)	1	1:00	4
Regeneration			
Exercise	Required Time	Tempo	Sets
Total Body Stretch (CFL Guide - Top 12)	8-10 Minutes	:20 sec/Each	1

Energy System Development

SAQ Drills (Get Up and Go) – 4 sets

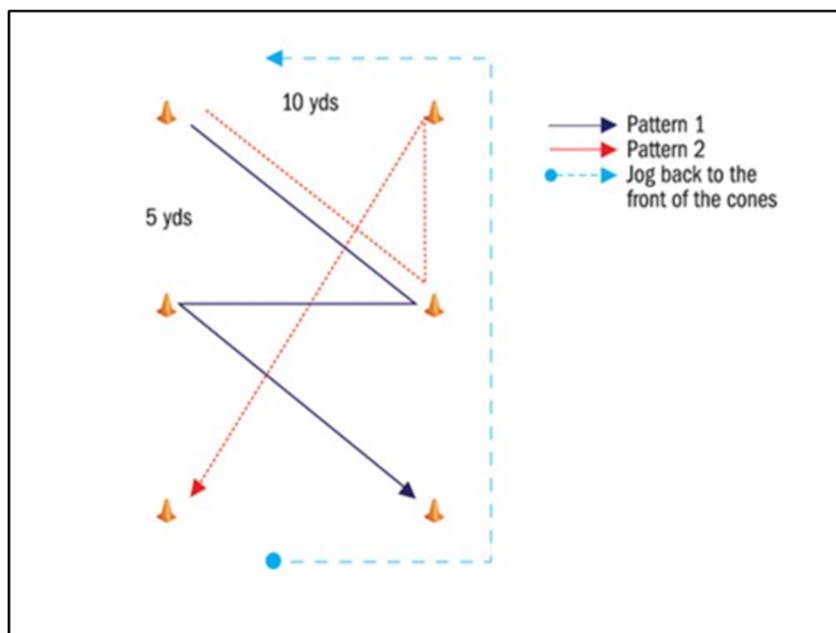
Position	Distance	Reps	Rest
Face Down/Head Forward	20 YDs	1	1-min
On Back/Head Forward – Roll Left	20 YDs	1	1-min
On Back/Head Forward – Roll Right	20 YDs	1	1-min
Face Down/Head Forward – Push up (x2)	20 YDs	1	1-min

Linear Acceleration – 4 sets

Intervals	Distance	Reps	Rest
20yds Easy – 20 yds moderate	40 YDs	1	1-min
20 yds Moderate – 20 yds Easy	40 YDs	1	1-min
10 yds Max – 30 yds Moderate	40 YDs	1	1-min
20 yds Max – 20 yds Moderate	40 YDs	1	1-min

Cone Drills (6-Cone) – 4 sets

Pattern	Reps	Rest
1	2	1-min
2	2	1-min



Endurance Workout			
Pillar Prep			
Exercise	Reps	Tempo	Sets
90/90 Stretch with Arm Sweep	4/Each	3:3	1
Glute Bridge - Marching (Hip Flexion)	4/Each + 3sec Hold	3:3	1
Pillar Bridge with Leg Lift	4/Each + 3sec Hold	2:2	1
"W" Bent Over	6 + 3sec Hold	3:3	1
Movement prep			
Exercise	Reps	Tempo	Sets
Mini Band - Lateral Walk (Bent Knees)	10/Each	----	1
Plank Walking	4	3:3	1
Reverse Lunge Elbow to Instep with Rotation	4/Each	----	1
Lateral Lunge - Alternating	4/Each	3:3	1
Linear March	15 Yds	----	1
Linear Skip	15 Yds	----	1
Drop Squat to Single Leg Balance to Base Pogo	5sec	----	2
Plyos			
Exercise	Reps	Work to Rest	Sets
Squat Jump to Stabilize - Noncountermovement	6	1:2	2
Lateral Bound to Stabilize - Countermovement	6/Each	1:2	2
Linear Hop to Stabilize - Countermovement	6/Each	1:3	2
Split Squat Jumps - Alternating (Continuous)	6/Each	1:3	2
Plyometric Push Up - Coninuous (On Bench)	6	1:2	2
ESD			
Exercise	Reps	Rest	Sets
Machine-Based/Non-Impact (Rower/Bike/Ski Erg/Versa Climber) - RPE 9/10	200m/:30sec	2:00	2
300 Yd Shuttle Run (CFL Guide - 25Yds Down/Back) - RPE 7/10	1	2:00	2
Regeneration			
Exercise	Required Time	Tempo	Sets
Total Body SMR (NOFFS SES Series)	20 Minutes	:30-40/Each	1
Total Body Stretch (CFL Guide - Top 12)	8-10 Minutes	:20/Each	1

Sandbag Workout			
Pillar Prep			
Exercise	Reps	Tempo	Sets
Quadruped Thorasic Rotation	4/Each	3:3	1
Glute Bridge	6 + 3sec Hold	2:2	1
Dynamic Lateral Pillar Bridge	4/Each + 3sec Hold	2:2	1
"T" Bent Over	6 + 3sec Hold	3:3	1
Movement prep			
Exercise	Reps	Tempo	Sets
Mini Band - Lateral Walk (Straight Knees)	10/Each	-----	1
Plank with Alternating Hip Flexion	6/Each	2:2	1
Reverse Lunge Elbow to Instep with Rotation	4/Each	-----	1
Drop Lunge - Alternating	6/Each	2:2	1
Deep Squat to Hamstring Stretch	6	2:2	1
Hand Walk (Inch Worm)	4	2:2	1
Linear Skip	15 Yds	-----	1
Drop Squat to Base Rotations	5sec	-----	2
Strength			
Exercise	Work/Rest	Tempo	Sets
Squat to Overhead Press (Sandbag/DB/KB/Band)	:30sec/:15sec	2:2	3
Romanian Deadlift (Sandbag/DB/KB)	:30sec/:15sec	2:2	3
Bent Over Row (Sandbag/DB/KB/Band)	:30sec/:15sec	2:2	3
Rotational Lift - Weighted Low to High (Sandbag)	:30sec/:15sec	-----	3
Push Ups (Unloaded/Loaded) - Sandbag Parallel to Spine	:30sec/:15sec	2:2	3
Reverse Lunge with Swing - Alternating (Sandbag)	:30sec/:15sec	-----	3
Resisted Walk - Weighted 1-Arm (Sandbag)	:30sec/:15sec	:15sec/Arm	3
ESD			
Exercise	Reps	Rest	Sets
40 Yd - Sandbag Walking Lunges (Sandbag Across Shoulders)	20 Yds Down/Back	1:00	2
40 Yd - Sandbag Lateral Toss from Hip	20 Yds Down/Back	1:00	2
20 Yd - Bear Crawl (Unloaded/Loaded) - Sandbag Parallel to Spine	20 Yds Down/Back	1:00	2
Regeneration			
Exercise	Required Time	Tempo	Sets
Total Body SMR (NOFFS SES Series)	20 Minutes	:30-40/Each	1
Total Body Stretch (CFL Guide - Top 12)	8-10 Minutes	:20/Each	1

APPENDIX D

IMPROVING PRT SCORES

The [5-week Training Plan](#) is designed to reintegrate physical activity. Individuals and Commands can use the NOFFS 5-Week Conditioning Manual and workouts to improve operational readiness and reduce the severity of the injury. Using the provided link, CFLs/ACFLs can download/print the entire 5-week plan for offline use. An example is provided below.

WEEK 1 - WORKOUT 1						
Exercise	Equipment	Reps/Time/Distance	Tempo	Sets	Rest	
Pillar Prep						
Pillar Bridge	----	30 secs	----	1	----	
Glute Bridge	----	30 secs	----	1	----	
Y's Bent Over	----	6 reps	2:1:2	1	----	
90/90 Stretch	----	6 reps	3:2:3	1	----	
Movement Prep						
Mini Band - External Rotation	O-Ring Mini Band	6 reps per leg	2:1:2	1	----	
Reverse Lunge Elbow to Instep	----	6 reps	-----	1	----	
Lateral Lunge	----	6 reps	2:1:2	1	----	
Knee Hug - In Place	----	6 reps	2:1:2	1	----	
Inverted Hamstring	----	6 reps	3:1:3	1	----	
Circuit 1						
Glute Bridge	----	10 reps	2:1:2	2	----	
Push ups	----	10 reps	2:1:2	2	----	
Squat w/ Mini Band	O-Ring Mini Band	10 reps	2:1:2	2	----	
Y's Bent Over	Resistance Band	10 reps	2:1:2	2	1 min	
Circuit 2						
Lateral Squat - Low Alternating	----	10 reps per leg	2:1:2	2	----	
Overhead Press 1/2 Kneeling	Resistance Band, Sandbag or Dumbbell	10 reps	2:1:2	2	----	
Lateral Pillar Bridge	----	10 reps	3:1:3	2	----	
Straight Leg Lowering - Alternating	----	10 reps	3:1:3	2	1 min	
ESD						
Linear Accelerations - 30 yards Moderate/ 10 yards Max	5 cones	40 yards	30 secs	4	1 min	
Regeneration						
Walk	----	5-10 mins	----	1	----	
90/90 Stretch w/ Arm Sweep	----	4 per side	3:1:3	2	----	
Bent Knee Hamstring Stretch	----	4 per leg	3:1:3	2	----	
Leg Cradle - Supine	----	20 secs	----	2	----	
Quad/Hip Flexor Stretch - 1/2 Kneeling	----	4 per leg	3:1:3	2	----	

4-Workout Week

NUTRITION TIP - COME BACK TO EARTH

Choose the least processed items from each food group such as fruits, veggies, whole grains, and high fiber carbohydrates.

APPENDIX E

FEP MONTHLY TRACKING LOG

FEP Monthly Tracking Log

Week 1		Dates:						
	Activity Performed / Location	Minutes						
MON								
TUES								
WED								
THURS								
FRI								
Weekly Weight:								
Week 2		Dates:						
	Activity Performed / Location	Minutes						
MON								
TUES								
WED								
THURS								
FRI								
Weekly Weight:								
Week 3		Dates:						
	Activity Performed / Location	Minutes						
MON								
TUES								
WED								
THURS								
FRI								
Weekly Weight:								
Week 4		Dates:						
	Activity Performed / Location	Minutes						
MON								
TUES								
WED								
THURS								
FRI								
Weekly Weight:								
Week 5		Dates:						
	Activity Performed / Location	Minutes						
MON								
TUES								
WED								
THURS								
FRI								
Weekly Weight:								
Monthly PFA Results								
BCA:	Hgt:	Wgt:	AC:	Neck:	Ab:	Waist:	Hips:	BF%:
PRT:	P/U:	PLANK:	CARDIO:					

Member's Signature

Date

CFL/ACFL Signature

Date

APPENDIX F

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) systems 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 an 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.