

## GUIDE-9

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

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## 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 its Sailors.
2. Program Strategies. Program strategies include increasing 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) Components (Section 3) provides details on the command of 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).
  - b. Command/Unit PT Guidelines for developing PT programs are provided in Section 4 of this guide.
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 (PPAQ) before every Command/Unit PT and FEP session (Refer to 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 time and location 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 PPAQ before Command/Unit PT (Appendix A).
  - h. Start with an appropriate Pillar Prep and Movement Prep (dynamic warm-up) exercise routine.

i. Provide instruction on alternative options for personnel with higher fitness levels (progressions) or for personnel with limited exercise capabilities (regressions).

j. End the session with regeneration (cool down). 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 (or the combat arms equivalent remedial program) 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.

**Note:** Combat arms personnel must implement an equivalent remedial program. Participation and progress documentation must be maintained for those in the equivalent remedial program for combat arms personnel. Refer to PRP Guide-5B for additional information regarding remediation for combat arms occupations.

### 2. Program Administration.

a. **Program Management**. FEP (or the combat arms equivalent remedial program) is managed by the CFL on behalf of the CO/OIC. The CFL is responsible for administering all aspects of the program. ACFLs play an important role in assisting the CFL in conducting FEP or remedial program 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 (or the combat arms equivalent remedial program). Members may also participate in FEP (or the combat arms equivalent remedial program) 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 (or the combat arms equivalent remedial program) enrollment and nutrition education requirements. Refer to PRP Guides 1 and 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 (or the combat arms equivalent remedial program) 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 Specialists of the sponsoring military service.

(3) FEP Hours. Unless otherwise directed by the command's mission/commitments, FEP (or the combat arms equivalent remedial program) activities are to be conducted during normal working hours and in align with OPNAVINST 6110.1(series).

(4) **FEP Nutrition.** Nutrition plays an important role in a member's performance, weight management, and disease prevention. Each member enrolled in FEP (or the combat arms equivalent remedial program) must select a nutrition option based on not being within BCA 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 a Registered Dietitian Nutritionist (RDN) or other healthcare providers. CFL/ACFLs do not provide diets, recommend specific caloric intakes, or provide nutrition counseling. Detailed information regarding FEP (or the combat arms equivalent remedial program) participant nutrition education requirements and available resources are provided in Guide-10. CFLs will annotate the nutrition option selection on the members contact record page, using the nutrition enrollment tile in PRIMIS. The FEP (or the combat arms equivalent remedial program) participant needs to provide proof of completion to the CFL for record-keeping in PRIMIS.

d. **FEP Documentation.** All FEP (or the combat arms equivalent remedial program) 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 unofficial (mock) PFA results, including BCA and PRT components
- (4) Nutrition education documentation of any courses/programs offered, completed, or declined.

e. **FEP Participation and Disenrollment (Non-Combat Arms Personnel).** Members are required to remain enrolled in FEP until passing an official PFA with PRT scores of a Good-Low or above in all modalities they are medically cleared for. 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 an official PFA for the events which they are medically cleared for.

f. **FEP Participation and Disenrollment (Combat Arms Personnel).** Members are required to remain enrolled in FEP until passing an official PFA with PRT scores of a Good-High or above in all modalities they are medically cleared for. 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 an official PFA for the events which they are medically cleared for.

g. **Progress.** Progress may be assessed via program participation records and monthly unofficial (mock) PFA results. Each member's progress will vary and depend on members' age, health status, fitness level, and body composition.

(1) BCA. Members assigned to FEP (or the combat arms equivalent remedial program) due to BCA failure must participate in the FEP unofficial (mock) PRT. Training emphasis should focus on decreasing body fat rather than 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% per month.

(2) PRT. Improved unofficial (mock) scores are the number one indicator of improvement of fitness.

**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 (or the combat arms equivalent remedial program).

(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.** CFL/ACFLs, RDNs, local health promotions personnel, medical department representatives, ShipShape facilitators, and MWR Fitness Specialists 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 is required to be recorded in PRIMIS. Review each member's progress at least monthly. A FEP (or the combat arms equivalent remedial program) 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 (or the combat arms equivalent remedial program) 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 and are trained to assist with group and individualized exercise programs.

c. Promote additional caloric expenditure outside of FEP (or the combat arms equivalent remedial program) 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 (or the combat arms equivalent remedial program).

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 fit. Use PRT run times to group members into like-fitness levels as appropriate.

(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 regiment, 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 per week.

(2) Types of muscle contraction.

(a) Eccentric. Muscle lengthens

(b) Concentric. Muscle shortens

(c) Isometric. No change in 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 per 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), which uses reciprocal inhibition and controlled stretch timing to avoid activating the 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 efficiently signal the muscles to activate and control movement. Incorporating neuromuscular training into PT sessions assists members with improving movement quality, balance, coordination, agility, and overall performance. Neuromuscular fitness components include plyometrics, speed, agility, change of direction patterns, and quickness, which together promote functional strength, posture, and injury prevention.

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, energy system development (ESD), regeneration, and be 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

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

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 movements 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 exercised muscles.

(c) Increased oxygen delivery to the muscle.

(2) Pillar Prep. The pillar consists of the shoulder/scapula, 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 elongate 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-Speed, Agility, and Quickness (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 that enable muscles to produce maximal force in a short time to develop explosive power (speed-strength). Plyometric training uses the stretch-shortening cycle to improve power, acceleration, and change of direction capability required for Navy operational tasks. When incorporated into a command PT session, plyometric movements are performed after movement prep and before strength training for optimal neuromuscular performance.

(b) Execution and Safety. When performing plyometric exercises, Sailors shall begin only after a proper warm-up (pillar & movement prep), emphasizing proper technique and alignment during takeoff and landing. Sailors will land softly, absorb force through hips-knees-ankles, maintain upright posture, and focus on movement quality over quantity. Allow appropriate recovery (up to 72 hours) between plyometric sessions based on volume and intensity.

(c) Training Volume. Plyometric volume is measured in foot/hand contacts per week. Table 3-4 outlines the recommended progression based on individual experience level to ensure appropriate training load and minimize the risk of injury.

Table 3-4: Plyometric Exercise Recommendations

<b>Plyometric Experience</b>	<b>Volume (per week)</b>
Beginner (no experience)	80-100
Intermediate	100-120
Advanced	120-140

## (d) SAQ:

- i. Speed. The ability to move the body as quickly as possible with optimal technique.
- ii. Agility. The ability to rapidly change direction, decelerate, and re-accelerate efficiently while maintaining balance and control.
- iii. Quickness. The ability to generate rapid, reactive movements in response to external stimuli (visual, auditory, or tactical).

## (2) Strength Training.

(a) Purpose of Strength Training. Strength training develops the muscular strength, power, and endurance required for performance across all operational platforms. Sailors shall maintain proper movement patterns and select resistance levels that are challenging yet allow correct form throughout all repetitions. Strength training enhances performance in:

- i. Load carriage and material handling.
- ii. Shipboard mobility, ladder climbs, and equipment lifts.
- iii. Deployment-specific tasks (e.g., firefighting, damage control).
- iv. Injury reduction through improved joint stability and tissue resilience.

Table 3-5 provides recommended sets, repetitions, tempo, intensity, and rest periods to support targeted training goals, including muscular endurance, strength, and power.

Table 3-5: Strength Training and Tempo Recommendations

<b>Goal</b>	<b>Sets</b>	<b>Reps</b>	<b>Rest</b>	<b>Intensity</b>	<b>Eccentric</b>	<b>Isometric</b>	<b>Concentric</b>
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) Exercise Sequencing. Exercise order directly impacts safety, neuromuscular function, and overall training effectiveness.

i. Exercises should be sequenced based on the intensity and neurological demand. Power exercises (e.g., power clean, loaded jumps, medicine ball throws) 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/accessory exercises are performed last (e.g., hamstring curl, bicep curl, band activation) to reinforce movement balance without compromising technique. Proper sequencing maximizes performance adaptations and reduces fatigue-related injury risk.

(3) Energy System Development (ESD). ESD improves cardiorespiratory performance across all three energy systems to support Navy operational readiness. The training methods outlined below can be incorporated into command or unit PT sessions.

(a) Metabolic Circuit. Metabolic circuits combine resistance and cardiorespiratory exercises in a continuous or interval format with minimal rest to maintain an elevated heart rate. This method improves both aerobic and anaerobic energy system performance while simultaneously developing movement strength, muscular endurance, and mobility. Exercise selection should align with the session's goals and be performed with proper technique to ensure effective energy system development without compromising movement quality.

(b) Linear Accelerations. Linear Accelerations involve sprint-pattern drills designed to improve movement speed by developing both start mechanics and efficient acceleration posture. These drills can be performed using cone drills, linear accelerations, and box drills.

(c) Long Slow Distance (LSD). LSD training consists of continuous, steady state running at a comfortable, conversational pace for extended durations longer than 20 minutes. This method develops the aerobic energy system. LSD should emphasize efficient running mechanics and consistent pacing to build a strong foundation for improving endurance.

(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).** Regeneration is a critical component of any training program and is designed to restore balance to the body. Effective regeneration reduces tension, mitigates aches and inflammation, enhances tissue quality, and ensures optimal recovery for continued readiness. Regeneration components of a training session include:

(1) Cool-down. The cool-down gradually transitions the cardiorespiratory system toward a resting state while lowering heart rate and circulatory demands. Light locomotion (e.g., walking or easy cycling) and controlled breathing should be incorporated for 3-5 minutes to help reduce metabolic by products and minimize post-exercise dizziness.

(2) Soft Tissue Management. Soft-tissue strategies (e.g., foam rolling, light compression, self-massage, massage stick) improve blood flow, reduce muscle tension, and restore tissue extensibility after training. Maximum performance benefits can be achieved by targeting 3-4 key muscles for short durations (> 30 seconds per muscle), repeated for 1-2 sets, prioritizing areas that were specifically loaded during the session. These techniques are performed before stretching to promote more effective flexibility improvements and better movement quality in future training.

(3) Stretching. Static or active-isolated stretching focuses on restoring range of motion in muscles and joints that were stressed during training. Each stretch should be performed in a controlled manner for 10-30 seconds per muscle group while avoiding ballistic movements. Stretching supports flexibility improvements and enhances movement quality for future training sessions. Recommended exercises can be found in Appendix B.

## Section 4. Basic Exercise Principles and Programming

1. **Basic Fitness Principles.** CFL/ACFLs shall apply the FITT principles (Frequency, Intensity, Time, and Type) when developing command physical training sessions to ensure exercises align with intended outcomes and support measurable improvement. Sailors may refer to Appendix F for training terminology.

a. **Frequency.** The number of training sessions conducted per day or per week. Frequency must be balanced with recovery needs – higher-intensity activities require more recovery, while lower-intensity sessions may be performed more frequently.

b. **Intensity.** The level of physical effort required to perform a given activity. Intensity may be monitored using the Target Heart Rate, Rate of Perceived Exertion (RPE), the talk test, and repetition max (RM) depending on training methods.

(1) Target Heart Rate. Target heart rate can be estimated using the maximum heart rate (HR) equation by subtracting age from 220 (220-age). For example, a 26-year-old Sailor would have a max heart rate of 194 beats/minute (220 – 26 = 194). A more individualized method is the Karvonen formula, which incorporates resting heart rate to determine target training zones. The formula is: [(Max HR – Resting HR) x %Intensity] + Resting HR. Using target heart rate during training helps Sailors match their effort level to the intended intensity.

(2) The Talk Test. Sailors gauge intensity based on breathing control and the ability to speak during movement—the easier the conversation, the lower the intensity.

(3) Rate of Perceived Exertion (RPE). 1-10 scale used to estimate subjective effort and communicate intensity between Sailors and CFL/ACFL’s. Below is a sample Exercise Intensity chart that incorporates RPE, the Talk Test, and Target Heart Rates.

	Target	Description	Target
<b>MAX</b>	10/10	Maximum effort. Give it all you got!	100% Max HR
<b>HARD</b>	9/10	Extremely strenuous and difficult to maintain.	90% Max HR
<b>MODERATE</b>	7/10	Rapid breathing. Can't talk now!	80% Max HR
<b>EASY</b>	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.** Duration of a training session or individual exercise bouts. Time should align with the intended training effect--shorter for higher intensity work and longer for endurance-focused sessions. CFL/ACFLs will adjust time as needed to maintain proper technique and safe fatigue levels. 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 sets
Strength Training	Moderate	30 minutes	30 sec - 2 min between sets

d. **Type.** The mode of exercise selected (e.g., strength, plyometrics-SAQ, running, circuit training). The chosen activity must support the session's goal and ensure safe, effective movement patterns throughout training.

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. **Progression.** Fitness improvements occur when the training load is increased gradually over time. Adjusting only one FITT variable at a time helps ensure Sailors adapt safely while maintaining movement quality. Progression must account for individual readiness, operational stress, and environmental conditions.

b. **The rule of progression.** Exercise programs should progress gradually, avoiding doing too much, too soon, or too fast to minimize setbacks and reduce the risk of injury.

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 minutes and 30 seconds.

(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 activities, 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) Return from inactivity. After a break in training, it is recommended to resume exercise progressively to allow the body to readapt safely. The 5-week reconditioning plan (<https://www.navyfitness.org/fitness/5-week-training-plan>) can assist with a structured and gradual return to physical activity. Refer to 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 ability to recover and adapt, a decline in performance can occur. These conditions result from inadequate recovery relative to training stress.

a. **Overreaching.** Short-term increase in training load without sufficient recovery that exceeds the body's capacity. With proper recovery, performance typically

rebounds within a few days or up to two weeks. Without adequate recovery, overreaching leads to declines in physical performance and overall readiness.

b. **Overtraining Syndrome.** A more serious condition that results from repeated or untreated overreaching, producing long-term performance impairments and potential for other conditions that may require medical intervention.

#### 4. Cueing Command PT.

a. **Teach by Walking.** CFL/ACFLs must move throughout the training area to actively correct posture, alignment, and mechanics as needed during exercises, rather than remaining fixed in one location

b. **Verbal Command Styles.** Use command and verbal strategies to motivate Sailors and maintain proper exercise tempo, including echo counts, four-count cadence, and countdowns, ensuring cadence aligns with the intended movement speed. When appropriate, lead using mirror-image demonstrations ("I lead right, you lead left").

c. **Cue Types.** Cueing may be vocal, visual, or reactive (e.g., tactile) depending on what best reinforces correct form

(1) **Vocal Cues.** Provide short, clear, external instructions that reinforce movement (e.g., "push through the ground," "stand tall"). Vocal cues promote self-correction and reinforce safe movement patterns.

(a) **External Cues.** 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 Cues.** Focus on the body part (e.g., squat example, state "bring your hips back and down").

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

(2) **Reactive Cues.** Used only as a last resort to correct movement when verbal/visual cues are insufficient. Ask the Sailor's permission before providing spatial or tactile guidance (e.g., standing in front to correct torso alignment or adding a band to support knee tracking).

**Note:** CFL/ACFLs must never manipulate a Sailor into the ideal position.

5. Exercise Tempo. Maintaining exercise tempo supports intended strength adaptations and ensures proper technique. numbers that can be indicated for exercises that should be performed at a specific tempo.

a) There are three phases of an exercise that may be performed at a specific tempo/count.

1) Eccentric - muscle lengthens

2) Isometric - no movement

3) Concentric- muscle shortens.

**Example:** A tempo of 2:1:2 means: 2 seconds down (eccentric), 1 second pause (isometric), and 2 seconds up (concentric). When applied to push-ups, it is a 2-second descent, a 1-second hold, and a 2-second rise.

b) Refer to Table 3-5 for the prescribed tempo for endurance, strength, and power exercises.

## 6. Movement Compensations.

a. Movement compensation is any deviation from optimal patterns decreased or increased muscle activation, limited joint mobility and/or stability, and inappropriate joint movement sequencing.

b. The CFL/ACFLs role in identifying movement compensations include the following:

(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 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
<b>Weight shifts</b>	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
<b>Pelvic tilts</b>	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
<b>Head position</b>	Extension of the neck	Cervical extension/flexion	Manual head tilt Remove/minimize visual	Head facing forward in a neutral position
<b>Thoracic hinge</b>	Thoracic extension and rib flare Slight cervical extension	Rib flare	Close down the ribs Torso activation	Neutral spine with ribs closed
<b>Knee collapse</b>	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 exercises or stretches that exceed a joint's normal range of motion, create excessive or rapid twisting on a fixed position, or require advanced skill to execute. These movements may be inappropriate for Command PT sessions, and are to be avoided at all command-led PT sessions. Some examples of contraindicated exercises and stretches are listed in Appendix B; this list is **not** all inclusive. Contraindicated exercises and stretches are movements that can cause:

- a. Inability to maintain proper body alignment if posture or neutral spine cannot be sustained, modify or stop the movement.
- b. Locked or hyper extended joints avoid end-range loading such as hyperextended knees, elbows, or spine.
- c. Uncontrollable or jerking movements etches, or ballistic motions increase risk for soft-tissue injuries.

**Note:** It is important to understand each Sailor's individual limits and capabilities when planning and conducting training.

8. Overcoming Obstacles to Command PT/FEP. CFL/ACFLs will experience obstacles when trying to assist Sailors in improving physical readiness. Table 4-5 provides tips for assisting with PT obstacles. 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. CFL/ACFLs are encouraged to utilize authorized Navy Fitness resources to support safe and effective Command PT/FEP programming. The following approved tools provide evidence-based guidance, exercise examples, and progressions tailored to Navy readiness requirements.

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

b. **Navy Operational Fitness and Fueling System (NOFFS)**. NOFFS courses are offered aboard Navy installations and provide an evidence-based physical training and fueling system designed to meet the evolving operational demands placed on Sailors. NOFFS eliminates the guesswork by delivering human performance best practices directly to the fleet. The system seeks to maximize physical readiness and reduce musculoskeletal injuries (MSKIs) through restoring, training, and fueling movement.

(1) Delivered through three different methods: NOFFS Pre-Designed Series (including free NOFFS smartphone applications), NOFFS Educational Courses, and Customized NOFFS Programming.

(2) NOFFS includes pillar prep, movement prep, plyometrics - SAQ, strength training, cardiorespiratory conditioning (Energy System Develop (ESD)), regeneration (stretching and flexibility), and nutrition (fueling strategies).

(3) CFL/ACFLs have access to certified NOFFS instructors located throughout the fleet to provide training and assist with integrating NOFFS into command PT. Various NOFFS programs and courses are available, including:

(a) NOFFS series.

1. Operational Series. Designed to help individuals maintain physical fitness levels despite space and equipment limitations. The Operational series provides total-body workouts, including cardiorespiratory training options tailored for submarines, surface ships, and large deck platforms.

2. Strength Series. Designed to help individuals develop the strength required to perform at higher levels through three phases: Build Muscle, Get Strong, and Get Powerful.

3. Endurance Series. Designed to help individuals in breaking through training plateaus while reducing the risk of injuries commonly associated with traditional endurance training.

4. 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.

5. 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.

(b) MWR Instructor-led NOFFS Educational Courses.

1. NOFFS Short Course. The eight-hour NOFFS Operational course is designed to provide attendees with a foundational understanding of the methodology.

2. 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.

3. NOFFS Operational Course. Five-day course is designed to review the mission, intent, and goals of NOFFS. The course equips attendees with the tools needed to plan, lead, and execute NOFFS training across the fleet. Instruction includes both classroom-based lectures and practical gym application.

4. Certified MWR NOFFS instructors are located throughout the fleet and support both individuals and commands. They develop customized physical training sessions, help enhance movement quality and performance, and deliver programming tailored to command requirements. Their training approach includes all NOFFS performance components such as pillar prep, movement prep, plyometrics/SAQ, strength training, Energy System Development (ESD), and regeneration.

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

# APPENDIX A

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## 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

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## 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. Perform after workouts during the regeneration/recovery phase**
- 2. Select stretches that target the muscles used in the session**
- 3. Prioritize individual limitations or areas of tightness**
- 4. Maintain stable, balanced positioning**
- 5. Lean gently into each stretch until mild tension is felt**
- 6. Avoid bouncing or forcing additional range of motion**
- 7. Breathe steadily, exhaling to deepen relaxation**
- 8. Keep the stretch pain-free and controlled**
- 9. Hold each stretch for 20-30 seconds (or longer as needed)**
- 10. Repeat 1-2 rounds per muscle group**
- 11. Aim for a total regeneration time of 10 minutes**

Stretch	Description & Caution	Recommended for Movement	Contraindicated Stretch
<p><b>Chest Stretch</b></p> 	<p><b>Description:</b> Stand tall with feet hip width apart. Place fingertips lightly at the sides of your head near your ears. Open elbows wide to the side to gently stretch the chest. Slightly lift the chest and maintain a neutral neck and spine. Do NOT pull on your neck or head with your hands.</p> <p><b>Caution:</b> You can do this as a partner assisted stretch, but they should not force the stretch by aggressively pulling back on the elbows. Avoid arching the lower back or pushing the head forward.</p>	<p>Horizontal Push (e.g., push-up, chest press)</p>	
<p><b>Posterior Shoulder Stretch</b></p> 	<p><b>Description:</b> Stand with shoulders relaxed. Bring one arm straight across the chest at shoulder height. Use the opposite hand, placed just above the elbow, to gently pull the arm toward the chest. Keep the shoulders level and the trunk facing forward. Hold when a stretch is felt in the back of the shoulder (posterior deltoid). Repeat on the other side.</p>	<p>Horizontal or Vertical Pull (e.g., bent over row, pull up)</p>	
<p><b>Triceps Stretch</b></p> 	<p><b>Description:</b> Take your left arm and reach it behind your back. Place your right hand on the back side of your left arm and gently push to achieve a stretch in the left triceps. Repeat on the opposite side.</p>	<p>Horizontal or Vertical Push (e.g., bench press, overhead press)</p>	

Stretch	Description & Caution	Recommended for Movement	Contraindicated Stretch
<p><b>Active Isolated Stretch: Quad/Hip Flexor Stretch</b>  <b>Repetitions: 30 sec total</b></p> 	<p><b>Description:</b> Begin in a kneeling stance with one knee on the ground and the opposite leg forward at a 90-degree angle. Engage your core and maintain a neutral pelvis with the torso upright, avoiding any arching of the lower back.</p> <p><b>Procedure:</b> With a slight forward lean in the torso, engage your core and contract the glute of the back leg. Maintaining good posture, gently shift the hips forward. You should feel the stretch in the front of the rear thigh and hip. Exhale and hold the stretch for 2 seconds, then return to the starting position and repeat.</p> <p><b>Coaching Key:</b> Contract the glute on the back leg. Avoid excessive arching in the lower back. Keep your back flat and torso engaged throughout the stretch</p>	<p>Lower Body Push (primary) + Lower Body Hip Extension mobility.</p>	
<p><b>Groin or Butterfly Stretch</b></p> 	<p><b>Description:</b> While sitting with the upper body nearly vertical and legs straight, bend both knees and bring the soles of the feet together. Place your hands lightly on your ankles, keeping the chest lifted and the spine tall. Gently press the knees toward the deck using the strength of your hips (do not push with the hands). Lean slightly forward as your elbows move downward. You should feel a stretch in the groin area. Hold the position while breathing deeply and avoid bouncing.</p>	<p>Lower Body Push or Pull (e.g., lateral lunge, single-leg RDL)</p>	

Stretch	Description & Caution	Recommended for Movement	Contraindicated Stretch
<p><b>Modified Hurdler Stretch</b></p> 	<p><b>Description:</b> Sit upright on the deck with one leg extended straight in front of you. Bend the opposite leg so the sole of the foot rests against the inner thigh of the extended leg. Maintain a tall posture and hinge forward from the hips, reaching toward the toes of the straight leg without grabbing the toes. Keep the back flat, chest lifted, and the knee of the extended leg relaxed. Hold the stretch without bouncing, then switch sides.</p>	<p>Lower Body Push or Pull (e.g., deadlift, RDL, squat)</p>	
<p><b>Outer-Hip-and-Low-Back-Stretch</b></p> 	<p><b>Description:</b> Sit tall with both legs extended straight in front of you. Cross one leg over the other so the foot is placed flat on the deck outside the opposite knee. Keep the torso upright and gently rotate toward the crossed knee. Place the opposite elbow on the outside of the crossed knee to assist the twist. Keep the hips grounded; the stretch should be felt in the outer hip and mid to low back. Repeat on the 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 data-bbox="317 386 541 412"><b>Piriformis Stretch</b></p> 	<p data-bbox="680 256 1264 526"><b>Description:</b> Lie on your back with both knees bent at 90 degrees. Cross your right ankle over your left thigh just above the knee. Reach through and grasp the back of the left thigh, gently pulling the left leg toward your chest. Maintain a neutral spine and keep the upper body relaxed. You should feel the stretch in the outer hip and glute of the crossed leg. Repeat on the opposite side.</p> <p data-bbox="680 561 1234 711"><b>Note:</b> If you experience low back pain after performing physical activity, seek medical assistance. This stretch is intended to increase flexibility in the hip and gluteal region and may assist in reducing discomfort.</p>	<p data-bbox="1289 256 1583 344">Lower Body Push or Pull (e.g., deadlift, squat, lunge, RDL)</p>	
<p data-bbox="317 763 541 789"><b>Low Back Stretch</b></p> 	<p data-bbox="680 747 1255 834"><b>Description:</b> 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 data-bbox="1289 747 1583 834">Lower Body Push or Pull (e.g., deadlift, squat lunge, RDL)</p>	<p data-bbox="1625 747 1885 834">Avoid extreme hyper-extension of the spine (arching the back).</p> 

Stretch	Description & Caution	Recommended for Movement	Contraindicated Stretch
<p data-bbox="310 326 552 354"><b>Quadriceps Stretch</b></p> 	<p data-bbox="682 256 1255 496"><b>Description(On-the-Ground):</b> While lying on your side with a slight bend in the lower knee, grasp the ankle of the top leg with the hand on the same side. Gently pull the foot toward the buttocks while keeping the knee aligned with the body—ensure the knee is not flared outward and remains directly below the hip. Repeat on the opposite side.</p> <p data-bbox="682 532 1255 829"><b>Description (Standing):</b> Stand with a slight bend in the supporting knee. Grasp the ankle of the opposite leg with the same side hand and maintain balance. Gently pull the foot toward the buttocks, keeping the knee aligned with the body and directly below the hip. An additional option is to stretch the trapezius (neck) muscles by gently bringing the chin toward the opposite side of the chest while holding the quadriceps stretch. Repeat on the opposite side.</p> <p data-bbox="682 865 1255 922"><b>Note:</b> If balancing is difficult, hold onto a wall or perform this stretch while lying on your side.</p>	<p data-bbox="1291 256 1570 313">Lower Body Push (e.g., squat, lunge)</p>	
<p data-bbox="310 1068 552 1096"><b>Abdominal Stretch</b></p> 	<p data-bbox="682 961 1255 1170"><b>Description:</b> Lie face-down on your stomach and place your hands beneath your shoulders. Gently push up until you feel a stretch in the abdominal muscles. Keep the hips and pelvis grounded. Do not fully lock out the elbows or hyperextend the back. Maintain a neutral neck position and breathe steadily.</p> <p data-bbox="682 1206 1255 1317"><b>Note:</b> If you feel discomfort in the lower back while performing this exercise, reduce the tension by using a “propped on elbows” position instead.</p>	<p data-bbox="1291 961 1360 984">Core</p>	

Stretch	Description & Caution	Recommended for Movement	Contraindicated Stretch
<p><b>Calf Stretch</b></p> 	<p><b>Description:</b> Lie on your back with both legs on the deck. Loop a stretch strap (or towel) around the ball of one foot. Keep the leg straight as you gently lift it upward until you feel a stretch in the upper calf. Actively pull the toes toward you using the strap or towel while keeping the heel aligned. Maintain a neutral spine and keep the hips square. Hold for 20–30 seconds, then release and repeat for controlled repetitions. Switch sides.</p>	<p>Plyometrics (e.g., jumping, bounding), ESD (e.g., running)</p>	

**Active Isolated Stretch (AIS) Protocol:**

1. Start with the muscle relaxed in a neutral position.
2. Actively move through the range of motion (ROM) without assistance.
3. Apply no more than one pound of pressure at the end of the ROM.
4. Provide a controlled return to starting position.
5. Each stretch should last no longer than 2 seconds.
6. Repeat the stretch 10 times, aiming to increase ROM slightly each repetition
7. Keep all stretches pain-free and avoid bouncing.
8. Always return the muscle being stretched to the starting position.
9. Exhale during the stretch and inhale during relaxation phase.

Additional regeneration exercises can be found at  
<https://www.navyfitness.org/fitness/noffs-training/noffs-series/regeneration-strategies>

# APPENDIX C

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## SAMPLE WORKOUTS

<b>Operational Workout</b>			
<b>Pillar Prep</b>			
<b>Exercise</b>	<b>Reps</b>	<b>Tempo</b>	<b>Sets</b>
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
<b>Movement Prep</b>			
<b>Exercise</b>	<b>Reps</b>	<b>Tempo</b>	<b>Sets</b>
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
<b>Strength</b>			
<b>Circuit 1</b>	<b>Reps</b>	<b>Tempo</b>	<b>Sets</b>
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
<b>Circuit 2</b>			
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
<b>Circuit 3</b>			
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
<b>ESD</b>			
<b>Exercise</b>	<b>Reps</b>	<b>Rest</b>	<b>Sets</b>
Reaction Drills	1	1:00	4
Linear Acceleration	1	1:00	4
Cone Drills (6-Cone)	1	1:00	4
<b>Regeneration</b>			
<b>Exercise</b>	<b>Required Time</b>	<b>Tempo</b>	<b>Sets</b>
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

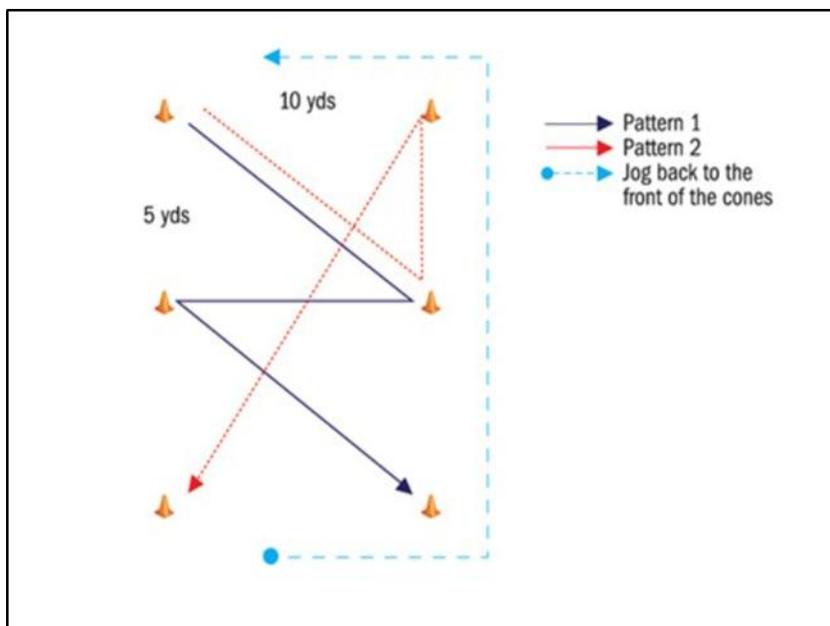
Position	Distance	Reps	Rest
Face Down/Head Forward	20 YDs	1	1-min
On Back/Head Forward – Roll Left	20 YDs	1	1-min
On Back/Head Forward – Roll Right	20 YDs	1	1-min
Face Down/Head Forward – Push up (x2)	20 YDs	1	1-min

### 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

<b>Sandbag Workout</b>			
<b>Pillar Prep</b>			
<b>Exercise</b>	<b>Reps</b>	<b>Tempo</b>	<b>Sets</b>
Quadruped Thoracic 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
<b>Movement prep</b>			
<b>Exercise</b>	<b>Reps</b>	<b>Tempo</b>	<b>Sets</b>
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
<b>Strength</b>			
<b>Exercise</b>	<b>Work/Rest</b>	<b>Tempo</b>	<b>Sets</b>
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
<b>ESD</b>			
<b>Exercise</b>	<b>Reps</b>	<b>Rest</b>	<b>Sets</b>
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
<b>Regeneration</b>			
<b>Exercise</b>	<b>Required Time</b>	<b>Tempo</b>	<b>Sets</b>
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

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## IMPROVING PRT SCORES

The 5-week reconditioning plan is designed to reintegrate physical activity. Sailors can use the NOFFS 5-Week Conditioning Manual and workouts to improve operational readiness and reduce the severity of the injury. The 5-week plan for offline use is available at <https://www.navyfitness.org/fitness/5-week-training-plan>.

WEEK 1 - WORKOUT 1						
Exercise	Equipment	Reps/Time/Distance	Tempo	Sets	Rest	
<b>Pillar Prep</b>						
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	----	
<b>Movement Prep</b>						
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	----	
<b>Circuit 1</b>						
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	
<b>Circuit 2</b>						
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	
<b>ESD</b>						
Linear Accelerations - 30 yards Moderate/ 10 yards Max	5 cones	40 yards	30 secs	4	1 min	
<b>Regeneration</b>						
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

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## FEP MONTHLY TRACKING LOG

## FEP Monthly Tracking Log

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

\_\_\_\_\_  
Member's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
CFL/ACFL Signature

\_\_\_\_\_  
Date

# APPENDIX F

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## 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 minute period designed to prepare the body for the demands of a workout or practice. These movements progress from low to high intensity and incorporate all planes of motion.
8. Energy System Development (ESD). A structured approach to training that enhances the body's ability to produce, use, and recover energy during physical activity. ESD focuses on improving the efficiency and capacity of the aerobic and anaerobic systems through planned variations in intensity, duration, and recovery.
9. 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.
10. 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.
11. FEP for Five. A Navy concept used to gradually introduce exercise to deconditioned members or those beginning a new program. It utilizes small repetitions (no more than five reps) across a set of five exercises to promote safe adaptation and proper movement quality.

12. Flexibility. This is the range of motion of a joint that may increase by stretching.
13. 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).
14. 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.
15. 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).
16. Long Slow Distance (LSD). Running slowly or running for a set amount of time or distance without regard to time.
17. 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).
18. 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).
19. 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.
20. 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.
21. 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.