# **INTRODUCTION**















**Navy Operational Fitness Series** 

# **Navy Operational Fueling & Fitness Series**

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# The Navy Operational Fitness and Fueling Series Project

# **Project Introduction**

The Navy Operational Fitness and Fueling Series Project (NOFFS) provides the Navy with a "best in class" physical fitness and nutrition performance resource that provides guidance to Sailors and to Navy health and fitness professionals. The Navy Operational Fitness and Fueling Series instructs individuals how to physically train effectively and safely, and how to make healthy nutrition choices in both shore-based and operational environments.

As the Navy is called to intensify operational tempo based on current world-wide mission requirements, it is imperative for Sailors to be physically fit. Physical fitness of Sailors is an essential and critical component of operational readiness and meeting deployment schedules. Sailor resiliency and durability are primary goals of the development and distribution of the NOFFS.

The purpose of the Navy Operational Fitness Series is to provide a complete physical training program that will "eliminate the guesswork" for



- the individual Sailor that is participating in her/her personal physical training program.
- the Navy health and fitness professional that is interested in obtaining a readily prepared comprehensive and biomechanically balanced individual or group physical training program.

The NOFFS project goals are to:

- 1: Improve operational performance.
- 2: Provide foundational and performance nutrition guidance.
- 3: Decrease the incidence/severity of musculoskeletal physical training related injuries.

The Navy Operational Fitness and Fueling Series provides Sailors with an evidence-based performance tool that will address injury prevention by physically training operational job movement patterns. Rather than focusing specifically on the physical readiness test (PRT), the product will emphasize how to specifically improve the functional performance of a Sailor during daily operations including; lifting, pushing, pulling, carrying, aerobic/anaerobic demands, body movement skills with balance, agility and coordination. The focus of the product is to optimize operational physical performance and fueling for Sailors while preserving Navy combat power.





# Functional Performance = Operational Performance: Does the Training Relate to the Demands on the Job?

The operational environment places a unique demand of physiological and mechanical stress on to the human body. This demand requires a systematic approach to physical preparation to ensure personnel are operationally efficient and can sustain a productive, healthy career.

There is a consummate paradigm shift in physical development from a traditional fitness model of isolated, single joint resistance to an archetype in integrated training systems based on movement including:

- Restoring Movement
- Training Movement
- Fueling Movement

The NOFFS represents this training system as a professional medium to take care of the Navy's greatest asset: its' people.

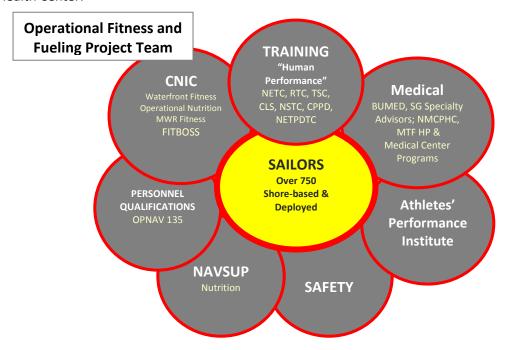






# **NOFFS Project Development Team:**

A comprehensive cooperative Navy project team was assembled for the purpose of developing the NOFFS. The primary project team consists of the following organizations: Center for Personal and Professional Development (CPPD) – the project manager; TYCOMS – including COMNAVSUBFOR, COMNAVSURFOR, and COMNAVAIRFOR (over 750 Sailors provided input for the development of the NOFFS); Commander Naval Installations Command (CNIC) MWR Fitness, Nutrition, & Deployed Forces Program; Navy Supply Command (NAVSUP) Nutrition Program, OPNAV 135 Physical Readiness Division; Navy Safety Center; Naval Leadership Command; and Bureau of Medicine and Surgery (BUMED) assets: Clinical Care and Public Health(M3/5CCPH), SG Specialty Advisors, and Navy and Marine Corps Public Health Center.



Center for Personal and Professional Development (CPPD) serves as the project manager for the Navy Operational Fitness and Fueling Series. CPPD promotes and institutionalizes a culture of fitness in the Navy. It is the responsibility of the CPPD to serve as the central authority for U.S. Navy training for leadership, professional, and personal development training and support. Physical fitness/human performance is a primary component of the CPPD's health and wellness program. CPPD supports the Navy's workforce by providing tools, knowledge, and information to support the character growth, professional development, and personal competency of Sailors. These tools promote personal development and improve personal readiness which in turn helps accomplish the Navy's mission.

To augment these efforts, Athletes' Performance Institute (API), recognized within the professional sports human performance industry as a leading expert in developing training programs that produce results, is working directly with Navy physical fitness and nutrition experts.





API has an unmatched track record and history of efficiently and ethically improving professional/elite athletes' performance. Additionally, API has extensive experience and knowledge of the Armed Forces community and the specialized needs of this warrior culture.

The mission of API is to provide the finest performance methods, specialists and facilities seamlessly integrated to efficiently and ethically enhance our athletes' performance. Through this mission, API and the Navy have specific goals that focus on; career productivity, performance enhancement, career longevity, injury prevention, motivation through education, sustainable strategies for success, and most importantly, achieving results. API is able to execute this mission and achieve these goals through the Athletes' Performance Training Systems (APTS). The APTS represents the world's leading Professional Sports Model (PSM) for the optimization of human performance in all training sectors and sports. The APTS was utilized to build the Navy Operational Fitness and Fueling Series.





APAZ

APLA





**APFL** 

# **Emphasizing Physical Training Injury Prevention**

Injuries impose a greater ongoing negative impact on the health and readiness of the U.S. Armed Forces than any other category of medical complaint during peacetime & combat (*Am J. Prev Med, 2000, 18 (3S), p 16.*)

Injuries represent the leading health problem of U.S. military personnel across the spectrum of health from deaths and disabilities, to hospitalization and outpatient treatment (Jones et al. 1999; Jones and Amoroso 2000). Training-related (overuse) injuries have been identified as the leading cause of clinic visits and have a very real impact on the readiness of the Force due to limited duty assignments (Jones et al. 1999; Jones et al. 2000). Conservative estimates of time Service members are given physical activity restrictions are upwards of 25 million limited duty days per year for all three Services combined. These Service members are unable to perform their full duties and as a consequence many are unable to deploy. Most of the overuse injuries sustained in a military environment come from the cumulative effect of physical training.

The DoD Military Injury Prevention Priorities Working Group stated in 2006 that physical training and sports injuries are of particular concern. Decreasing injuries is likely to have the greatest impact on military readiness. The Defense Safety Oversight Council (DSOC) suggests that the greatest reduction of lost duty days due to injuries across DoD may be achieved via mitigation efforts focused specifically on sports-and physical training related injuries. *DSOC, DoD Military Injury Prevention Priorities Working Group: Leading Injuries, Causes, and Mitigation Recommendations, Feb.2006.* 

Two key areas of risk that have been identified by the Navy concerning injury and the approach to injury prevention are; Reducing running volume and developing body movement skills.





# **Running Mileage**

There is a growing body of military and civilian research that shows that high running volume significantly increases the risk for lower extremity injury. During initial military training about 25 percent of men and about 50 percent of women incur one or more physical training-related injuries. About 80 percent of these injuries are in the lower extremities and are of the overuse type - a condition brought about by physical training volume overload - generally caused by excessive running (JSPTIPWG Interventions Supplement, May 2007).



The Cardiovascular training implemented within the NOFFS works to combat this issue by providing Sailors with a variety of training options that avoid long slow sustained running. In its place, interval training is used that focuses on developing the Sailor's leg strength, speed, power, and endurance. Interval training options are provided allowing for small space (ie. Metabolic circuits), unloaded (ex. Equipment based options), and ground based options. This will provide Sailors with cardiovascular training strategies that will allow them to improve their performance, regardless of where and how they train.

#### **Body Movement Skills**

There is an increasing body of knowledge identifying "core stability" as a key component necessary for successful performance of most gross motor activities. "Core stability" is identified as hip and trunk muscle strength, abdominal muscle endurance, good spinal pelvic alignment, and the absence of ligament laxity in the vertebral column.

Strength and stabilization exercises directed at the body's core represent many of the same movements required during more complex activities and thereby increase the likelihood of improved military occupational task performance. DoD Military Injury Prevention Priorities Working Group: Leading Injuries Causes and Mitigation Recommendations, Defense Safety Oversight Council (DSOC) February 2006.

The Joint Service Physical Training Injury Prevention Work Group found good evidence that increasing the proportion of physical training time devoted to improvement of body movement skills reduces injuries and improves performance. These body movement skills include; agility, posture, stability, flexibility, balance, speed, power, reactive ability, and coordination. Focus must be on improving precision of movement during execution of these exercises. This is particularly important during deployments on the Navy's operational platforms.







The methodology implemented by API throughout the NOFFS fitness programming places a large emphasis on all body movement skills and truly takes a proactive approach towards injury prevention. The approach taken not only places an emphasis on the volume and intensity of training, but is also critical of the types of movements prescribed, the quality of how those movements are executed, and the balanced combination and progression of each movement.

Each training component used within the API methodology plays a vital role in both preventing injury and improving performance. Pillar Preparation takes the concept of "The Core" one step further and places a focus on the stability and strength of the Sailor's "Pillar" - their hips, torso, and shoulders - to ensure a solid foundation from which to move and transfer energy. Movement Preparation places the attention on priming the Sailor's body for the work to come by lengthening, strengthening, and stabilizing actively through full ranges of motion. This works to greatly enhance the Sailor's proprioception and kinesthetic awareness. The movement and loading selection within the strength training component works to strengthen the fundamental patterns of movement that transfer directly to their operational performance, working through 3 planes of motion and applying their body movement skills functionally. Facilitating recovery is also a critical component to any training program to help bring balance back to the body, and enhance the body's response to the training stimulus. The details of each training component will be discussed later in this document to provide a more in-depth look at what is involved in each.





# **Focus Groups & Findings**

The NOFFS is a project that supports US Navy Sailors. To maintain a Sailor-orientated project, shaping information had to come from Sailors themselves. Over 750 Sailors were involved with the development of the Operational Fitness and Fueling Series. The NOFFS is based upon the feedback from the focus groups held during 28-30 January, 2009 site visits conducted on the USS Boise (SSN-764), USS George Herbert Walker Bush (CVN-77), and Strike Fighter Squadron (VFA-11) "Red Rippers." In January 2009, NAVSUP Nutrition also conducted West Coast focus groups with the following operational platforms: USS Pinckney (DDG-91), USS Princeton



(CG-59), USS Benfold (DDG-65), USS Bunkerhill (CG-52), USS John Paul Jones (DDG-53) and NAS Lemoore. Sailors from the USS Devastator (MCM-6), and USS Monterey (CG-61) also provided invaluable baseline input for the project. Representatives from Center for Personal and Professional Development (CPPD), Navy Supply Command (NAVSUP), Navy and Marine Corps Public Health Center (NMCPHC), and Athletes' Performance worked together to collect data and talk with the Sailors during the focus groups.

The information was gathered from all ranks at the commands and provided the development team with a very real perspective. Command level personnel assisted in providing framework for the product included the following: health promotion coordinators, culinary specialists, command fitness leaders, LCPO Medical, Commanding Officer (CO), Executive Officer (XO), Command Master Chief (CMC), Chief of the Boat (COB), Physical Therapist – large deck, Independent Duty Corpsmen (IDC). The focus group participants included enlisted, senior enlisted, officers and Sailors actively involved with the Fitness Enhancement Program (FEP). Performance of command physical training programs and FEP programs were also reviewed.

Both the strengths and limitations of the Navy workplace environment and personnel were revealed as they relate to the performance of exercise programming and the practice of making healthy nutrition choices. Sailors communicated clearly how they wanted the product to be designed and what information they wanted to be included in the resource. Their statements were very clear, "eliminate the guesswork" for the individual Sailor to participate in his/her personal exercise and nutrition program. As well as, provide the command a straightforward tool for operational fitness and basic nutritional guidelines.

The following feedback provides a good summary of our findings from talking with the individual Sailors during the Focus Groups:





#### **Operational Fitness Feedback from Sailors:**

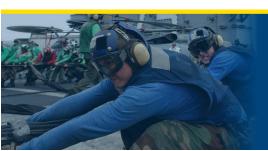
- "Need to know how to do the exercises when we are underway. Eliminate the guesswork for us.
   Make it easy for us to understand."
- "Need standardized information, something evidence-based. There's so much information out there. Give us the best training program."
- Time constraints "Can we have a PT program that can be performed using different time increments? 30, 45, 60 minute options?"
- "I suffer from knee and back problems need something to prevent these injuries."
- "Eliminate the guesswork for us. Make it easy for us to understand."
- "There's no room This makes it difficult to workout."
- "Consider specific needs of each TYCOM. Make something specific for each."
- "Don't place in a manual or a CD, we won't use it."

# **Operational Fueling Feedback from Sailors:**

- Foundational nutrition interest was greater than performance nutrition increased emphasis on weight management was asked for.
- Interest in acquiring "best in practice" weight management strategies and solutions. Sailors were often heard saying, "There's so much out there, what's the best?"
- Need to provide information in a simplified manner that can be understood and applied
- Need a resource that they can readily use to improve their food selection
- "Give me something I can readily use. I'm not going to read a manual." Marketing recommendation is to develop something eye catching. Develop as an 8 1/2 X 11 sheet that can be used by Navy nutrition, fitness, and health professionals. Also may be used by printing to a poster size and placing in the Galleys and health and fitness areas.
- Needs to be a system with balance that can incorporate both "healthy foods" and foods that are traditional "comfort foods"
- Many Sailors are in the stage of pre-contemplation; therefore, information needs to be created in a non-threatening way that would get them thinking about making a healthy choice.
- Identify appropriate portion sizes and how much they should be eating
- Create food lists to help guide food choices "show me the food lists that are the healthiest"
- Educate on optimum Nutrient Timing (ie: improved recovery before and/or after PT)
- Focus on key problem areas. (ie: Skipping breakfast was identified as a key problem area)
- Educate Sailors on risks associated with increased consumption of Energy Drinks



\*The Operational Fueling Series content has been created to address the nutritional needs of the Sailors. The nutritional product will provide Sailors with simple strategies and tools through a series of cards.





# **Product Review: Operational Fitness Series**

The Operational Fitness Series has been developed in 4 distinct series, each designed specifically to tackle the needs of each platform; Submarine Series, Surface Ship Series, Large Deck Series, and Group Training Series. Each series has been developed on 8 ½ x 11 inch cards that will be packaged together on a ring. The cards will provide the Sailor with all pertinent information needed to complete the training program. This includes a series of images, exercise description, sets, reps, and duration. Each card series will offer various stages of progression (levels 1-3, stages A-D) both in exercises and volume/intensities. The cards will also provide each Sailor with 30, 45, and 60 minute options. The individual Sailor may use the resources as a guide to perform their daily personal exercise program, or this product may be utilized by Navy health and fitness professionals as a teaching tool or as a guide for leading a command exercise session.

The challenges addressed in each card series are the following:



- A.) Submarine Series
  - Small space for all training
  - Fit Kit equipment
  - Minimal cardio equipment



- B.) Surface Ship Series
  - Moderate space for all training
  - Fit Kit & full equipment options
  - Cardio equipment



- C.) Large Deck Series
  - Large space for all training
  - Fit Kit & full equipment options
  - Cardio equipment



- D.) Group Training Series
  - Progressions on each card for differing levels of ability
  - Fit Kit equipment





# **Program Design Methodology**

Each program has been created using a combination of training components to make up a single training session, or workout. The training components used include:

#### Pillar Preparation / Movement Preparation / Strength / Cardiovascular Fitness / Recovery

Each training component has a specific role within the program and combined creates a well rounded program to target injury prevention and operational performance improvement. The following pages provide a brief summary of each training component.

# 1.) Pillar Preparation:

Your pillar - which consists of your hips, torso, and shoulders - represents the foundation for all of your movement. All movement requires the production or absorption of forces; this force is then transferred throughout your body in order to execute the movement. Your pillar acts as a bridge to ensure the seamless transfer of energy throughout your body - its alignment and function directly correspond to the quality and efficiency of every move you will make.



If your pillar is compromised, energy leaks may occur throughout your body causing movement compensations which can quickly lead to aches, pain, and even injuries. It's important to realize that these energy leaks will also have a negative impact on the amount of power production in any given movement.

If you think of the body as a wheel, the pillar is the hub, and the limbs are spokes. We want to have the hub perfectly aligned so we can draw energy from it and effectively transfer energy throughout the body. It's impossible to move the limbs efficiently and forcefully if they're not attached to something solid and stable.

Pillar Preparation is a training component that is designed to strengthen the critical stabilizing muscles of your pillar: shoulders, torso, and hips. By performing Pillar Preparation at the start of your training session you are engaging, or "turning on" the muscles that will help protect, stabilize, and strengthen your pillar so that you are able to safely and effectively transfer energy throughout your body during the rest of your workout. On top of that, Pillar Preparation will give you a solid foundation which will allow you to perform your operational task at the best of your ability, all while reducing the chance of injury. A strong pillar will help keep you healthy and in peak form.





# 2.) Movement Preparation:

Traditionally when people prepare to train they enter into a routine that primarily consists of a mixture of stretching, as well as a form of general activity to warm up tissue before engaging in activity.



Stretching is an important part of any warm up or cool-down. It is vital for injury prevention, muscle recovery, optimizing muscle gains, and increasing flexibility. However, there are different types of stretching, and each affects your body in different ways. That being said, it is important to understand how, and when to use different types of stretching.

Static stretching, holding a stretch for a long duration of time, works by sending a message to the muscle saying, "shut this tightness off," ultimately forcing the muscle to release and relax. Whether you are preparing to train or begin work on your operational platform, movement requires dynamic, fluid action. By holding long static stretches right before a bout of activity, you are effectively shutting off the muscles when you need them the most, making the upcoming physical demands harder on the body. It's not that static stretching is a bad idea; it can be a great tool when done correctly and at the appropriate time.

Static stretching is best used post-workout or at the end of the day to elongate the muscle and connective tissue, while turning off the nervous system (your brain and the nerves running to and from your muscles). It is also effective on recovery emphasis days, as long static holds help to produce long-term changes in the fascia (the band of elastic tissue that envelops the body, beneath the skin), ultimately improving muscle balance and flexibility.

Activities that are done to "warm up," or increase your body's temperature are often done without a specific purpose in mind, except of course to "warm up," or sweat. You may see people ride a stationary bike, or go for a light jog for 5 minutes. There is nothing wrong with riding a stationary bike, or going for a light run, as long as there is a purpose for it. You need to ask yourself this question, is a light ride on a stationary bike appropriate for a Sailor who is warming up for multidirectional movements?

#### **Redefining Warm up: Movement Prep**

Movement Preparation is a training component designed as an efficient, systematic approach to help people prepare for the specific demands of the day's training session. "Movement Prep" is a series of active and dynamic stretching involving movements that imitate those inherent to the activities for which you are preparing. Muscles are stretched through a series of controlled, active movements, holding them only for 1-2 seconds instead of an extensive period of time.

The movements prescribed in this training component have a focused purpose, and are designed to increase your core temperature; lengthen, strengthen, stabilize, and balance your muscles; and, as the name suggests prepare your body for the upcoming movement, providing the individual tremendous "bang for their buck."





Movement Preparation also is effective in improving balance and body awareness, the ability to sense the position, location, orientation and movement of the body and its parts. This is important to create body awareness and control for every Sailor allowing them to start to understand how to control compensations and correct and coach themselves through the movement during the rest of their training session and in their operational life. The needs for balance and body awareness are great in operational life where Sailors are forced to deal with the pitching and rolling that come hand in hand with life at sea.

# **Refining Movement Patterns (Unloaded)**

Movement Prep will allow Sailors to train their "muscle memory" and movement patterns through various planes of motion (linear/lateral/rotational) in an unloaded situation. This is vital for injury prevention and movement quality, helping to train Sailors out of any compensatory patterns. Because Movement Prep is a ritual that is done before each and every training session the accumulative time spent focusing on quality movement patterns is tremendous and highly effective. In fact, if a Sailor were to perform Movement Preparation for just 5 minutes, 4 days a week that would add up to 1,040 minutes of movement rehearsal each year!

# 3.) Strength:

Traditionally, strength programs are designed with specific body parts in mind; they use single joint movements, and work through a single plane of motion. We have tried to break from this traditional approach in our program design and focus instead on training movement patterns, using multi joint movements that work through multiple planes of motion.

The reason we train body movements instead of parts is because everything about the body's engineering is connected. What happens to the big toe affects the knees, the hips, and ultimately the shoulders. The muscular system is both complex and simple, a series of muscular and fascial bands (connective tissue) that work seamlessly to produce efficient movement. Many workout programs do more damage than good by producing muscle imbalances and inefficient movement patterns that sabotage this highly coordinated operating system.

The movement patterns we focus on involve the following;











**Upper Pulling** 

**Lower Pushing** 

**Lower Pulling** 

**Rotational** 

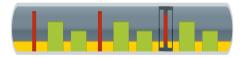




The realities of operational life require every Sailor to be prepared to deal with these movement demands. Whether they are working in confined spaces, on a carrier deck, loading cargo, or assisting in the mooring of a ship. We strongly believe that the ultimate goal of the strength training component is to provide the appropriate characteristics of strength to each movement pattern to help ensure every Sailor reaches their performance potential.

# 4.) Cardiovascular Fitness:

When people usually think of cardiovascular fitness the first thing that comes to mind is long slow runs, and the assumption is the longer you



can go the better shape you are in. Although this is a valid measure of specific fitness, the approach isn't necessarily the most effective training approach to elicit great improvements in cardiovascular fitness. In fact, if this is all you do during training you are more likely to hit a plateau and suffer from aches and pains associated to large volumes of repetitive stress under fatigue.

Interval training is an alternate approach to long slow duration training. This involves training that alternates between short intense bouts of exercise and periods of true recovery. This will take you from an effort level that is easy, up to a hard effort, and then back down to an easy effort. To do a "true interval" you must allow your heart rate to truly recover before picking the intensity back up. The following are some of the key benefits of interval training.

#### Overloading:

In order to bring about positive physical changes to your cardiovascular system the body must be presented with a workload that challenges its current fitness state. By overloading the heart and lungs, you are increasing your endurance and cardiovascular fitness level, which is the same principle as weight training (overloading a muscle will result in increasing the muscles strength). The heart is a muscle, so it must be overloaded to improve its strength. At the same time, the rest of the respiratory system is improving, including the lungs and blood circulation, for better endurance. This workload will cause fatigue, and with proper recovery, will eventually yield cardiovascular improvements. It is important to note that the overload happens during training, while adaptation occurs during recovery – thus making recovery a vital part of your programming.

#### **Increased Caloric Burn:**

Another advantage of interval training is that you can actually burn more total calories in the same amount of training time.

#### Motivation:

By designing intervals into your conditioning session you are provided with variety across each workout. The working intervals are kept to about five-minute work sets, balanced with the appropriate amount of recovery to help facilitate this motivation. You will be much more inclined to push yourself during the training if you know you will get a chance to recover shortly.





#### Metabolism:

Another benefit of interval training is that it increases your metabolism, both during your training session, and after. It is not just about what your body is doing during the workout; it is important to understand what your body is doing the rest of the day. Studies have shown that interval training raises your metabolism after a workout, and keeps it up longer than any "steady state" workout. Steady state exercise refers to any exercise that stays at the same workload for a long period of time.

#### **Increase Anaerobic Threshold:**

Interval training allows us to train at a higher intensity for a longer period of time throughout the duration of our training session, due to the intermittent recovery throughout. As our bodies become more efficient we are able to train at a higher intensity without crossing over into our anaerobic energy system. This results in more calories being burned, an increased threshold to fatigue, and quicker recovery between bursts of activity.

# 5.) Recovery:

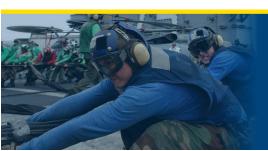
Operational life is very demanding, both physically and mentally. The repetitive mechanics and constant pounding your body endures day in and day out can take its toll. If you do not allow your body to properly recover, you increase your injury potential, and eventually you could find yourself with nagging aches and pains that eventually lead to injury. Fortunately there are strategies you can implement to help your body recover, a process we refer to as regeneration. It's important to realize that the things you do at rest are just as important as the work you perform. If you



focus on having high quality rest and regeneration, you'll be able to get more return on investment from every step of your training. Recovery activities will relieve your body of aches and pains, decrease inflammation, and improve tissue quality. Within the Recovery training component we will focus on; increasing your flexibility, ensuring your body is balanced, and isolating and relieving built up tension within your muscles.

# Flexibility

Instead of passive static stretching the movements prescribed in regeneration will use Active-Isolated Stretching (AIS) to reprogram your muscles to contract and relax through new ranges of motion, working to increase your flexibility. This type of flexibility work can be done using an 8 to 10 foot length of rope, or no equipment at all. The movements that you perform will allow you to isolate the muscle to be stretched. You won't hold stretches 10 to 30 seconds, as in traditional stretching; instead you'll use the rope to gently assist the muscle's range of motion about 10 to 20 percent farther than your body would ordinarily allow and only hold 1-2 seconds. As you stretch the muscle you will exhale, releasing tension and getting a deeper stretch, actively moving your body through its full range of motion – then giving gentle assistance.





# **Training Program Introduction**

#### **Program Progression: Levels & Stages**

Each training component will have three levels. Each level will progress the Sailor in either movement/drill complexity, or work to rest ratios. Within the training components of Pillar Preparation, Movement Preparation, and Strength, each level will contain 4 stages (A, B, C, D). Stages represent smaller steps of progression within each level.

The Sailor should progress to the next stage when they have successfully completed the prescribed number of circuits in the allotted time. They will progress to the next level when they have successfully completed Stage D with perfect technique in the desired time.

#### **Duration of Training Session**

During the focus groups it was made clear to us that Sailors needed to have different time options for their workouts due to their busy schedules in their Operational Life. To accommodate this we have built in 3 different time options for each training component allowing them to create a 30 / 45 / 60 minute training session. This is communicated on the card by offering three training options – Short, Medium, and Long (S/M/L).

#### **Equipment & Space**

Each operational platform will have their own individual equipment and space constraints. The Operational Fitness Series have been created with these constraints in mind, ensuring each platform's training programs are able to be executed successfully.





# **Movement Library**

The following pages contain images and detailed movement descriptions for each of the movements used in the Operational Fitness Series. Movements are organized by Levels and Training Components.





# Level 1 – Warm Up & Strength

# **Pillar Preparation (Level 1)**

#### Pillar Bridge (\*30 Sec Hold)

#### **Starting Position:**

Lie face down with your forearms on the deck under your chest.

#### Procedure:

Push up off your elbows, supporting your weight on the forearms. Tuck your chin so that your head is in line with your body. Keep feet shoulder width apart and pull your toes towards your shins. Hold the position for 30 seconds.

#### Coaching Key:

Push your chest as far away from the deck as prescribed. Keep your belly button drawn in. Keep your head in line with your spine. Don't sag or bend. Do not round off your upper back.

#### You Should Feel It:

Working your shoulders and torso.

#### Glute Bridge (\*30 Sec Hold)

#### **Starting Position:**

Lie faceup on the deck with your arms at your sides, your knees bent, and your heels on the deck.

#### Procedure:

Lift your hips off the deck until your knees, hips, and shoulders are in a straight line. Hold the position for 30 seconds and return to the starting position.

#### Coaching Key:

Fire your glutes to lift your hips off the deck. Do not let your back extend during the movement.

#### You Should Feel It:

In your glutes, and to a lesser degree, in your hamstrings and low back.

#### Y's - Deck

#### **Starting Position:**

Lie face down on the deck with your arms over your head to form a Y with your thumbs up.

#### Procedure:

Glide your shoulder blades back and down, then raise your arms over your head maintaining a Y position. Return to the starting position and continue for the prescribed number of reps.

#### Coaching Key:

Initiate the movement with your shoulder blades, not your arms and keep your thumbs up.

#### You Should Feel It:

Working your shoulders and your upper and lower back.

#### 90/90 Stretch

#### **Starting Position:**

Lie on the deck on your left side in a fetal position, with your legs tucked up to your torso at a 90 degree angle and a rolled-up towel between your knees. Keep both arms straight at a 90 degree angle to your torso.

#### Procedure:

Keeping your knees together and on the deck and your hips still, rotate your chest and right arm back to the right, trying to put your back on the deck. Exhale and hold for 2 seconds, then return to the starting position. Finish your repetitions, then switch sides and repeat.

#### Coaching Key:

Keep your knees together and pressed against the deck. Only rotate as far as you can without lifting or separating your knees. Exhale as you stretch.

#### You Should Feel It:

Stretching through your torso and the muscles of your middle and upper back.















# **Movement Preparation (Level 1)**

#### Mini band – External Rotations

#### **Starting Position:**

Stand with your feet slightly wider apart than your shoulders, your hips back and down, your back flat, and a mini band around your legs just above your knees

#### Procedure

Keeping one leg stationary, move your other knee in and out for the prescribed number of reps. Switch legs and repeat.

#### **Coaching Key:**

Keep both feet flat on the deck. Keep your pelvis stable. Don't let the knee of your stationary leg drop in.

#### You Should Feel It:

Working your glutes.

#### Reverse Lunge, Elbow to Instep – Kneeling

#### **Starting Position:**

In a kneeling position, take a half step forward with your left foot

#### Procedure:

Take your left elbow and reach down your instep (on your forward leg). Place your left hand on the deck and push your hips upward as you straighten your front leg. Return to the starting position and repeat.

#### Coaching Key:

Contract the glute muscle of your back leg during the stretch.

#### You Should Feel It:

Stretching through the groin, the hip flexor muscle of your back leg, the glute muscle of your front leg, and your hamstring.

#### **Lateral Squat – Alternating**

#### **Starting Position:**

Stand with your feet wider than shoulder width apart.

#### Procedure:

Shift your hips to the left and down by bending your left knee and keeping your right leg straight. Your feet should be straight ahead and flat on the deck. Push through your left hip, returning to the starting position. Alternate sides and repeat for the prescribed number of repetitions.

#### **Coaching Key:**

Keep your knee on your "working" side behind your toes. Keep your opposite leg straight, your back flat, and your chest up.

#### You Should Feel It:

Lengthening and strengthening your glutes, groin, hamstrings, and quads.











#### Knee Hug - In Place

#### **Starting Position:**

Stand with your back straight and your arms at your side.

#### Procedure:

Lift your left foot off the deck and slightly squat back and down on your right leg. Take hold below the knee with your hands and pull your knee as close to your chest as you can while contracting your right glute for 1 to 2 seconds. Return to the starting position and repeat on the other side moving with control throughout the movement. Continue, alternating sides, for the prescribed number of repetitions.

#### Coaching Key:

Keep your chest up and weight on the middle of your foot. Contract the glute of the leg you are standing on.

#### You Should Feel It:

Stretch in the glute and the hamstring of your front leg and in the hip flexor of your back leg.

#### **Drop Lunge**

#### Procedure:

Reach your left foot 2 feet behind and across your right foot. Square your hips back to the starting position, and sit back and down into a squat. Stand and step laterally with your right foot. Then repeat the stretch on the same side. Continue until you've completed your reps on that side. Then reverse directions.

#### **Coaching Key:**

Keep your chest up and sit your hips back. Maintain your weight on the heel of your front leg. You will be moving around the room during this exercise, so give yourself plenty of space.

#### You Should Feel It:

Stretch in the outsides of both hips.

#### **Inverted Hamstring w/ Support**

#### **Starting Position:**

Stand on one leg with perfect posture, your arms raised out to your sides, your thumbs up, and your shoulder blades back and down. Lightly place your hand on a partner's shoulder, chair, or other stable object for support.

#### Procedure:

Keeping a straight line between your ear and ankle, bend over at the waist and elevate your other leg behind you. When you feel a stretch, return to the standing position by contracting the glute and hamstring of your planted leg. Continue with the same leg for the prescribed number of repetitions. Then switch legs.

#### Coaching Key:

Keep your back flat and your hips parallel to the deck. Maintain a straight line from your ear through your hip, knee, and ankle. Try not to let your foot touch the deck between repetitions. Be sure to keep your knee slightly unlocked on your stance leg during the movement.

#### You Should Feel It:

Stretch in your hamstrings.













# Strength – Fit Kit Equipment (Level 1)

#### **Glute Bridge (Reps)**

#### **Starting Position:**

Lie faceup on the deck with your arms at your sides, your knees bent, and your heels on the deck.

#### Procedure:

Lift your hips off the deck until your knees, hips, and shoulders are in a straight line. Return to the starting position and repeat for the prescribed repetitions.

#### Coaching Key:

Fire your glutes to lift your hips off the deck. Do not let your back extend during the movement.

#### You Should Feel It:

In your glutes, and to a lesser degree, in your hamstrings and low back.

#### **Push Up Kneeling**

#### **Starting Position:**

Assume a push up position with your hands and knees on the deck.

#### Procedure:

Lower your body towards the deck, then reverse the movement without touching the deck. Keep your body in a straight line.

#### **Coaching Key:**

Push your sternum as far away from your hands as possible at the end of the movement.

#### You Should Feel It:

In your chest, arms, and torso.

#### Squat w/ Mini band

#### **Starting Position:**

Stand with your arms at your sides, your feet shoulder width apart and pointing straight ahead, and a mini band around and above your knees.

#### Procedure:

Maintain perfect posture and initiate movement with your hips. As you reach your arms far forward, squat your hips back and down until your thighs are parallel to the deck. Return to standing position by pushing through your hips. Keep your knees out. Repeat until you've completed all your reps.

## Coaching Key:

Keep your knees behind your toes during the movement. Also, keep your knees pushing against the band so they do not collapse to the inside during the movement. Keep your chest up and back flat.

#### You Should Feel It:

In your glutes, hamstrings, and quads.

#### Y's - Bent Over (Bands)

#### **Starting Position:**

Stand bent over at the waist with your back flat and your chest up. Take hold of a light resistance band in both hands.

#### **Procedure:**

Glide your shoulder blades back and down, then raise your arms over your head to form a Y. You should feel slight resistance from the bands as you raise you arms. Return to the starting position and continue for the prescribed number of reps.

#### **Coaching Key:**

Initiate the movement with your shoulder blades, not your arms and keep your thumbs up.

#### You Should Feel It:

Working your shoulders and your upper and lower back.













#### **Lateral Squat – Low Alternating**

#### **Starting Position:**

Stand with your feet wider than shoulder width apart.

#### Procedure:

Shift your hips to the right and down by bending your right knee and keeping your left leg straight. Your feet should be straight ahead and flat on the deck. Push through your right hip to shift your weight onto the opposite leg, while keeping your hips at the same low level. Continue this movement for the prescribed number of repetitions.

#### Coaching Key:

Keep your knee on your "working" side behind your toes. Keep your chest up and hips low throughout the movement.

#### You Should Feel It:

Working your glutes, groin, hamstrings, and quads.

#### Overhead Press - 1/2 Kneeling Bands

#### **Starting Position:**

Half-kneel (put one knee on the deck) with your back knee on a soft mat or pad. Place the middle of the band underneath your front foot and hold a handle in each hand.

#### Procedure:

Keeping your arms in line with your body, press the bands straight overhead. Return to the starting position and repeat for the prescribed number of repetitions.

#### Coaching Key:

Be sure not to allow the bands to pull your arms forward; they should move straight up and down. Maintain a tall posture during the movement and engage your back glute. Switch legs midway through the set.

#### You Should Feel It:

In your shoulders and upper back.

#### **Lateral Pillar Bridge (\*30 Sec Hold)**

#### **Starting Position:**

Lie on your side with your forearm on the deck under your shoulder and your feet stacked together.

#### Procedure:

With your body in a straight line and your elbow under your shoulder, push your hip off the deck, creating a straight line from ankle to shoulder. Keep your head in line with the spine. Hold for 30 seconds.

#### **Coaching Key:**

Keep your body in a straight line and keep your stomach tight.

#### You Should Feel It:

In your shoulders and trunk.

#### Straight Leg Lowering – Alternating

#### **Start Position:**

Lying face up on deck with your knees straight and hips flexed with legs pointing up with soles of feet pointing towards the ceiling.

# **Procedure:**

While keeping your stomach tight, spine still, and left leg stationary, slowly lower your right leg straight down until you feel your pelvis about to start moving. Return back to the starting position and repeat on the opposite side. Continue for the prescribed number of repetitions.

#### **Coaching Keys:**

Do not let your pelvis move as your leg lowers. Do not let your feet touch the deck. Push the arch of your foot as far away from your hips as possible when lowering your leg.

#### You Should Feel It:

Working your trunk and stretching your hamstring.















# Strength - Full Equipment (Level 1)

#### Romanian Deadlift - Dumbbell

#### **Starting Position:**

Stand with a tall posture while holding a dumbbell in both hands, using an overhand grip.

#### Procedure:

Hinge over at the waist, and begin lowering the dumbbells close to your shins. Return to the standing position by contracting your hamstring and glutes. Repeat for the prescribed number of repetitions, then switch legs.

#### **Coaching Keys:**

Keep your torso engaged and do not let your back arch. Keep your shoulder blades back and down throughout the movement, and keep the dumbbell close to your shin.

#### You Should Feel It:

In your glutes, hamstrings, and back.

#### **Bench Press - Dumbbell**

#### **Starting Position:**

Lie faceup on a bench, holding dumbbells over your shoulders, your palms facing your thighs.

#### Procedure:

Lift the dumbbells straight up over your chest. Lower the dumbbells until your arms just break parallel with the deck, then push them back up. Repeat the movement for the prescribed number of repetitions.

#### **Coaching Key:**

Keep your feet on the deck and your hips and shoulders on the bench at all times. Pull your stomach in to stabilize your core. Do not let your back arch as you press the dumbbells up.

#### You Should Feel It:

In your chest, shoulder, and triceps.

#### Squat - w/ Mini bands

#### **Starting Position:**

Stand with your arms at your sides, your feet shoulder width apart and pointing straight ahead, and a mini band around and above your knees.

#### Procedure:

Maintain perfect posture and initiate movement with your hips. As you reach your arms far forward, squat your hips back and down until your thighs are parallel to the deck. Return to standing position by pushing through your hips. Keep your knees out. Repeat until you've completed all your reps.

#### **Coaching Key:**

Keep your knees behind your toes during the movement. Also, keep your knees pushing against the band so they do not collapse to the inside during the movement. Keep your chest up and back flat.

#### You Should Feel It:

In your glutes, hamstrings, and quads.











#### **Bent Over Row – Dumbbell**

#### **Starting Position:**

Stand, hinged over at the waist, holding dumbbells in each hand.

#### Procedure:

Slide your shoulder blades toward your spine and then lift the weight to your body by driving your elbow to the ceiling. Return to the starting position and repeat for the prescribed number of repetitions.

#### Coaching Key:

Move with your shoulder, not your arm, to initiate the row. Keep your back level – your shoulders should stay parallel to the deck. Keep your torso engaged and your back flat throughout the movement.

#### You Should Feel It:

In your back, lats, and shoulders.

#### **Lateral Squat - Dumbbell Alternating**

#### **Starting Position:**

Stand with your feet wider than shoulder width apart and dumbbells resting on your shoulders with elbows pointing forward.

#### Procedure:

Shift your hips to the right and down by bending your right knee and keeping your left leg straight. Your feet should be straight ahead and flat on the deck. Push through your right hip, returning to the starting position. Alternate sides and repeat for the prescribed number of repetitions.

#### **Coaching Key:**

Keep your knee on your "working" side behind your toes. Keep your opposite leg straight, your back flat, and your chest up.

#### You Should Feel It:

Working your glutes, groin, hamstrings, and quads.

#### Glute Bridge - 1 Leg

#### **Starting Position:**

Lie faceup on the deck with your arms at your sides, your knees bent, and your heels on the deck. Lift one knee to your chest.

#### Procedure:

Lift your hips off the deck until your knee, hips, and shoulders are in a straight line. Hold for 1-2 seconds and return to the starting position. Repeat this movement for the prescribed amount of repetitions. Then switch legs and repeat.

#### **Coaching Key:**

Fire your glute to lift your hips off the deck. Do not let your back extend during the movement.

#### You Should Feel It:

In your glutes, and to a lesser degree, in your hamstrings and low back.

#### **Lateral Pillar Bridge (\*30 Sec Hold)**

# **Starting Position:**

Lie on your side with your forearm on the deck under your shoulder and your feet stacked together.

# **Procedure:**

With your body in a straight line and your elbow under your shoulder, push your hip off the deck, creating a straight line from ankle to shoulder. Keep your head in line with the spine. Hold for 30 seconds.

#### **Coaching Key:**

Keep your body in a straight line and keep your stomach tight.

#### You Should Feel It:

In your shoulders and trunk.















#### Straight Leg Lowering - Alternating

#### **Start Position:**

Lying face up on deck with your knees straight and hips flexed with legs pointing up with soles of feet pointing towards the ceiling

#### Procedure:

While keeping your stomach tight, spine still, and left leg stationary, slowly lower your right leg straight down until you feel your pelvis about to start moving. Return back to the starting position and repeat on the opposite side. Continue for the prescribed number of repetitions.

#### Coaching Keys:

Do not let your pelvis move as your leg lowers. Do not let your feet touch the deck. Push the arch of your foot as far away from your hips as possible when lowering the leg.

#### You Should Feel It:

Working your trunk and stretching your hamstring.

# Level 2 – Warm Up & Strength

# Pillar Preparation (Level 2)

# Pillar Bridge - w/ Arm Lift

#### **Starting Position:**

Assume the pillar position with your feet wider than shoulder width apart.

#### Procedure:

Without moving your torso, lift your left arm up and slightly to the left and hold for 1 to 2 seconds. Return to the starting position and repeat with your right arm. Repeat for the prescribed number of reps.

#### **Coaching Key:**

Try to keep your weight even on both feet as your arm lifts. Do not let your trunk move as your arm leaves the deck. Keep your torso engaged throughout the movement.

#### You Should Feel It:

Working your shoulders and torso.

#### Glute Bridge - Marching (Knee Extension)

#### **Starting Position:**

Lie face up on the deck with your arms to your sides, knees bent, and your heels on the deck with your toes pulled up towards your shins.

#### **Procedure:**

Lift your hips off the deck until your knees, hips, and shoulders are in a straight line. Hold the position while extending your left knee. Return your foot to the deck and repeat with your right knee.

#### Coaching Key:

Do not let your back hyperextend. Do not let your hips drop as your knee extends.

#### You Should Feel It:

Working mainly in your glutes, and secondarily, in your hamstrings and lower back.

#### Y's - Bent Over

#### **Starting Position:**

Stand bent over at the waist with your back flat and your chest up.

#### Procedure

Glide your shoulder blades back and down, then raise your arms over your head to form a Y. Return to the starting position and continue for the prescribed number of reps.

#### **Coaching Key:**

Initiate the movement with your shoulder blades, not your arms and keep your thumbs up.

#### You Should Feel It:

Working your shoulders and your upper and lower back.















#### 90/90 Stretch - Legs Crossed

#### **Starting Position:**

Lie face up on the deck holding a towel roll, your left knee bent to 90 degrees, and your right leg crossed over the left. Roll over onto your left side and pin the towel between your right knee and the deck.

#### Procedure:

Maintaining pressure on the towel and a keeping your hips stationary, rotate your chest and right arm back to the right, trying to put your back on the deck. Hold for 2 seconds, then return to the starting position. Repeat until you've completed your reps, then switch sides.

#### Coaching Key:

Keep pressure on the towel pressed against the deck. Only rotate as far as you can without lifting or releasing the pressure on the towel. Exhale as you stretch.

#### You Should Feel It:

Stretching through your torso and the muscles of your middle and upper back.

# **Movement Preparation (Level 2)**

#### Mini band - Bent Knee Lateral Walk

#### **Starting Position:**

Stand in a quarter-squat position with your feet hip width apart and a mini band above your knees.

#### Procedure:

Walk laterally with small steps as your elbows drive back with each step. Push with your back leg, and pick up your leading foot. Be sure not to reach with your leading leg.

#### **Coaching Key**

Keep your chest up and your back flat. Keep your knees pushed apart and over your toes at all times. Keep tension on the mini band at all times.

#### You Should Feel It:

Working your glutes.

#### Reverse Lunge, Elbow to Instep – In Place

#### **Starting Position:**

Stand with your back straight and your arms at your sides.

#### Procedure:

Step backwards into a lunge with your right foot. Place your right hand on the deck and your left elbow to the inside of your left foot, and hold the stretch for 1 to 2 seconds. Place your left hand outside your foot and push your hips to the sky. Return your left elbow to the inside of your left foot and repeat for the prescribed number of repetitions on each side.

#### Coaching Key:

Keep your back knee off the deck. Contract your glute and reach your heel as far away from your hips as possible

#### You Should Feel It:

Stretching your groin, your back leg hip flexor, and your front leg glute and hamstring.











#### **Lateral Squat – Low Alternating**

#### **Starting Position:**

Stand with your feet wider than shoulder width apart.

#### Procedure:

Shift your hips to the right and down by bending your right knee and keeping your left leg straight. Your feet should be straight ahead and flat on the deck. Push through your right hip to shift your weight onto the opposite leg, while keeping your hips at the same low level. Continue this movement for the prescribed number of repetitions.

#### Coaching Key:

Keep your knee on your "working" side behind your toes. Keep your chest up and hips low throughout the movement.

#### You Should Feel It:

Working your glutes, groin, hamstrings, and quads.

#### Reverse Lunge - w/ Reach

#### **Starting Position:**

Stand with your back straight and your arms at your sides.

#### Procedure:

Step backward with your right foot into the lunge, your left foot forward, then contract your right glute. Reach your right hand overhead and laterally crunch your torso to the left, reaching your left hand toward the deck – hold for 2 seconds. Return to the starting position and repeat on the opposite side. Continue, alternating sides, for the desired number of repetitions.

#### **Coaching Key:**

Maintain your posture throughout the movement. Contract your back glute during the stretch. Keep your front knee behind your toes. Don't let your back knee touch the deck. Keep your chest up and fire your front glute as you return to the starting position.

#### You Should Feel It:

Stretching in the hip flexor of your back leg, in the glute and groin area of your front leg, and in the lateral muscles of your torso.

#### **Drop Lunge – Alternating**

#### **Starting Position:**

Stand with your back straight, your knees unlocked, and arms clasped together in front.

#### **Procedure:**

Reach your left foot 2 feet behind and across your right foot. Square your hips back to the starting position, and sit back and down into a squat. Stand and step laterally with your right foot, then repeat the stretch on the other side. Continue until you've completed the prescribed reps on each side.

#### **Coaching Key:**

Keep your chest up and sit your hips back. Maintain your weight on the heel of your front leg. You will be moving around the room during this exercise, so give yourself plenty of space.

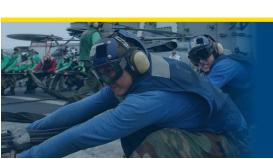
#### You Should Feel It:

Stretching in the outsides of both hips.











#### **Inverted Hamstring**

#### **Starting Position:**

Stand on one leg with perfect posture, your arms raised out to your sides, your thumbs up, and your shoulder blades back and down.

#### Procedure:

Keeping a straight line between your ear and ankle, bend over at the waist and elevate your other leg behind you. When you feel a stretch, return to the standing position by contracting the glute and hamstring of your planted leg. Continue with the same leg for the prescribed number of repetitions, then switch legs.

#### Coaching Key:

Keep your back flat and your hips parallel to the deck. Maintain a straight line from your ear through your hip, knee, and ankle. Try not to let your foot touch the deck between repetitions. Be sure to keep your knee slightly unlocked on your stance leg during the movement.

#### You Should Feel It:

Stretching in your hamstrings.

# **Strength – Fit Kit Equipment (Level 2)**

#### Glute Bridge - 2 Legs Up, 1 Leg Down

#### **Starting Position:**

#### **Procedure:**

Lift your hips off the deck until your knees, hips and shoulders are in a straight line. Hold the position while lifting your right knee to your chest, then slowly lower your hips to the starting position with the single leg. Repeat this movement for the prescribed amount of repetitions, then repeat while lifting your left knee to your chest while lowering yourself.

#### **Coaching Key:**

Fire your glutes to lift your hips off the deck. Do not let your back extend during the movement.

#### You Should Feel It:

In your glutes, and to a lesser degree, in your hamstrings and low back.

#### **Push Up (Standard)**

#### **Starting Position:**

Assume a push up position with your hands and feet on the deck.

#### Procedure:

Lower your body towards the deck, then reverse the movement without touching the deck. Keep your body in a straight line.

#### Coaching Key:

Push your sternum as far away from your hands as possible at the end of the movement.

#### You Should Feel It:

In your chest, arms, and torso.















#### **Split Squat (Bands)**

#### **Starting Position:**

Stand in a tall split position with feet shoulder width apart, with a band under your front foot and your weight primarily on the arch of your front foot. Hold the handles in your hands with your elbows facing forward.

#### Procedure:

Drop your hips to the deck by bending your front knee without letting your back knee touch the deck. Return to standing by pushing up with your front leg. Repeat for the prescribed repetitions, then switch legs and repeat.

#### Coaching Key:

Maintain the majority of your weight on the arch of your front foot with very little on your back foot. Your front hip should be bearing the majority of the load during this movement. Keep your torso engaged and back flat.

#### You Should Feel It:

In your glute, hamstrings, and quads.

#### **Bent Over Row (Bands)**

#### **Starting Position:**

Stand, hinged over at the waist, with both feet standing on the band holding handles in each hand. Adjust the position of the bands to ensure the resistance is challenging enough.

#### Procedure:

Slide your shoulder blades toward your spine and then lift the weight to your body by driving your elbow to the ceiling. Return to the starting position and repeat for the prescribed number of repetitions.

#### **Coaching Key:**

Move with your shoulder, not your arm, to initiate the row. Keep your back level – your shoulders should stay parallel to the deck. Keep your torso engaged and your back flat throughout the movement.

#### You Should Feel It:

In your back, lats, and shoulders.

#### Squat to Overhead Press (Bands)

#### **Starting Position:**

Stand with your feet shoulder width apart with the bands under your feet, holding handles at your shoulders with your elbows facing forward. If you are taller and the bands are not long enough with two feet on them, stand on the center of the band with one foot.

#### Procedure:

Squat your hips back and down until your thighs are parallel with the deck. Return to standing by pushing through your hips. At the top of your stance, press the handles overhead. Return to the starting position and repeat for the prescribed number of repetitions.

#### **Coaching Key:**

Keep the weight on the arches of your feet and do not let your knees collapse during the movement. Keep your elbows up and pointing straight ahead throughout.

#### You Should Feel It:

In your glutes, hamstrings, quads, and shoulders.











#### T's – Bent Over (Bands)

#### **Starting Position:**

Stand bent over at the waist with your back flat and your chest up. Take hold of a light resistance band in both hands.

#### Procedure:

Glide your shoulder blades back and down, then raise your arms out to your sides to form a T. You should feel slight resistance from the bands as you raise you arms. Return to the starting position and continue for the prescribed number of reps.

#### **Coaching Key:**

Initiate the movement with your shoulder blades, not your arms and keep your thumbs up.

#### You Should Feel It:

Working your shoulders and your upper and lower back.

#### **Dynamic Lateral Pillar Bridge**

#### **Starting Position:**

Lie on your side with your forearm on the deck under your shoulder. Feet stacked together.

#### Procedure:

With your body in a straight line and your elbow under your shoulder, push your hip off the deck, creating a straight line from ankle to shoulder. Keep your head in line with the spine. Hold for 1-2 seconds, and then return to the start position. Repeat this movement for the prescribed reps, then switch sides and repeat.

#### **Coaching Key:**

Keep your body in a straight line and keep your stomach tight.

#### You Should Feel It:

In your shoulders and trunk.

#### **Crunches**

#### **Starting Position:**

Lie faceup with your knees bent, and your arms crossed in front of your chest.

#### Procedure:

Lift your chest until your shoulder blades are off the deck, and at the same time rotate your pelvis toward your belly button. Slowly return to the starting position. Repeat until you've completed your reps.

#### **Coaching Key:**

Do not pull your head with your hands. Feel each segment of your spine flexing as you crunch.

#### You Should Feel It:

In your abdominals.













# Strength - Full Equipment (Level 2)

#### Romanian Deadlift - 1 Leg Dumbbell

#### **Starting Position:**

Stand on one foot while holding a dumbbell in each hand, using an overhand grip.

#### Procedure:

Hinge over at the waist, lowering the dumbbells as your non-supporting leg lifts behind you. Return to the standing position by contracting your hamstring and glutes. Repeat for the prescribed number of repetitions, then switch legs.

#### **Coaching Keys:**

Do not let your back arch. Your torso and leg should move as one unit. Fire the glute of your extended leg to keep it straight. Keep your shoulder blades back and down throughout the movement, and keep the dumbbells close to your shin.

#### You Should Feel It:

In your glutes, hamstrings, and torso.

# **Bench Press – Alternating Dumbbell**

#### **Starting Position:**

Lie faceup on a bench, holding dumbbells over your shoulders, your palms facing your thighs.

#### Procedure:

Keeping one arm straight, lower the other dumbbell until your arm just breaks parallel with the deck, then push it back up. Switch arms and continue to alternate arms for the prescribed number of repetitions.

#### **Coaching Key:**

Keep your nonworking arm straight. Keep your feet on the deck and your hips and shoulders on the bench at all times. Pull your stomach in to stabilize your torso.

#### You Should Feel It:

In your chest, shoulder, and triceps.

#### Split Squat – Rear Foot Elevated Dumbbell

#### **Starting Position:**

Hold dumbbells at arm's length at your sides. Standing in front of a bench or box, reach back and place the top of your back foot on its surface.

#### **Procedure:**

Lower your hips toward the deck by squatting back and down. Without letting your back knee touch the deck, return to the starting position by driving your weight back up with your front leg. Do all the reps with that leg forward, then switch legs and repeat.

#### Coaching Key:

Don't let your front knee slide forward over your toes; if it does, start over again with your front foot farther forward.

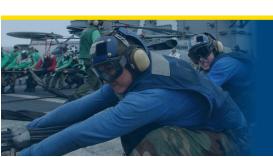
#### You Should Feel It:

In your hips and the fronts of your legs.











#### Bent Over Row – 1 Arm 1 Leg Dumbbell

#### **Starting Position:**

Stand, hinged over at the waist, holding a dumbbell in one hand.

#### Procedure:

To initiate the row, slide your shoulder blade toward your spine and then lift the weight to your body by driving your elbow to the ceiling. Return to the starting position and repeat for the prescribed number of repetitions.

#### **Coaching Key:**

Move with your shoulder, not your arm, to initiate the row. Keep your back level – your shoulders should stay parallel to the deck. Keep your torso engaged and your back flat throughout the movement.

#### You Should Feel It:

In your back, lats, and shoulders.

#### Squat to Overhead Press – Dumbbell

#### **Starting Position:**

Stand with your feet shoulder width apart, holding dumbbells at your shoulders with your elbows facing forward.

#### Procedure:

Squat your hips back and down until your thighs are parallel with the deck. Return to standing by pushing through your hips. At the top of your stance, press the dumbbells overhead. Return to the starting position and repeat for the prescribed number of repetitions.

#### **Coaching Key:**

Keep the weight on the arches of your feet and do not let your knees collapse during the movement. Keep your elbows up and pointing straight ahead throughout.

#### You Should Feel It:

In your glutes, hamstrings, quads, and shoulders.

#### Lateral Pillar Bridge - w/ Abduction

#### **Starting Position:**

Lie on your side with your forearm on the deck under your shoulder. Feet stacked together.

#### **Procedure:**

With your body in a straight line and your elbow under your shoulder, push your hip off the deck, creating a straight line from ankle to shoulder. Keep your head in line with the spine. Lift your top leg into the air as if you were doing a lateral jumping jack.

#### **Coaching Key:**

Keep your body in a straight line and keep your stomach tight.

#### You Should Feel It:

In your shoulders and trunk.

#### **Curl – ½ Kneeling Dumbbell**

#### **Starting Position:**

In a  $\frac{1}{2}$  kneeling position, hold dumbbells at your side.

#### **Procedure:**

Keeping your elbows still, lift the dumbbells towards your shoulders as you rotate your palms to the ceiling. Return to the starting position and repeat until you've completed all your reps. Switch forward leg midway through the set.

#### Coaching Key:

Keep your stomach and the glute muscles of your rear leg tight throughout the movement. Do not allow your back to move. Do not rock forward or backward, and don't move your elbows.

#### You Should Feel It:

In your biceps, glutes, and hip flexors.













#### **Crunches**

#### **Starting Position:**

Lie faceup with your knees bent, and your arms crossed in front of your chest.

#### Procedure:

Lift your chest until your shoulder blades are off the deck, and at the same time rotate your pelvis toward your belly button. Slowly return to the starting position. Repeat until you've completed your reps.

#### Coaching Key:

Do not pull your head with your hands. Feel each segment of your spine flexing as you crunch.

#### You Should Feel It:

In your abdominals.

# Level 3 - Warm Up & Strength

# **Pillar Preparation (Level 3)**

# Plank - w/ Alternating Hip Flexion

#### **Starting Position:**

Start in a push up position with your hands directly beneath your shoulders and your feet shoulder width apart.

#### Procedure:

With your torso engaged and hips still, draw your right knee towards your chest and return to the start position. Repeat with the left leg and continue alternating this movement for the prescribed repetitions.

#### **Coaching Key:**

Keep your back flat and torso engaged throughout the entire movement. Move with control and keep your hips still as you alternate leg positions. One foot should always be in contact with the deck.

### You Should Feel It:

Working your torso, hips, and shoulders.

#### Glute Bridge – Marching (Hip Flexion)

#### **Starting Position:**

Lie face up on the deck with your arms to your sides, knees bent, and your heels on the deck.

#### **Procedure:**

Lift your hips off the deck until your knees, hips, and shoulders are in a straight line. Hold the position while lifting your left knee to your chest. Return your foot to the deck and repeat with your right knee.

#### **Coaching Key:**

Do not let your back hyperextend. Do not let your hips drop as your knee comes to your chest.

#### You Should Feel It:

Working mainly in your glutes, and secondarily in your hamstrings and low back.

#### T's - Bent Over

# **Starting Position:**

Stand bent over at the waist with your back flat and your chest up.

#### **Procedure**

Glide your shoulder blades back and down, then raise your arms out to your sides to form a T. Return to the starting position and continue for the prescribed number of reps.

#### Coaching Key:

Initiate the movement with your shoulder blades, not your arms and keep your thumbs up.

#### You Should Feel It:

Working your shoulders and your upper and lower back.













#### **Quadruped Thoracic Rotation**

#### **Starting Position:**

Start on your hands and knees with your elbows straight, hands directly below your shoulders, knees directly below your hips, and your right hand behind your head.

#### Procedure

With a controlled movement rotate toward the right as far as possible while exhaling, stretching the front of the torso, and hold 2 seconds. Rotate trunk to the deck, taking right elbow to left knee while exhaling, feeling a stretch in the back, and hold for two seconds. Continue for the prescribed number of reps, switch sides, and repeat.

#### Coaching Key:

Keep your torso engaged throughout the movement. Allow your eyes to follow where your chest is pointing as you rotate through your torso.

#### You Should Feel It:

Stretching your upper, mid, and low back, and anterior torso.

# **Movement Preparation (Level 3)**

# Mini Band – Straight Leg Lateral Walk

#### **Starting Position:**

Stand in a tall position with your feet hip width apart, hands on your hips and a mini band at your ankles.

#### Procedure:

Walk laterally with small steps as your elbows drive back with each step. Push with your back leg, and pick up your leading foot. Be sure not to reach with your leading leg.

#### Coaching Key

Keep your chest up and your back flat. Keep your knees pushed apart and over your toes at all times. Keep tension on the mini band at all times.

#### You Should Feel It:

Working your glutes.

#### Reverse Lunge, Elbow to Instep – In Place w/ Rotation

#### **Starting Position:**

Stand with your back straight and your arms at your sides.

#### **Procedure:**

Step backwards into a lunge with your left foot. Place your left hand on the deck and your right elbow to the inside of your right foot, and hold the stretch for 1 to 2 seconds. Rotate your right arm and chest to the sky as far as you can. Hold for 1 to 2 seconds. Take your elbow back and down toward your instep and reach through to your opposite side. Place your left hand outside your foot and push your hips to the sky. Return your right elbow to the inside of your right foot and repeat for the prescribed number of repetitions on each side.

#### **Coaching Key:**

Keep your back knee off the deck. Contract your glute and reach your heel as far away from your hips as possible

#### You Should Feel It:

Stretching in your groin, your back leg hip flexor, your front leg glute and hamstring.











#### Lateral Lunge - Alternating

#### **Starting Position:**

Stand with good posture with your hands at your sides and feet shoulder width apart.

#### Procedure:

Step to the right with your right foot, keeping your toes forward and your feet flat. Squat through your right hip while keeping your left leg straight. Squat as low as possible, holding this position for 2 seconds. Push back to the starting position and repeat for the prescribed number of repetitions, then repeat with the left leg.

#### Coaching Key:

Keep your knee on your "working" side behind your toes. Keep your opposite leg straight, your back flat, and your chest up.

#### You Should Feel It:

In your glutes, groin, hamstrings, and quads.

#### Reverse Lunge – w/ Rotation

#### **Starting Position:**

Stand with your back straight and your arms at your sides.

#### Procedure:

Step backward with your left foot into the lunge, your right foot forward, then contract your left glute. Place your left hand on the outside of your front leg, and your chest by rotating towards your right – hold for 2 seconds. Return to the starting position and repeat on the opposite side. Continue, alternating sides, for the desired number of repetitions.

#### **Coaching Key:**

Maintain your posture throughout the movement. Contract your back glute during the stretch. Keep your front knee behind your toes. Don't let your back knee touch the deck. Keep your chest up and fire your front glute as you return to the starting position.

#### You Should Feel It:

Stretching in the hip flexor of your back leg, in the glute and groin area of your front leg, and in the mid to upper torso.

#### Leg Cradle – In Place

#### **Starting Position:**

Stand with your back straight, your knees unlocked, and your arms at your side.

#### Procedure:

Lift your left foot off the deck and slightly squat back and down on your right leg. Bring your knee to your chest, placing your left hand under the knee and your right hand under your ankle. Pull your left leg as close as you can to your chest in a gentle stretch while contracting your right glute. Return to the starting position and repeat with your right knee. Continue, alternating legs, for the prescribed number of repetitions.

#### Coaching Key:

Keep your chest up. Contract the glute of the leg you are standing on.

#### You Should Feel It:

Stretching on the outside of your hip in your front leg and in the hip flexor of your back leg.











# **Inverted Hamstring**

### **Starting Position:**

Stand on one leg with perfect posture, your arms raised out to your sides, your thumbs up, and your shoulder blades back and down.

#### Procedure:

Keeping a straight line between your ear and ankle, bend over at the waist and elevate your other leg behind you. When you feel a stretch, return to the standing position by contracting the glute and hamstring of your planted leg. Continue with the same leg for the prescribed number of repetitions, then switch legs.

# Coaching Key:

Keep your back flat and your hips parallel to the deck. Maintain a straight line from your ear through your hip, knee, and ankle. Try not to let your foot touch the deck between repetitions. Be sure to keep your knee slightly unlocked on your stance leg during the movement.

### You Should Feel It:

Stretching in your hamstrings.

# Strength – Fit Kit Equipment (Level 3)

# Romanian Deadlift - 1 Arm 1 Leg (Bands)

### **Starting Position:**

Wrap the band around one foot until the tension is challenging enough & hold both handles in the opposite hand.

### Procedure:

Hinge over at the waist, lowering the handle as your non-supporting leg lifts behind you. Return to the standing position by contracting your hamstring and glute. Repeat for the prescribed number of repetitions, then switch legs.

# **Coaching Keys:**

Do not let your back arch. Your torso and leg should move as one unit. Fire the glute of your extended leg to keep it straight. Keep your shoulder blades back and down throughout the movement, and keep the handle of the band close to your shin.

### You Should Feel It:

In your glutes, hamstrings, and torso.

# Push Up - 1 Leg

### **Starting Position:**

Assume a push up position with your hands and feet on the deck. Keeping your torso engaged and hips square to the deck, slowly lift one foot 2 – 3 inches off the deck while keeping your leg straight.

### Procedure:

Holding this position, lower your body to the deck, then reverse the movement without touching the deck. Keep your body in a straight line. Repeat for the prescribed number of reps and then repeat with the opposite foot in the air.

### Coaching Key:

Push your sternum as far away from your hands as possible at the end of the movement.

### You Should Feel It:

In your chest, arms, and torso.











# Single Leg Squat - w/ Mini band

# **Starting Position:**

Stand on one foot with your arms at your sides with good posture, with a mini band just above your knees.

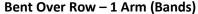
#### Procedure:

Initiate movement with your hips, squatting back and down on one leg as you reach forward. Picture you are reaching your hips back to sit down softly on a chair. Return to a standing position using only the leg you are balancing on. Repeat for the prescribed number of repetitions, then switch legs.

### Coaching Key:

Keep your weight balanced on the center of your arch and so not let your knee collapse to the inside. You Should Feel It:

In your glutes, hamstrings, and quads.



# **Starting Position:**

Wrap the band on one foot until the tension is challenging enough and hold the handle in the opposite hand. Stand, hinged over at the waist.

#### Procedure:

Slide your shoulder blade toward your spine and then lift the handle to your body by driving your elbow to the ceiling. Return to the starting position and repeat for the prescribed number of repetitions.

### Coaching Key:

Move with your shoulder, not your arm, to initiate the row. Keep your back level – your shoulders should stay parallel to the deck. Keep your torso engaged and your back flat throughout the movement.

### You Should Feel It:

In your back, torso, lats, and shoulders.

# Squat – 1 Arm (Bands)

# **Starting Position:**

Wrap the band on one foot to ensure appropriate tension & hold both handles in the opposite hand. Stand with your feet slightly wider than shoulder-width apart.

### Procedure

Drop your hips towards the deck until you're in a squat position. Leading with your chest, stand up, and then repeat. Continue for the prescribed number of repetitions, then switch sides.

# **Coaching Key:**

Keep your feet flat on the deck with your weight in your arches. Maintain a flat back with your chest up.

### You Should Feel It:

In your glutes, hamstrings, and quads.

# Glute Bridge - 1 Leg

# **Starting Position:**

Lie faceup on the deck with your arms at your sides, your knees bent, and your heels on the deck. Lift one knee to your chest.

# Procedure:

Lift your hips off the deck until your knee, hips and shoulders are in a straight line. Hold for 1-2 seconds and return to the starting position. Repeat this movement for the prescribed amount of repetitions, then switch legs and repeat.

### Coaching Key:

Fire your glute to lift your hips off the deck. Do not let your back extend during the movement.

### You Should Feel It:

In your glutes, and, to a lesser degree, in your hamstrings and low back.













# Overhead Press – Low Split (Bands)

# **Starting Position:**

Stand in a low split position, with the majority of your weight on your front foot in the middle of your arch. Place the middle of the band underneath your front foot and hold a handle in each hand.

#### Procedure

Keeping your arms in line with your body, press the bands straight overhead. Return to the starting position and repeat for the prescribed number of repetitions.

### Coaching Key:

Be sure not to allow the bands to pull your arms forward, they should move straight up and down. Maintain a tall posture during the movement and engage your back glute. Switch legs midway through the set.

#### You Should Feel It:

In your shoulders and upper back.

# Pillar Bridge – Rolling

# **Starting Position:**

Lie face down with your forearms on the deck under your chest.

### Procedure:

Push up off your elbows, supporting your weight on the forearms. Tuck your chin so that your head is in line with your body. Pull your toes towards your shins. Hold the position for 1-2 seconds. With your torso engaged and back flat roll into a lateral pillar bridge. Hold this position for 1-2 seconds. Return to the start position and repeat on the opposite side. That's one repetition.

# **Coaching Key:**

Keep your torso engaged and back flat throughout the movement. Tuck your chin and keep your spine as tall as you can. You should maintain a straight line from ankle to ear.

# You Should Feel It:

In your torso and shoulders.

# Strength – Full Equipment (Level 3)

# Romanian Deadlift - 1 Arm 1 Leg Dumbbell

# **Starting Position:**

Stand on one foot while holding a dumbbell in the opposite hand, using an overhand grip.

# **Procedure:**

Hinge over at the waist, lowering the dumbbell as your non-supporting leg lifts behind you. Return to the standing position by contracting your hamstring and glute. Repeat for the prescribed number of repetitions, then switch legs.

### **Coaching Keys:**

Do not let your back arch. Your torso and leg should move as one unit. Fire the glute of your extended leg to keep it straight. Keep your shoulder blades back and down throughout the movement, and keep the dumbbell close to your shin.

### You Should Feel It:

In your glutes, hamstrings, and back.











# Bench Press - 1 Arm (w/ Half Off Bench)

# **Starting Position:**

Lie on a bench, with your left glute and left shoulder blade on the bench and right glute and right shoulder blade off the bench. Hold a dumbbell in your right hand and hold on to the bench with your left hand, above your head.

#### Procedure:

Slowly lower the weight until your arm just breaks parallel with the deck, then push it back up. Continue for the prescribed number of repetitions, then switch sides.

### Coaching Key:

Keep your stomach tight and don't let anything move except your arm.

### You Should Feel It:

Working your chest and stabilizing your torso.

# Single Leg Squat - To Bench

# **Starting Position:**

Stand on one foot in front of a bench or chair.

### Procedure:

Initiate movement with your hips, squatting back and down on one leg as you reach forward until your glutes touch the bench. Return to a standing position using only the leg you are balancing on. Repeat for the prescribed number of repetitions, then switch legs.

### Coaching Key:

Keep your weight balanced on the center of your arch and do not let your knee collapse to the inside.

# You Should Feel It:

In your glutes, hamstrings, and quads.

# Bent Over Row - 1 Arm Dumbbell

# **Starting Position:**

Stand, hinged over at the waist, holding a dumbbell in one hand and lightly holding a stable object for support.

# **Procedure:**

Slide your shoulder blade toward your spine and then lift the weight to your body by driving your elbow to the ceiling. Return to the starting position and repeat for the prescribed number of repetitions.

# **Coaching Key:**

Move with your shoulder, not your arm, to initiate the row. Keep your back level – your shoulders should stay parallel to the deck. Keep your torso engaged and your back flat throughout the movement.

# You Should Feel It:

In your back, lats, and shoulders.

# Squat – 1 Arm Dumbbell

# **Starting Position:**

Stand with your feet slightly wider than shoulder-width apart, with a dumbbell in your hand between your legs.

# **Procedure:**

Drop your hips towards the deck until you're in a squat position. Leading with your chest, stand up, and then repeat. Continue for the prescribed number of repetitions, then switch sides.

### Coaching Key:

Keep your feet flat on the deck with your weight in your arches. Maintain a flat back with your chest up.

# You Should Feel It:

In your glutes, hamstrings, and quads.













# Glute Bridge - 1 Leg

# **Starting Position:**

Lie faceup on the deck with your arms at your sides, your knees bent, and your heels on the deck. Lift one knee to your chest.

#### Procedure:

Lift your hips off the deck until your knee, hips and shoulders are in a straight line. Hold for 1-2 seconds and return to the starting position. Repeat this movement for the prescribed amount of repetitions, then switch legs and repeat.

### Coaching Key:

Fire your glute to lift your hips off the deck. Do not let your back extend during the movement.

### You Should Feel It:

In your glutes, and to a lesser degree, in your hamstrings and low back.

# Curl to Overhead Press - 1/2 Kneeling Dumbbell

# **Starting Position:**

In a ½ kneeling position, hold dumbbells at your side.

### Procedure:

Perform a biceps curl so that the dumbbells are at your chest. Press your both hands over your head. Repeat for the prescribed number of repetitions, switch forward leg midway through the set. Contract the glute of your back leg to stabilize yourself.

# **Coaching Key:**

Maintain perfect posture, with your belly button pulled in and your shoulder blades pulled back and down. Do not let your back arch when the weight is pressed overhead.

# You Should Feel It:

In your biceps and shoulders, and throughout your pillar.

# Pillar Bridge - Rolling

# **Starting Position:**

Lie face down with your forearms on the deck under your chest.

### Procedure:

Push up off your elbows, supporting your weight on the forearms. Tuck your chin so that your head is in line with your body. Pull your toes towards your shins. Hold the position for 1-2 seconds. With your torso engaged and back flat roll into a lateral pillar bridge. Hold this position for 1-2 seconds. Return to the start position and repeat on the opposite side. That's one repetition.

### **Coaching Key**

Keep your torso engaged and back flat throughout the movement. Tuck your chin and keep your spine as tall as you can. You should maintain a straight line from ankle to ear.

# You Should Feel It:

In your torso and shoulders.











# **Metabolic Circuit**

# **Reverse Lunge - Alternating**

### **Starting Position:**

Stand with good posture with your hands at your sides and feet shoulder width apart.

### Procedure:

With your feet together, step back with your right leg into a lunge, maintaining your weight primarily on the arch of your front foot. Return to standing by pushing through your front hip. Repeat with the opposite leg and continue for prescribed reps.

### Coaching Key:

Maintain weight on the arch of the front foot throughout the movement, and focus on using your front hip to return to standing. Do not let your back knee touch the deck.

### You Should Feel It:

In your glutes, hamstrings, and quads.

# Pillar Bridge - w/ Arm Lift

# **Starting Position:**

Assume the pillar position with your feet wider than shoulder width apart.

# Procedure:

Without moving your torso, lift your left arm up and slightly to the left and hold for 1 to 2 seconds. Return to the starting position and repeat with your right arm. Repeat for the prescribed number of reps.

# **Coaching Key:**

Try to keep your weight even on both feet as your arm lifts. Do not let your trunk move as your arm leaves the deck. Keep your torso engaged throughout the movement.

### You Should Feel It:

Working your shoulders and torso.

# Lateral Lunge - Alternating

# **Starting Position:**

Stand with good posture with your hands at your sides and feet shoulder width apart.

### Procedure:

Step to the right with your right foot, keeping your toes forward and your feet flat. Squat through your right hip while keeping your left leg straight. Squat as low as possible, holding this position for 2 seconds. Push back to the starting position and repeat for the prescribed number of repetitions, then repeat with the left leg.

# **Coaching Key:**

Keep your knee on your "working" side behind your toes. Keep your opposite leg straight, your back flat, and your chest up.

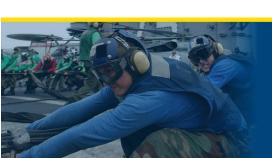
# You Should Feel It:

In your glutes, groin, hamstrings, and quads.











# Reverse Lunge, Elbow to Instep – w/ Rotation

# **Starting Position:**

Stand with your back straight and your arms at your sides.

#### Procedure:

Step backwards into a lunge with your left foot. Place your left hand on the deck and your right elbow to the inside of your right foot, and hold the stretch for 1 to 2 seconds. Rotate your right arm and chest to the sky as far as you can. Hold for 1 to 2 seconds. Take your elbow back and down toward your instep and reach through to your opposite side. Place your left hand outside your foot and push your hips to the sky. Return your right elbow to the inside of your right foot and repeat for the prescribed number of repetitions on each side.

### **Coaching Key:**

Keep your back knee off the deck. Contract your glute and reach your heel as far away from your hips as possible.

### You Should Feel It:

Stretching in your groin, your back leg hip flexor, and your front leg glute and hamstring.

# Plank - Running

# **Starting Position:**

Start in a push up position with your hands directly beneath your shoulders and your feet shoulder width apart. Keeping your hips and torso still, draw one knee towards your chest keeping your back leg straight.

# Procedure:

With your torso engaged, switch your leg position by driving your straightened knee towards your chest while straightening your bent knee. Continue alternating this movement for the prescribed repetitions.

### **Coaching Key:**

Keep your back flat and torso engaged throughout the entire movement. Try to keep your hips still as you alternate leg positions, do not bounce.

### You Should Feel It:

In your torso, hips, and shoulders

# Single Leg Balance - Alphabet

### **Starting Position:**

Standing tall on one leg, with the opposite foot floating directly beside your stance foot.

### Procedure:

Sit your hips down and back into a quarter squat. Keep your weight balanced on the center of your arch. With your floating foot spell the letters of the alphabet in the air in small letters for the prescribed amount of time.

# **Coaching Key:**

Keep your torso and hip engaged throughout the movement.

# You Should Feel It:

In your glutes and quads.











# Split Squat - Alternating 5 Sec Holds

# **Starting Position:**

Stand in a tall split position with feet shoulder width apart, and your weight primarily on the arch of your front foot.

#### Procedure:

Drop your hips to the deck by bending your front knee without letting your back knee touch the deck. Hold this position for 5 seconds, then switch legs and repeat until working time has elapsed.

# **Coaching Key:**

Maintain the majority of your weight on the arch of your front foot with very little on your back foot. Your front hip should be bearing the majority of the load during this movement. Keep your torso engaged and back flat.

### You Should Feel It:

In your glutes, hamstrings, and quads.

# **Drop Lunge – Alternating**

# **Starting Position:**

Stand with your back straight, your knees unlocked, and arms at your side.

### Procedure:

Reach your left foot 2 feet behind and across your right foot. Square your hips back to the starting position, and sit back and down into a squat. Stand and step laterally with your right foot, then repeat the stretch on the other side. Continue until you've completed the prescribed reps on each side.

#### Coaching Key:

Keep your chest up and sit your hips back. Maintain your weight on the heel of your front leg. You will be moving around the room during this exercise, so give yourself plenty of space.

### You Should Feel It:

Stretching in the outsides of both hips.

# Flexibility – Stretch Strap

# Calf Stretch (Strap)

# **Starting Position:**

Lie on your back with the stretch strap wrapped around your right foot and your leg raised 45 degrees into the air.

# Procedure:

Actively pull your right foot to your shin and then give assistance with the strap. Hold the stretch for 1 to 2 seconds and then relax. Perform 10 reps, then switch legs.

### **Coaching Key:**

Exhale during the stretch. Continue to actively pull your foot to your shin even when assisting with the strap.

### You Should Feel It:

Stretching your calf.











# Straight Leg Hamstring Stretch (Strap)

# **Starting Position:**

Lie on your back with your right leg straight and a stretch strap wrapped around your foot.

#### Procedure:

Keeping your right leg straight, actively lifting it as high as possible, then give gentle assistance with the strap until you feel a stretch. Hold 2 seconds and relax. Repeat for 10 repetitions, then switch legs.

# **Coaching Key:**

Keep your opposite leg on the deck by pushing your heel as far away from your head as possible, contracting the glute. Pull the strap above your head.

#### You Should Feel It:

Stretching in the hamstring of the raised leg, and stretching in the hip flexor of the bottom leg.

# Adductor Stretch (Strap)

# **Starting Position:**

Lie on your back with the stretch strap wrapped around one foot. The strap should be wrapped around the inside of your lower leg. Hold the end of the strap in the hand on the same side as your strapped leg.

# Procedure:

Actively lift your leg as far to the side as possible, then give gentle assistance with the strap until you feel a stretch. Exhale and hold for 2 seconds, then relax and repeat for 10 repetitions. Then switch sides.

# **Coaching Key:**

Keep your opposite leg on the deck by pushing your heel as far away from your head as possible, contracting the glute. Keep your toes pointed to the sky. Keep your back in line and your shoulder on the deck

# You Should Feel It:

Stretching in the inside of the thigh of the leg with the strap.

# **Abductor Stretch (Strap)**

# **Starting Position:**

Lie on your back with the stretch strap wrapped around the outside of one foot. Hold the end of the strap in your opposite hand, with your free hand out to the side.

# Procedure:

Actively lift your leg across your body as far as possible, and then give gentle assistance with the strap until you feel a stretch. Exhale and hold for 2 seconds, then relax and repeat for 10 repetitions. Then switch legs.

# **Coaching Key:**

Keep your non-strapped leg on the deck by pushing your heel as far away from your head as possible, contracting the glute. Keep your toes pointed to the sky. Keep your back in line and your shoulders on the deck.

### You Should Feel It:

Stretching in the outside of the thigh of your roped leg.











# Quad Stretch (Strap)

# **Starting Position:**

Lie on your stomach with the stretch strap wrapped around one foot. The strap should be wrapped around twice. Hold the end of the strap in the hand on the same-side as your strapped leg.

#### Procedure:

Actively bend your knee, bringing your heel as close to your hips as possible, then give gentle assistance with the strap until you feel a stretch. Exhale and hold for 2 seconds, then relax and repeat for 10 repetitions. Then switch sides.

### Coaching Key:

Contract the glute on the leg that is being stretched. Keep your back flat and torso engaged during the stretch.

#### You Should Feel It:

Stretching your quads and hips.

# Shoulder/Triceps Stretch (Strap)

# **Starting Position:**

Stand holding a stretch strap behind your head with your right hand over and your left hand under.

# Procedure:

Actively reach your right hand down your back and give gentle assistance with your left hand, exhaling and holding the stretch for 2 seconds. Now, actively reach your left hand up your back as high as possible, and give gentle assistance with your right hand, exhaling and holding the stretch for 2 seconds. Repeat for 10 repetitions, then switch hands and repeat.

# **Coaching Key:**

Actively move through the range of motion with the arm being stretched. Exhale during the stretch. Maintain perfect posture with your stomach tightened.

### You Should Feel It:

Stretching in the triceps of the top arm, and stretching in the shoulder of the bottom arm.

# Flexibility – No Equipment

# **Bent Knee Hamstring Stretch**

# **Starting Position:**

Lie on your back with both legs straight. Pull your right knee to your chest, grasping behind the knee with both hands.

### Procedure:

Actively straighten your right knee as much as possible without letting it move away from your chest. Give gentle assistance with your hands until you feel a stretch, hold 2 seconds, and relax. Continue for 10 repetitions, then switch legs and repeat.

# **Coaching Key:**

Keep your opposite leg on the deck by pushing your heel as far away from your head as possible, contracting your glute. Keep your knee pulled as tightly to your chest as possible throughout the entire movement. It's okay if you can't fully straighten your knee.

### You Should Feel It:

Stretching in your hamstring of the bent leg and stretching in the hip flexor of the bottom leg.















# **Knee Hug – Supine**

# **Starting Position:**

Lie on your back with both legs straight.

#### Procedure:

Actively lift one knee to your chest and then give it gentle assistance by grabbing the knee and pulling it closer to your chest. Exhale and hold the stretch for 2 seconds, then return to the starting position. Repeat for the prescribed number of repetitions. Then switch legs.

### Coaching Key:

Keep your non-stretching leg flat on the deck by pushing the bottom of your heel away from your head.

### You Should Feel It:

Stretching your glutes, hamstrings, and hip flexors.

# Leg Cradle - Supine

# **Starting Position:**

Lie on your back with both legs straight.

# **Procedure:**

Lift your right knee to your chest, placing your right hand on your knee and your left hand under your ankle. Pull your right leg as close as you can to your chest into a gentle stretch while contracting your left glute. Hold the stretch for 2 seconds, and then relax. Continue for 10 repetitions, then switch legs and repeat.

# **Coaching Key:**

Throughout the movement, contract the glute of the leg that's on the deck, point that foot toward the ceiling, and keep your belly button drawn in.

### You Should Feel It:

Stretching in the outside of the thigh of your bent leg.

# Quad/Hip Flexor Stretch - ½ Kneeling

### **Starting Position:**

Half-kneel (put one knee on the deck) with your back knee on a soft mat or pad. Rest the hand of your opposite arm on your forward knee.

# **Procedure:**

While keeping a slightly forward lean in your torso, tighten your stomach and contract the glute of your back leg. Maintaining this posture, shift your entire body slightly forward. Exhale and hold the stretch for 2 seconds. Relax, repeat 10 times, and then switch legs.

# **Coaching Key:**

Avoid excessive arching in your lower back.

# You Should Feel It:

Stretching in the front of your hip and in the upper thigh of your back leg.

# **Triceps Stretch**

# **Starting Position:**

Standing with good posture with your arms at your sides.

# **Procedure:**

Lift one arm up over head and reach your hand back down your back as far as you can, with your opposite hand give gentle assistance until you feel a stretch. Exhale and hold for 2 seconds, then relax and repeat for 10 repetitions. Then switch sides.

### Coaching Key:

Keep your back flat and torso engaged throughout the stretch.

# You Should Feel It:

Stretching your triceps, lats, and shoulder.





















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# 90/90 Stretch - w/ Arm Sweep

# **Starting Position:**

Lie face up on the deck holding a towel roll, your left knee bent to 90 degrees, and your right leg crossed over the left. Roll over onto your left side and pin the towel between your right knee and the deck.

### Procedure:

Maintaining pressure on the towel and a keeping your hips stationary, rotate your chest and sweep your right arm - palm up, bending your elbow at the end reaching for your back pocket – palm down. Hold for 2 seconds, then return to the starting position. Repeat until you've completed your reps, then switch sides.

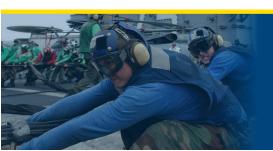
### Coaching Key:

Keep pressure on the towel pressed against the deck. Only rotate as far as you can without lifting or releasing the pressure on the towel. Exhale as you stretch.

# You Should Feel It:

Stretching through your torso, mid/upper back, chest, and shoulder.







# **Navy Operational Fueling & Fitness Series**

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# The Navy Operational Fitness and Fueling Series Project

# **Project Introduction**

The Navy Operational Fitness and Fueling Series Project (NOFFS) provides the Navy with a "best in class" physical fitness and nutrition performance resource that provides guidance to Sailors and to Navy health and fitness professionals. The Navy Operational Fitness and Fueling Series instructs individuals how to physically train effectively and safely, and how to make healthy nutrition choices in both shore-based and operational environments.

As the Navy is called to intensify operational tempo based on current world-wide mission requirements, it is imperative for Sailors to be physically fit. Physical fitness of Sailors is an essential and critical component of operational readiness and meeting deployment schedules. Sailor resiliency and durability are primary goals of the development and distribution of the NOFFS.

The purpose of the Navy Operational Fitness Series is to provide a complete physical training program that will "eliminate the guesswork" for



- the individual Sailor that is participating in her/her personal physical training program.
- the Navy health and fitness professional that is interested in obtaining a readily prepared comprehensive and biomechanically balanced individual or group physical training program.

The NOFFS project goals are to:

- 1: Improve operational performance.
- 2: Provide foundational and performance nutrition guidance.
- 3: Decrease the incidence/severity of musculoskeletal physical training related injuries.

The Navy Operational Fitness and Fueling Series provides Sailors with an evidence-based performance tool that will address injury prevention by physically training operational job movement patterns. Rather than focusing specifically on the physical readiness test (PRT), the product will emphasize how to specifically improve the functional performance of a Sailor during daily operations including; lifting, pushing, pulling, carrying, aerobic/anaerobic demands, body movement skills with balance, agility and coordination. The focus of the product is to optimize operational physical performance and fueling for Sailors while preserving Navy combat power.





# Functional Performance = Operational Performance: Does the Training Relate to the Demands on the Job?

The operational environment places a unique demand of physiological and mechanical stress on to the human body. This demand requires a systematic approach to physical preparation to ensure personnel are operationally efficient and can sustain a productive, healthy career.

There is a consummate paradigm shift in physical development from a traditional fitness model of isolated, single joint resistance to an archetype in integrated training systems based on movement including:

- Restoring Movement
- Training Movement
- Fueling Movement

The NOFFS represents this training system as a professional medium to take care of the Navy's greatest asset: its' people.

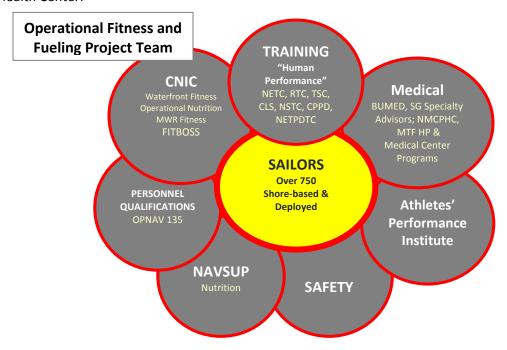






# **NOFFS Project Development Team:**

A comprehensive cooperative Navy project team was assembled for the purpose of developing the NOFFS. The primary project team consists of the following organizations: Center for Personal and Professional Development (CPPD) – the project manager; TYCOMS – including COMNAVSUBFOR, COMNAVSURFOR, and COMNAVAIRFOR (over 750 Sailors provided input for the development of the NOFFS); Commander Naval Installations Command (CNIC) MWR Fitness, Nutrition, & Deployed Forces Program; Navy Supply Command (NAVSUP) Nutrition Program, OPNAV 135 Physical Readiness Division; Navy Safety Center; Naval Leadership Command; and Bureau of Medicine and Surgery (BUMED) assets: Clinical Care and Public Health(M3/5CCPH), SG Specialty Advisors, and Navy and Marine Corps Public Health Center.



Center for Personal and Professional Development (CPPD) serves as the project manager for the Navy Operational Fitness and Fueling Series. CPPD promotes and institutionalizes a culture of fitness in the Navy. It is the responsibility of the CPPD to serve as the central authority for U.S. Navy training for leadership, professional, and personal development training and support. Physical fitness/human performance is a primary component of the CPPD's health and wellness program. CPPD supports the Navy's workforce by providing tools, knowledge, and information to support the character growth, professional development, and personal competency of Sailors. These tools promote personal development and improve personal readiness which in turn helps accomplish the Navy's mission.

To augment these efforts, Athletes' Performance Institute (API), recognized within the professional sports human performance industry as a leading expert in developing training programs that produce results, is working directly with Navy physical fitness and nutrition experts.





API has an unmatched track record and history of efficiently and ethically improving professional/elite athletes' performance. Additionally, API has extensive experience and knowledge of the Armed Forces community and the specialized needs of this warrior culture.

The mission of API is to provide the finest performance methods, specialists and facilities seamlessly integrated to efficiently and ethically enhance our athletes' performance. Through this mission, API and the Navy have specific goals that focus on; career productivity, performance enhancement, career longevity, injury prevention, motivation through education, sustainable strategies for success, and most importantly, achieving results. API is able to execute this mission and achieve these goals through the Athletes' Performance Training Systems (APTS). The APTS represents the world's leading Professional Sports Model (PSM) for the optimization of human performance in all training sectors and sports. The APTS was utilized to build the Navy Operational Fitness and Fueling Series.





APAZ

APLA





**APFL** 

# **Emphasizing Physical Training Injury Prevention**

Injuries impose a greater ongoing negative impact on the health and readiness of the U.S. Armed Forces than any other category of medical complaint during peacetime & combat (*Am J. Prev Med, 2000, 18 (3S), p 16.*)

Injuries represent the leading health problem of U.S. military personnel across the spectrum of health from deaths and disabilities, to hospitalization and outpatient treatment (Jones et al. 1999; Jones and Amoroso 2000). Training-related (overuse) injuries have been identified as the leading cause of clinic visits and have a very real impact on the readiness of the Force due to limited duty assignments (Jones et al. 1999; Jones et al. 2000). Conservative estimates of time Service members are given physical activity restrictions are upwards of 25 million limited duty days per year for all three Services combined. These Service members are unable to perform their full duties and as a consequence many are unable to deploy. Most of the overuse injuries sustained in a military environment come from the cumulative effect of physical training.

The DoD Military Injury Prevention Priorities Working Group stated in 2006 that physical training and sports injuries are of particular concern. Decreasing injuries is likely to have the greatest impact on military readiness. The Defense Safety Oversight Council (DSOC) suggests that the greatest reduction of lost duty days due to injuries across DoD may be achieved via mitigation efforts focused specifically on sports-and physical training related injuries. *DSOC, DoD Military Injury Prevention Priorities Working Group: Leading Injuries, Causes, and Mitigation Recommendations, Feb.2006.* 

Two key areas of risk that have been identified by the Navy concerning injury and the approach to injury prevention are; Reducing running volume and developing body movement skills.





# **Running Mileage**

There is a growing body of military and civilian research that shows that high running volume significantly increases the risk for lower extremity injury. During initial military training about 25 percent of men and about 50 percent of women incur one or more physical training-related injuries. About 80 percent of these injuries are in the lower extremities and are of the overuse type - a condition brought about by physical training volume overload - generally caused by excessive running (JSPTIPWG Interventions Supplement, May 2007).



The Cardiovascular training implemented within the NOFFS works to combat this issue by providing Sailors with a variety of training options that avoid long slow sustained running. In its place, interval training is used that focuses on developing the Sailor's leg strength, speed, power, and endurance. Interval training options are provided allowing for small space (ie. Metabolic circuits), unloaded (ex. Equipment based options), and ground based options. This will provide Sailors with cardiovascular training strategies that will allow them to improve their performance, regardless of where and how they train.

# **Body Movement Skills**

There is an increasing body of knowledge identifying "core stability" as a key component necessary for successful performance of most gross motor activities. "Core stability" is identified as hip and trunk muscle strength, abdominal muscle endurance, good spinal pelvic alignment, and the absence of ligament laxity in the vertebral column.

Strength and stabilization exercises directed at the body's core represent many of the same movements required during more complex activities and thereby increase the likelihood of improved military occupational task performance. DoD Military Injury Prevention Priorities Working Group: Leading Injuries Causes and Mitigation Recommendations, Defense Safety Oversight Council (DSOC) February 2006.

The Joint Service Physical Training Injury Prevention Work Group found good evidence that increasing the proportion of physical training time devoted to improvement of body movement skills reduces injuries and improves performance. These body movement skills include; agility, posture, stability, flexibility, balance, speed, power, reactive ability, and coordination. Focus must be on improving precision of movement during execution of these exercises. This is particularly important during deployments on the Navy's operational platforms.







The methodology implemented by API throughout the NOFFS fitness programming places a large emphasis on all body movement skills and truly takes a proactive approach towards injury prevention. The approach taken not only places an emphasis on the volume and intensity of training, but is also critical of the types of movements prescribed, the quality of how those movements are executed, and the balanced combination and progression of each movement.

Each training component used within the API methodology plays a vital role in both preventing injury and improving performance. Pillar Preparation takes the concept of "The Core" one step further and places a focus on the stability and strength of the Sailor's "Pillar" - their hips, torso, and shoulders - to ensure a solid foundation from which to move and transfer energy. Movement Preparation places the attention on priming the Sailor's body for the work to come by lengthening, strengthening, and stabilizing actively through full ranges of motion. This works to greatly enhance the Sailor's proprioception and kinesthetic awareness. The movement and loading selection within the strength training component works to strengthen the fundamental patterns of movement that transfer directly to their operational performance, working through 3 planes of motion and applying their body movement skills functionally. Facilitating recovery is also a critical component to any training program to help bring balance back to the body, and enhance the body's response to the training stimulus. The details of each training component will be discussed later in this document to provide a more in-depth look at what is involved in each.





# **Focus Groups & Findings**

The NOFFS is a project that supports US Navy Sailors. To maintain a Sailor-orientated project, shaping information had to come from Sailors themselves. Over 750 Sailors were involved with the development of the Operational Fitness and Fueling Series. The NOFFS is based upon the feedback from the focus groups held during 28-30 January, 2009 site visits conducted on the USS Boise (SSN-764), USS George Herbert Walker Bush (CVN-77), and Strike Fighter Squadron (VFA-11) "Red Rippers." In January 2009, NAVSUP Nutrition also conducted West Coast focus groups with the following operational platforms: USS Pinckney (DDG-91), USS Princeton



(CG-59), USS Benfold (DDG-65), USS Bunkerhill (CG-52), USS John Paul Jones (DDG-53) and NAS Lemoore. Sailors from the USS Devastator (MCM-6), and USS Monterey (CG-61) also provided invaluable baseline input for the project. Representatives from Center for Personal and Professional Development (CPPD), Navy Supply Command (NAVSUP), Navy and Marine Corps Public Health Center (NMCPHC), and Athletes' Performance worked together to collect data and talk with the Sailors during the focus groups.

The information was gathered from all ranks at the commands and provided the development team with a very real perspective. Command level personnel assisted in providing framework for the product included the following: health promotion coordinators, culinary specialists, command fitness leaders, LCPO Medical, Commanding Officer (CO), Executive Officer (XO), Command Master Chief (CMC), Chief of the Boat (COB), Physical Therapist – large deck, Independent Duty Corpsmen (IDC). The focus group participants included enlisted, senior enlisted, officers and Sailors actively involved with the Fitness Enhancement Program (FEP). Performance of command physical training programs and FEP programs were also reviewed.

Both the strengths and limitations of the Navy workplace environment and personnel were revealed as they relate to the performance of exercise programming and the practice of making healthy nutrition choices. Sailors communicated clearly how they wanted the product to be designed and what information they wanted to be included in the resource. Their statements were very clear, "eliminate the guesswork" for the individual Sailor to participate in his/her personal exercise and nutrition program. As well as, provide the command a straightforward tool for operational fitness and basic nutritional guidelines.

The following feedback provides a good summary of our findings from talking with the individual Sailors during the Focus Groups:





# **Operational Fitness Feedback from Sailors:**

- "Need to know how to do the exercises when we are underway. Eliminate the guesswork for us. Make it easy for us to understand."
- "Need standardized information, something evidence-based. There's so much information out there. Give us the best training program."
- Time constraints "Can we have a PT program that can be performed using different time increments? 30, 45, 60 minute options?"
- "I suffer from knee and back problems need something to prevent these injuries."
- "Eliminate the guesswork for us. Make it easy for us to understand."
- "There's no room This makes it difficult to workout."
- "Consider specific needs of each TYCOM. Make something specific for each."
- "Don't place in a manual or a CD, we won't use it."

# **Operational Fueling Feedback from Sailors:**

- Foundational nutrition interest was greater than performance nutrition increased emphasis on weight management was asked for.
- Interest in acquiring "best in practice" weight management strategies and solutions. Sailors were often heard saying, "There's so much out there, what's the best?"
- Need to provide information in a simplified manner that can be understood and applied
- Need a resource that they can readily use to improve their food selection
- "Give me something I can readily use. I'm not going to read a manual." Marketing recommendation is to develop something eye catching. Develop as an 8 1/2 X 11 sheet that can be used by Navy nutrition, fitness, and health professionals. Also may be used by printing to a poster size and placing in the Galleys and health and fitness areas.
- Needs to be a system with balance that can incorporate both "healthy foods" and foods that are traditional "comfort foods"
- Many Sailors are in the stage of pre-contemplation; therefore, information needs to be created in a non-threatening way that would get them thinking about making a healthy choice.
- Identify appropriate portion sizes and how much they should be eating
- Create food lists to help guide food choices "show me the food lists that are the healthiest"
- Educate on optimum Nutrient Timing (ie: improved recovery before and/or after PT)
- Focus on key problem areas. (ie: Skipping breakfast was identified as a key problem area)
- Educate Sailors on risks associated with increased consumption of Energy Drinks



\*The Operational Fueling Series content has been created to address the nutritional needs of the Sailors. The nutritional product will provide Sailors with simple strategies and tools through a series of cards.





# **Product Review: Operational Fitness Series**

The Operational Fitness Series has been developed in 4 distinct series, each designed specifically to tackle the needs of each platform; Submarine Series, Surface Ship Series, Large Deck Series, and Group Training Series. Each series has been developed on 8 ½ x 11 inch cards that will be packaged together on a ring. The cards will provide the Sailor with all pertinent information needed to complete the training program. This includes a series of images, exercise description, sets, reps, and duration. Each card series will offer various stages of progression (levels 1-3, stages A-D) both in exercises and volume/intensities. The cards will also provide each Sailor with 30, 45, and 60 minute options. The individual Sailor may use the resources as a guide to perform their daily personal exercise program, or this product may be utilized by Navy health and fitness professionals as a teaching tool or as a guide for leading a command exercise session.

The challenges addressed in each card series are the following:



- A.) Submarine Series
  - Small space for all training
  - Fit Kit equipment
  - Minimal cardio equipment



- B.) Surface Ship Series
  - Moderate space for all training
  - Fit Kit & full equipment options
  - Cardio equipment



- C.) Large Deck Series
  - Large space for all training
  - Fit Kit & full equipment options
  - Cardio equipment



- D.) Group Training Series
  - Progressions on each card for differing levels of ability
  - Fit Kit equipment





# **Program Design Methodology**

Each program has been created using a combination of training components to make up a single training session, or workout. The training components used include:

# Pillar Preparation / Movement Preparation / Strength / Cardiovascular Fitness / Recovery

Each training component has a specific role within the program and combined creates a well rounded program to target injury prevention and operational performance improvement. The following pages provide a brief summary of each training component.

# 1.) Pillar Preparation:

Your pillar - which consists of your hips, torso, and shoulders - represents the foundation for all of your movement. All movement requires the production or absorption of forces; this force is then transferred throughout your body in order to execute the movement. Your pillar acts as a bridge to ensure the seamless transfer of energy throughout your body - its alignment and function directly correspond to the quality and efficiency of every move you will make.



If your pillar is compromised, energy leaks may occur throughout your body causing movement compensations which can quickly lead to aches, pain, and even injuries. It's important to realize that these energy leaks will also have a negative impact on the amount of power production in any given movement.

If you think of the body as a wheel, the pillar is the hub, and the limbs are spokes. We want to have the hub perfectly aligned so we can draw energy from it and effectively transfer energy throughout the body. It's impossible to move the limbs efficiently and forcefully if they're not attached to something solid and stable.

Pillar Preparation is a training component that is designed to strengthen the critical stabilizing muscles of your pillar: shoulders, torso, and hips. By performing Pillar Preparation at the start of your training session you are engaging, or "turning on" the muscles that will help protect, stabilize, and strengthen your pillar so that you are able to safely and effectively transfer energy throughout your body during the rest of your workout. On top of that, Pillar Preparation will give you a solid foundation which will allow you to perform your operational task at the best of your ability, all while reducing the chance of injury. A strong pillar will help keep you healthy and in peak form.





# 2.) Movement Preparation:

Traditionally when people prepare to train they enter into a routine that primarily consists of a mixture of stretching, as well as a form of general activity to warm up tissue before engaging in activity.



Stretching is an important part of any warm up or cool-down. It is vital for injury prevention, muscle recovery, optimizing muscle gains, and increasing flexibility. However, there are different types of stretching, and each affects your body in different ways. That being said, it is important to understand how, and when to use different types of stretching.

Static stretching, holding a stretch for a long duration of time, works by sending a message to the muscle saying, "shut this tightness off," ultimately forcing the muscle to release and relax. Whether you are preparing to train or begin work on your operational platform, movement requires dynamic, fluid action. By holding long static stretches right before a bout of activity, you are effectively shutting off the muscles when you need them the most, making the upcoming physical demands harder on the body. It's not that static stretching is a bad idea; it can be a great tool when done correctly and at the appropriate time.

Static stretching is best used post-workout or at the end of the day to elongate the muscle and connective tissue, while turning off the nervous system (your brain and the nerves running to and from your muscles). It is also effective on recovery emphasis days, as long static holds help to produce long-term changes in the fascia (the band of elastic tissue that envelops the body, beneath the skin), ultimately improving muscle balance and flexibility.

Activities that are done to "warm up," or increase your body's temperature are often done without a specific purpose in mind, except of course to "warm up," or sweat. You may see people ride a stationary bike, or go for a light jog for 5 minutes. There is nothing wrong with riding a stationary bike, or going for a light run, as long as there is a purpose for it. You need to ask yourself this question, is a light ride on a stationary bike appropriate for a Sailor who is warming up for multidirectional movements?

# **Redefining Warm up: Movement Prep**

Movement Preparation is a training component designed as an efficient, systematic approach to help people prepare for the specific demands of the day's training session. "Movement Prep" is a series of active and dynamic stretching involving movements that imitate those inherent to the activities for which you are preparing. Muscles are stretched through a series of controlled, active movements, holding them only for 1-2 seconds instead of an extensive period of time.

The movements prescribed in this training component have a focused purpose, and are designed to increase your core temperature; lengthen, strengthen, stabilize, and balance your muscles; and, as the name suggests prepare your body for the upcoming movement, providing the individual tremendous "bang for their buck."





Movement Preparation also is effective in improving balance and body awareness, the ability to sense the position, location, orientation and movement of the body and its parts. This is important to create body awareness and control for every Sailor allowing them to start to understand how to control compensations and correct and coach themselves through the movement during the rest of their training session and in their operational life. The needs for balance and body awareness are great in operational life where Sailors are forced to deal with the pitching and rolling that come hand in hand with life at sea.

# **Refining Movement Patterns (Unloaded)**

Movement Prep will allow Sailors to train their "muscle memory" and movement patterns through various planes of motion (linear/lateral/rotational) in an unloaded situation. This is vital for injury prevention and movement quality, helping to train Sailors out of any compensatory patterns. Because Movement Prep is a ritual that is done before each and every training session the accumulative time spent focusing on quality movement patterns is tremendous and highly effective. In fact, if a Sailor were to perform Movement Preparation for just 5 minutes, 4 days a week that would add up to 1,040 minutes of movement rehearsal each year!

# 3.) Strength:

Traditionally, strength programs are designed with specific body parts in mind; they use single joint movements, and work through a single plane of motion. We have tried to break from this traditional approach in our program design and focus instead on training movement patterns, using multi joint movements that work through multiple planes of motion.

The reason we train body movements instead of parts is because everything about the body's engineering is connected. What happens to the big toe affects the knees, the hips, and ultimately the shoulders. The muscular system is both complex and simple, a series of muscular and fascial bands (connective tissue) that work seamlessly to produce efficient movement. Many workout programs do more damage than good by producing muscle imbalances and inefficient movement patterns that sabotage this highly coordinated operating system.

The movement patterns we focus on involve the following;











Upper Pushing

**Upper Pulling** 

**Lower Pushing** 

Lower Pulling

Rotational

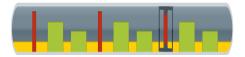




The realities of operational life require every Sailor to be prepared to deal with these movement demands. Whether they are working in confined spaces, on a carrier deck, loading cargo, or assisting in the mooring of a ship. We strongly believe that the ultimate goal of the strength training component is to provide the appropriate characteristics of strength to each movement pattern to help ensure every Sailor reaches their performance potential.

# 4.) Cardiovascular Fitness:

When people usually think of cardiovascular fitness the first thing that comes to mind is long slow runs, and the assumption is the longer you



can go the better shape you are in. Although this is a valid measure of specific fitness, the approach isn't necessarily the most effective training approach to elicit great improvements in cardiovascular fitness. In fact, if this is all you do during training you are more likely to hit a plateau and suffer from aches and pains associated to large volumes of repetitive stress under fatigue.

Interval training is an alternate approach to long slow duration training. This involves training that alternates between short intense bouts of exercise and periods of true recovery. This will take you from an effort level that is easy, up to a hard effort, and then back down to an easy effort. To do a "true interval" you must allow your heart rate to truly recover before picking the intensity back up. The following are some of the key benefits of interval training.

# Overloading:

In order to bring about positive physical changes to your cardiovascular system the body must be presented with a workload that challenges its current fitness state. By overloading the heart and lungs, you are increasing your endurance and cardiovascular fitness level, which is the same principle as weight training (overloading a muscle will result in increasing the muscles strength). The heart is a muscle, so it must be overloaded to improve its strength. At the same time, the rest of the respiratory system is improving, including the lungs and blood circulation, for better endurance. This workload will cause fatigue, and with proper recovery, will eventually yield cardiovascular improvements. It is important to note that the overload happens during training, while adaptation occurs during recovery – thus making recovery a vital part of your programming.

# **Increased Caloric Burn:**

Another advantage of interval training is that you can actually burn more total calories in the same amount of training time.

### Motivation:

By designing intervals into your conditioning session you are provided with variety across each workout. The working intervals are kept to about five-minute work sets, balanced with the appropriate amount of recovery to help facilitate this motivation. You will be much more inclined to push yourself during the training if you know you will get a chance to recover shortly.





# Metabolism:

Another benefit of interval training is that it increases your metabolism, both during your training session, and after. It is not just about what your body is doing during the workout; it is important to understand what your body is doing the rest of the day. Studies have shown that interval training raises your metabolism after a workout, and keeps it up longer than any "steady state" workout. Steady state exercise refers to any exercise that stays at the same workload for a long period of time.

# **Increase Anaerobic Threshold:**

Interval training allows us to train at a higher intensity for a longer period of time throughout the duration of our training session, due to the intermittent recovery throughout. As our bodies become more efficient we are able to train at a higher intensity without crossing over into our anaerobic energy system. This results in more calories being burned, an increased threshold to fatigue, and quicker recovery between bursts of activity.

# 5.) Recovery:

Operational life is very demanding, both physically and mentally. The repetitive mechanics and constant pounding your body endures day in and day out can take its toll. If you do not allow your body to properly recover, you increase your injury potential, and eventually you could find yourself with nagging aches and pains that eventually lead to injury. Fortunately there are strategies you can implement to help your body recover, a process we refer to as regeneration. It's important to realize that the things you do at rest are just as important as the work you perform. If you focus on having high quality rest and regeneration, you'll be able to get more return o



focus on having high quality rest and regeneration, you'll be able to get more return on investment from every step of your training. Recovery activities will relieve your body of aches and pains, decrease inflammation, and improve tissue quality. Within the Recovery training component we will focus on; increasing your flexibility, ensuring your body is balanced, and isolating and relieving built up tension within your muscles.

# Flexibility

Instead of passive static stretching the movements prescribed in regeneration will use Active-Isolated Stretching (AIS) to reprogram your muscles to contract and relax through new ranges of motion, working to increase your flexibility. This type of flexibility work can be done using an 8 to 10 foot length of rope, or no equipment at all. The movements that you perform will allow you to isolate the muscle to be stretched. You won't hold stretches 10 to 30 seconds, as in traditional stretching; instead you'll use the rope to gently assist the muscle's range of motion about 10 to 20 percent farther than your body would ordinarily allow and only hold 1-2 seconds. As you stretch the muscle you will exhale, releasing tension and getting a deeper stretch, actively moving your body through its full range of motion – then giving gentle assistance.





# **Training Program Introduction**

# **Program Progression: Levels & Stages**

Each training component will have three levels. Each level will progress the Sailor in either movement/drill complexity, or work to rest ratios. Within the training components of Pillar Preparation, Movement Preparation, and Strength, each level will contain 4 stages (A, B, C, D). Stages represent smaller steps of progression within each level.

The Sailor should progress to the next stage when they have successfully completed the prescribed number of circuits in the allotted time. They will progress to the next level when they have successfully completed Stage D with perfect technique in the desired time.

# **Duration of Training Session**

During the focus groups it was made clear to us that Sailors needed to have different time options for their workouts due to their busy schedules in their Operational Life. To accommodate this we have built in 3 different time options for each training component allowing them to create a 30 / 45 / 60 minute training session. This is communicated on the card by offering three training options – Short, Medium, and Long (S/M/L).

# **Equipment & Space**

Each operational platform will have their own individual equipment and space constraints. The Operational Fitness Series have been created with these constraints in mind, ensuring each platform's training programs are able to be executed successfully.





# **Movement Library**

The following pages contain images and detailed movement descriptions for each of the movements used in the Operational Fitness Series. Movements are organized by Levels and Training Components.





# Level 1 – Warm Up & Strength

# **Pillar Preparation (Level 1)**

# Pillar Bridge (\*30 Sec Hold)

### **Starting Position:**

Lie face down with your forearms on the deck under your chest.

### Procedure:

Push up off your elbows, supporting your weight on the forearms. Tuck your chin so that your head is in line with your body. Keep feet shoulder width apart and pull your toes towards your shins. Hold the position for 30 seconds.

# **Coaching Key:**

Push your chest as far away from the deck as prescribed. Keep your belly button drawn in. Keep your head in line with your spine. Don't sag or bend. Do not round off your upper back.

# You Should Feel It:

Working your shoulders and torso.

# Glute Bridge (\*30 Sec Hold)

### **Starting Position:**

Lie faceup on the deck with your arms at your sides, your knees bent, and your heels on the deck.

#### Procedure:

Lift your hips off the deck until your knees, hips, and shoulders are in a straight line. Hold the position for 30 seconds and return to the starting position.

### Coaching Key:

Fire your glutes to lift your hips off the deck. Do not let your back extend during the movement.

### You Should Feel It:

In your glutes, and to a lesser degree, in your hamstrings and low back.

### Y's - Deck

# **Starting Position:**

Lie face down on the deck with your arms over your head to form a Y with your thumbs up.

### **Procedure**

Glide your shoulder blades back and down, then raise your arms over your head maintaining a Y position. Return to the starting position and continue for the prescribed number of reps.

### Coaching Key:

Initiate the movement with your shoulder blades, not your arms and keep your thumbs up.

### You Should Feel It:

Working your shoulders and your upper and lower back.

# 90/90 Stretch

# **Starting Position:**

Lie on the deck on your left side in a fetal position, with your legs tucked up to your torso at a 90 degree angle and a rolled-up towel between your knees. Keep both arms straight at a 90 degree angle to your torso.

### Procedure:

Keeping your knees together and on the deck and your hips still, rotate your chest and right arm back to the right, trying to put your back on the deck. Exhale and hold for 2 seconds, then return to the starting position. Finish your repetitions, then switch sides and repeat.

# Coaching Key:

Keep your knees together and pressed against the deck. Only rotate as far as you can without lifting or separating your knees. Exhale as you stretch.

### You Should Feel It:

Stretching through your torso and the muscles of your middle and upper back.















# **Movement Preparation (Level 1)**

# Mini band – External Rotations

# **Starting Position:**

Stand with your feet slightly wider apart than your shoulders, your hips back and down, your back flat, and a mini band around your legs just above your knees

#### Procedure

Keeping one leg stationary, move your other knee in and out for the prescribed number of reps. Switch legs and repeat.

# **Coaching Key:**

Keep both feet flat on the deck. Keep your pelvis stable. Don't let the knee of your stationary leg drop in.

# You Should Feel It:

Working your glutes.

# Reverse Lunge, Elbow to Instep – Kneeling

# **Starting Position:**

In a kneeling position, take a half step forward with your left foot

#### Procedure:

Take your left elbow and reach down your instep (on your forward leg). Place your left hand on the deck and push your hips upward as you straighten your front leg. Return to the starting position and repeat.

### Coaching Key:

Contract the glute muscle of your back leg during the stretch.

### You Should Feel It:

Stretching through the groin, the hip flexor muscle of your back leg, the glute muscle of your front leg, and your hamstring.

# **Lateral Squat - Alternating**

# **Starting Position:**

Stand with your feet wider than shoulder width apart.

### Procedure:

Shift your hips to the left and down by bending your left knee and keeping your right leg straight. Your feet should be straight ahead and flat on the deck. Push through your left hip, returning to the starting position. Alternate sides and repeat for the prescribed number of repetitions.

# **Coaching Key:**

Keep your knee on your "working" side behind your toes. Keep your opposite leg straight, your back flat, and your chest up.

# You Should Feel It:

Lengthening and strengthening your glutes, groin, hamstrings, and quads.











# Knee Hug - In Place

### **Starting Position:**

Stand with your back straight and your arms at your side.

#### Procedure:

Lift your left foot off the deck and slightly squat back and down on your right leg. Take hold below the knee with your hands and pull your knee as close to your chest as you can while contracting your right glute for 1 to 2 seconds. Return to the starting position and repeat on the other side moving with control throughout the movement. Continue, alternating sides, for the prescribed number of repetitions.

### Coaching Key:

Keep your chest up and weight on the middle of your foot. Contract the glute of the leg you are standing on.

#### You Should Feel It:

Stretch in the glute and the hamstring of your front leg and in the hip flexor of your back leg.

# **Drop Lunge**

# **Procedure:**

Reach your left foot 2 feet behind and across your right foot. Square your hips back to the starting position, and sit back and down into a squat. Stand and step laterally with your right foot. Then repeat the stretch on the same side. Continue until you've completed your reps on that side. Then reverse directions.

# **Coaching Key:**

Keep your chest up and sit your hips back. Maintain your weight on the heel of your front leg. You will be moving around the room during this exercise, so give yourself plenty of space.

### You Should Feel It:

Stretch in the outsides of both hips.

# **Inverted Hamstring w/ Support**

### **Starting Position:**

Stand on one leg with perfect posture, your arms raised out to your sides, your thumbs up, and your shoulder blades back and down. Lightly place your hand on a partner's shoulder, chair, or other stable object for support.

### Procedure:

Keeping a straight line between your ear and ankle, bend over at the waist and elevate your other leg behind you. When you feel a stretch, return to the standing position by contracting the glute and hamstring of your planted leg. Continue with the same leg for the prescribed number of repetitions. Then switch legs.

# **Coaching Key:**

Keep your back flat and your hips parallel to the deck. Maintain a straight line from your ear through your hip, knee, and ankle. Try not to let your foot touch the deck between repetitions. Be sure to keep your knee slightly unlocked on your stance leg during the movement.

### You Should Feel It:

Stretch in your hamstrings.













# Strength – Fit Kit Equipment (Level 1)

# Glute Bridge (Reps)

# **Starting Position:**

Lie faceup on the deck with your arms at your sides, your knees bent, and your heels on the deck.

#### Procedure:

Lift your hips off the deck until your knees, hips, and shoulders are in a straight line. Return to the starting position and repeat for the prescribed repetitions.

### Coaching Key:

Fire your glutes to lift your hips off the deck. Do not let your back extend during the movement.

# You Should Feel It:

In your glutes, and to a lesser degree, in your hamstrings and low back.

# **Push Up Kneeling**

# **Starting Position:**

Assume a push up position with your hands and knees on the deck.

### Procedure:

Lower your body towards the deck, then reverse the movement without touching the deck. Keep your body in a straight line.

### Coaching Key:

Push your sternum as far away from your hands as possible at the end of the movement.

# You Should Feel It:

In your chest, arms, and torso.

# Squat w/ Mini band

# **Starting Position:**

Stand with your arms at your sides, your feet shoulder width apart and pointing straight ahead, and a mini band around and above your knees.

### Procedure:

Maintain perfect posture and initiate movement with your hips. As you reach your arms far forward, squat your hips back and down until your thighs are parallel to the deck. Return to standing position by pushing through your hips. Keep your knees out. Repeat until you've completed all your reps.

### **Coaching Key:**

Keep your knees behind your toes during the movement. Also, keep your knees pushing against the band so they do not collapse to the inside during the movement. Keep your chest up and back flat.

# You Should Feel It:

In your glutes, hamstrings, and quads.

# Y's - Bent Over (Bands)

# **Starting Position:**

Stand bent over at the waist with your back flat and your chest up. Take hold of a light resistance band in both hands.

### Procedure:

Glide your shoulder blades back and down, then raise your arms over your head to form a Y. You should feel slight resistance from the bands as you raise you arms. Return to the starting position and continue for the prescribed number of reps.

# **Coaching Key:**

Initiate the movement with your shoulder blades, not your arms and keep your thumbs up.

# You Should Feel It:

Working your shoulders and your upper and lower back.













# **Lateral Squat – Low Alternating**

# **Starting Position:**

Stand with your feet wider than shoulder width apart.

#### Procedure:

Shift your hips to the right and down by bending your right knee and keeping your left leg straight. Your feet should be straight ahead and flat on the deck. Push through your right hip to shift your weight onto the opposite leg, while keeping your hips at the same low level. Continue this movement for the prescribed number of repetitions.

### Coaching Key:

Keep your knee on your "working" side behind your toes. Keep your chest up and hips low throughout the movement.

#### You Should Feel It:

Working your glutes, groin, hamstrings, and quads.

# Overhead Press - 1/2 Kneeling Bands

### **Starting Position:**

Half-kneel (put one knee on the deck) with your back knee on a soft mat or pad. Place the middle of the band underneath your front foot and hold a handle in each hand.

### Procedure:

Keeping your arms in line with your body, press the bands straight overhead. Return to the starting position and repeat for the prescribed number of repetitions.

### **Coaching Key:**

Be sure not to allow the bands to pull your arms forward; they should move straight up and down. Maintain a tall posture during the movement and engage your back glute. Switch legs midway through the set.

### You Should Feel It:

In your shoulders and upper back.

# **Lateral Pillar Bridge (\*30 Sec Hold)**

# **Starting Position:**

Lie on your side with your forearm on the deck under your shoulder and your feet stacked together.

# Procedure:

With your body in a straight line and your elbow under your shoulder, push your hip off the deck, creating a straight line from ankle to shoulder. Keep your head in line with the spine. Hold for 30 seconds.

# **Coaching Key:**

Keep your body in a straight line and keep your stomach tight.

# You Should Feel It:

In your shoulders and trunk.

# Straight Leg Lowering – Alternating

# **Start Position:**

Lying face up on deck with your knees straight and hips flexed with legs pointing up with soles of feet pointing towards the ceiling.

### Procedure:

While keeping your stomach tight, spine still, and left leg stationary, slowly lower your right leg straight down until you feel your pelvis about to start moving. Return back to the starting position and repeat on the opposite side. Continue for the prescribed number of repetitions.

# **Coaching Keys:**

Do not let your pelvis move as your leg lowers. Do not let your feet touch the deck. Push the arch of your foot as far away from your hips as possible when lowering your leg.

# You Should Feel It:

Working your trunk and stretching your hamstring.















# Strength – Full Equipment (Level 1)

# Romanian Deadlift - Dumbbell

# **Starting Position:**

Stand with a tall posture while holding a dumbbell in both hands, using an overhand grip.

### Procedure:

Hinge over at the waist, and begin lowering the dumbbells close to your shins. Return to the standing position by contracting your hamstring and glutes. Repeat for the prescribed number of repetitions, then switch legs.

### **Coaching Keys:**

Keep your torso engaged and do not let your back arch. Keep your shoulder blades back and down throughout the movement, and keep the dumbbell close to your shin.

# You Should Feel It:

In your glutes, hamstrings, and back.

# **Bench Press - Dumbbell**

### **Starting Position:**

Lie faceup on a bench, holding dumbbells over your shoulders, your palms facing your thighs.

### Procedure:

Lift the dumbbells straight up over your chest. Lower the dumbbells until your arms just break parallel with the deck, then push them back up. Repeat the movement for the prescribed number of repetitions.

# **Coaching Key:**

Keep your feet on the deck and your hips and shoulders on the bench at all times. Pull your stomach in to stabilize your core. Do not let your back arch as you press the dumbbells up.

# You Should Feel It:

In your chest, shoulder, and triceps.

# Squat - w/ Mini bands

# **Starting Position:**

Stand with your arms at your sides, your feet shoulder width apart and pointing straight ahead, and a mini band around and above your knees.

### Procedure:

Maintain perfect posture and initiate movement with your hips. As you reach your arms far forward, squat your hips back and down until your thighs are parallel to the deck. Return to standing position by pushing through your hips. Keep your knees out. Repeat until you've completed all your reps.

# **Coaching Key:**

Keep your knees behind your toes during the movement. Also, keep your knees pushing against the band so they do not collapse to the inside during the movement. Keep your chest up and back flat.

### You Should Feel It:

In your glutes, hamstrings, and quads.











### Bent Over Row - Dumbbell

### **Starting Position:**

Stand, hinged over at the waist, holding dumbbells in each hand.

#### Procedure:

Slide your shoulder blades toward your spine and then lift the weight to your body by driving your elbow to the ceiling. Return to the starting position and repeat for the prescribed number of repetitions.

# **Coaching Key:**

Move with your shoulder, not your arm, to initiate the row. Keep your back level – your shoulders should stay parallel to the deck. Keep your torso engaged and your back flat throughout the movement.

#### You Should Feel It:

In your back, lats, and shoulders.

# **Lateral Squat - Dumbbell Alternating**

### **Starting Position:**

Stand with your feet wider than shoulder width apart and dumbbells resting on your shoulders with elbows pointing forward.

### Procedure:

Shift your hips to the right and down by bending your right knee and keeping your left leg straight. Your feet should be straight ahead and flat on the deck. Push through your right hip, returning to the starting position. Alternate sides and repeat for the prescribed number of repetitions.

# **Coaching Key:**

Keep your knee on your "working" side behind your toes. Keep your opposite leg straight, your back flat, and your chest up.

# You Should Feel It:

Working your glutes, groin, hamstrings, and quads.

# Glute Bridge - 1 Leg

# **Starting Position:**

Lie faceup on the deck with your arms at your sides, your knees bent, and your heels on the deck. Lift one knee to your chest.

### Procedure:

Lift your hips off the deck until your knee, hips, and shoulders are in a straight line. Hold for 1-2 seconds and return to the starting position. Repeat this movement for the prescribed amount of repetitions. Then switch legs and repeat.

### **Coaching Key:**

Fire your glute to lift your hips off the deck. Do not let your back extend during the movement.

# You Should Feel It:

In your glutes, and to a lesser degree, in your hamstrings and low back.

# **Lateral Pillar Bridge (\*30 Sec Hold)**

# **Starting Position:**

Lie on your side with your forearm on the deck under your shoulder and your feet stacked together.

# **Procedure:**

With your body in a straight line and your elbow under your shoulder, push your hip off the deck, creating a straight line from ankle to shoulder. Keep your head in line with the spine. Hold for 30 seconds.

# **Coaching Key:**

Keep your body in a straight line and keep your stomach tight.

# You Should Feel It:

In your shoulders and trunk.















## Straight Leg Lowering - Alternating

#### **Start Position:**

Lying face up on deck with your knees straight and hips flexed with legs pointing up with soles of feet pointing towards the ceiling

#### Procedure:

While keeping your stomach tight, spine still, and left leg stationary, slowly lower your right leg straight down until you feel your pelvis about to start moving. Return back to the starting position and repeat on the opposite side. Continue for the prescribed number of repetitions.

### **Coaching Keys:**

Do not let your pelvis move as your leg lowers. Do not let your feet touch the deck. Push the arch of your foot as far away from your hips as possible when lowering the leg.

#### You Should Feel It:

Working your trunk and stretching your hamstring.

# Level 2 – Warm Up & Strength

# Pillar Preparation (Level 2)

# Pillar Bridge - w/ Arm Lift

## **Starting Position:**

Assume the pillar position with your feet wider than shoulder width apart.

#### Procedure:

Without moving your torso, lift your left arm up and slightly to the left and hold for 1 to 2 seconds. Return to the starting position and repeat with your right arm. Repeat for the prescribed number of reps.

## **Coaching Key:**

Try to keep your weight even on both feet as your arm lifts. Do not let your trunk move as your arm leaves the deck. Keep your torso engaged throughout the movement.

## You Should Feel It:

Working your shoulders and torso.

## Glute Bridge - Marching (Knee Extension)

### **Starting Position:**

Lie face up on the deck with your arms to your sides, knees bent, and your heels on the deck with your toes pulled up towards your shins.

## **Procedure:**

Lift your hips off the deck until your knees, hips, and shoulders are in a straight line. Hold the position while extending your left knee. Return your foot to the deck and repeat with your right knee.

## Coaching Key:

Do not let your back hyperextend. Do not let your hips drop as your knee extends.

## You Should Feel It:

Working mainly in your glutes, and secondarily, in your hamstrings and lower back.

## Y's - Bent Over

## **Starting Position:**

Stand bent over at the waist with your back flat and your chest up.

### **Procedure**

Glide your shoulder blades back and down, then raise your arms over your head to form a Y. Return to the starting position and continue for the prescribed number of reps.

## **Coaching Key:**

Initiate the movement with your shoulder blades, not your arms and keep your thumbs up.

## You Should Feel It:

Working your shoulders and your upper and lower back.















## 90/90 Stretch - Legs Crossed

## **Starting Position:**

Lie face up on the deck holding a towel roll, your left knee bent to 90 degrees, and your right leg crossed over the left. Roll over onto your left side and pin the towel between your right knee and the deck.

#### Procedure:

Maintaining pressure on the towel and a keeping your hips stationary, rotate your chest and right arm back to the right, trying to put your back on the deck. Hold for 2 seconds, then return to the starting position. Repeat until you've completed your reps, then switch sides.

#### Coaching Key:

Keep pressure on the towel pressed against the deck. Only rotate as far as you can without lifting or releasing the pressure on the towel. Exhale as you stretch.

#### You Should Feel It:

Stretching through your torso and the muscles of your middle and upper back.

# **Movement Preparation (Level 2)**

## Mini band - Bent Knee Lateral Walk

## **Starting Position:**

Stand in a quarter-squat position with your feet hip width apart and a mini band above your knees.

#### Procedure:

Walk laterally with small steps as your elbows drive back with each step. Push with your back leg, and pick up your leading foot. Be sure not to reach with your leading leg.

## **Coaching Key**

Keep your chest up and your back flat. Keep your knees pushed apart and over your toes at all times. Keep tension on the mini band at all times.

## You Should Feel It:

Working your glutes.

## Reverse Lunge, Elbow to Instep - In Place

### **Starting Position:**

Stand with your back straight and your arms at your sides.

### Procedure:

Step backwards into a lunge with your right foot. Place your right hand on the deck and your left elbow to the inside of your left foot, and hold the stretch for 1 to 2 seconds. Place your left hand outside your foot and push your hips to the sky. Return your left elbow to the inside of your left foot and repeat for the prescribed number of repetitions on each side.

### **Coaching Key:**

Keep your back knee off the deck. Contract your glute and reach your heel as far away from your hips as possible

## You Should Feel It:

Stretching your groin, your back leg hip flexor, and your front leg glute and hamstring.











## **Lateral Squat – Low Alternating**

## **Starting Position:**

Stand with your feet wider than shoulder width apart.

#### Procedure:

Shift your hips to the right and down by bending your right knee and keeping your left leg straight. Your feet should be straight ahead and flat on the deck. Push through your right hip to shift your weight onto the opposite leg, while keeping your hips at the same low level. Continue this movement for the prescribed number of repetitions.

### Coaching Key:

Keep your knee on your "working" side behind your toes. Keep your chest up and hips low throughout the movement.

#### You Should Feel It:

Working your glutes, groin, hamstrings, and quads.

## Reverse Lunge – w/ Reach

## **Starting Position:**

Stand with your back straight and your arms at your sides.

#### Procedure:

Step backward with your right foot into the lunge, your left foot forward, then contract your right glute. Reach your right hand overhead and laterally crunch your torso to the left, reaching your left hand toward the deck – hold for 2 seconds. Return to the starting position and repeat on the opposite side. Continue, alternating sides, for the desired number of repetitions.

## **Coaching Key:**

Maintain your posture throughout the movement. Contract your back glute during the stretch. Keep your front knee behind your toes. Don't let your back knee touch the deck. Keep your chest up and fire your front glute as you return to the starting position.

## You Should Feel It:

Stretching in the hip flexor of your back leg, in the glute and groin area of your front leg, and in the lateral muscles of your torso.

## **Drop Lunge – Alternating**

## **Starting Position:**

Stand with your back straight, your knees unlocked, and arms clasped together in front.

## **Procedure:**

Reach your left foot 2 feet behind and across your right foot. Square your hips back to the starting position, and sit back and down into a squat. Stand and step laterally with your right foot, then repeat the stretch on the other side. Continue until you've completed the prescribed reps on each side.

## **Coaching Key:**

Keep your chest up and sit your hips back. Maintain your weight on the heel of your front leg. You will be moving around the room during this exercise, so give yourself plenty of space.

## You Should Feel It:

Stretching in the outsides of both hips.











## **Inverted Hamstring**

#### **Starting Position:**

Stand on one leg with perfect posture, your arms raised out to your sides, your thumbs up, and your shoulder blades back and down.

#### Procedure:

Keeping a straight line between your ear and ankle, bend over at the waist and elevate your other leg behind you. When you feel a stretch, return to the standing position by contracting the glute and hamstring of your planted leg. Continue with the same leg for the prescribed number of repetitions, then switch legs.

## **Coaching Key:**

Keep your back flat and your hips parallel to the deck. Maintain a straight line from your ear through your hip, knee, and ankle. Try not to let your foot touch the deck between repetitions. Be sure to keep your knee slightly unlocked on your stance leg during the movement.

#### You Should Feel It:

Stretching in your hamstrings.

# Strength – Fit Kit Equipment (Level 2)

## Glute Bridge - 2 Legs Up, 1 Leg Down

## **Starting Position:**

## **Procedure:**

Lift your hips off the deck until your knees, hips and shoulders are in a straight line. Hold the position while lifting your right knee to your chest, then slowly lower your hips to the starting position with the single leg. Repeat this movement for the prescribed amount of repetitions, then repeat while lifting your left knee to your chest while lowering yourself.

## **Coaching Key:**

Fire your glutes to lift your hips off the deck. Do not let your back extend during the movement.

### You Should Feel It:

In your glutes, and to a lesser degree, in your hamstrings and low back.

## Push Up (Standard)

### **Starting Position:**

Assume a push up position with your hands and feet on the deck.

### Procedure:

Lower your body towards the deck, then reverse the movement without touching the deck. Keep your body in a straight line.

### **Coaching Key:**

Push your sternum as far away from your hands as possible at the end of the movement.

### You Should Feel It:

In your chest, arms, and torso.















## **Split Squat (Bands)**

## **Starting Position:**

Stand in a tall split position with feet shoulder width apart, with a band under your front foot and your weight primarily on the arch of your front foot. Hold the handles in your hands with your elbows facing forward.

#### Procedure:

Drop your hips to the deck by bending your front knee without letting your back knee touch the deck. Return to standing by pushing up with your front leg. Repeat for the prescribed repetitions, then switch legs and repeat.

#### Coaching Key:

Maintain the majority of your weight on the arch of your front foot with very little on your back foot. Your front hip should be bearing the majority of the load during this movement. Keep your torso engaged and back flat.

## You Should Feel It:

In your glute, hamstrings, and quads.

## **Bent Over Row (Bands)**

#### **Starting Position:**

Stand, hinged over at the waist, with both feet standing on the band holding handles in each hand. Adjust the position of the bands to ensure the resistance is challenging enough.

## Procedure:

Slide your shoulder blades toward your spine and then lift the weight to your body by driving your elbow to the ceiling. Return to the starting position and repeat for the prescribed number of repetitions.

## **Coaching Key:**

Move with your shoulder, not your arm, to initiate the row. Keep your back level – your shoulders should stay parallel to the deck. Keep your torso engaged and your back flat throughout the movement.

### You Should Feel It:

In your back, lats, and shoulders.

# **Squat to Overhead Press (Bands)**

## **Starting Position:**

Stand with your feet shoulder width apart with the bands under your feet, holding handles at your shoulders with your elbows facing forward. If you are taller and the bands are not long enough with two feet on them, stand on the center of the band with one foot.

### **Procedure**

Squat your hips back and down until your thighs are parallel with the deck. Return to standing by pushing through your hips. At the top of your stance, press the handles overhead. Return to the starting position and repeat for the prescribed number of repetitions.

## **Coaching Key:**

Keep the weight on the arches of your feet and do not let your knees collapse during the movement. Keep your elbows up and pointing straight ahead throughout.

### You Should Feel It:

In your glutes, hamstrings, quads, and shoulders.











## T's - Bent Over (Bands)

## **Starting Position:**

Stand bent over at the waist with your back flat and your chest up. Take hold of a light resistance band in both hands.

#### Procedure:

Glide your shoulder blades back and down, then raise your arms out to your sides to form a T. You should feel slight resistance from the bands as you raise you arms. Return to the starting position and continue for the prescribed number of reps.

### Coaching Key:

Initiate the movement with your shoulder blades, not your arms and keep your thumbs up.

#### You Should Feel It:

Working your shoulders and your upper and lower back.

## **Dynamic Lateral Pillar Bridge**

## **Starting Position:**

Lie on your side with your forearm on the deck under your shoulder. Feet stacked together.

## Procedure:

With your body in a straight line and your elbow under your shoulder, push your hip off the deck, creating a straight line from ankle to shoulder. Keep your head in line with the spine. Hold for 1-2 seconds, and then return to the start position. Repeat this movement for the prescribed reps, then switch sides and repeat.

## **Coaching Key:**

Keep your body in a straight line and keep your stomach tight.

## You Should Feel It:

In your shoulders and trunk.

## **Crunches**

## **Starting Position:**

Lie faceup with your knees bent, and your arms crossed in front of your chest.

### Procedure:

Lift your chest until your shoulder blades are off the deck, and at the same time rotate your pelvis toward your belly button. Slowly return to the starting position. Repeat until you've completed your reps.

## **Coaching Key:**

Do not pull your head with your hands. Feel each segment of your spine flexing as you crunch.

## You Should Feel It:

In your abdominals.













# Strength – Full Equipment (Level 2)

## Romanian Deadlift - 1 Leg Dumbbell

### **Starting Position:**

Stand on one foot while holding a dumbbell in each hand, using an overhand grip.

## Procedure:

Hinge over at the waist, lowering the dumbbells as your non-supporting leg lifts behind you. Return to the standing position by contracting your hamstring and glutes. Repeat for the prescribed number of repetitions, then switch legs.

### **Coaching Keys:**

Do not let your back arch. Your torso and leg should move as one unit. Fire the glute of your extended leg to keep it straight. Keep your shoulder blades back and down throughout the movement, and keep the dumbbells close to your shin.

## You Should Feel It:

In your glutes, hamstrings, and torso.

## **Bench Press – Alternating Dumbbell**

## **Starting Position:**

Lie faceup on a bench, holding dumbbells over your shoulders, your palms facing your thighs.

#### Procedure:

Keeping one arm straight, lower the other dumbbell until your arm just breaks parallel with the deck, then push it back up. Switch arms and continue to alternate arms for the prescribed number of repetitions.

## **Coaching Key:**

Keep your nonworking arm straight. Keep your feet on the deck and your hips and shoulders on the bench at all times. Pull your stomach in to stabilize your torso.

## You Should Feel It:

In your chest, shoulder, and triceps.

## Split Squat – Rear Foot Elevated Dumbbell

### **Starting Position:**

Hold dumbbells at arm's length at your sides. Standing in front of a bench or box, reach back and place the top of your back foot on its surface.

## **Procedure:**

Lower your hips toward the deck by squatting back and down. Without letting your back knee touch the deck, return to the starting position by driving your weight back up with your front leg. Do all the reps with that leg forward, then switch legs and repeat.

## **Coaching Key:**

Don't let your front knee slide forward over your toes; if it does, start over again with your front foot farther forward.

## You Should Feel It:

In your hips and the fronts of your legs.











## Bent Over Row - 1 Arm 1 Leg Dumbbell

## **Starting Position:**

Stand, hinged over at the waist, holding a dumbbell in one hand.

#### Procedure:

To initiate the row, slide your shoulder blade toward your spine and then lift the weight to your body by driving your elbow to the ceiling. Return to the starting position and repeat for the prescribed number of repetitions.

## **Coaching Key:**

Move with your shoulder, not your arm, to initiate the row. Keep your back level – your shoulders should stay parallel to the deck. Keep your torso engaged and your back flat throughout the movement.

#### You Should Feel It:

In your back, lats, and shoulders.

## Squat to Overhead Press – Dumbbell

#### **Starting Position:**

Stand with your feet shoulder width apart, holding dumbbells at your shoulders with your elbows facing forward.

#### Procedure:

Squat your hips back and down until your thighs are parallel with the deck. Return to standing by pushing through your hips. At the top of your stance, press the dumbbells overhead. Return to the starting position and repeat for the prescribed number of repetitions.

## **Coaching Key:**

Keep the weight on the arches of your feet and do not let your knees collapse during the movement. Keep your elbows up and pointing straight ahead throughout.

### You Should Feel It:

In your glutes, hamstrings, quads, and shoulders.

## Lateral Pillar Bridge - w/ Abduction

## **Starting Position:**

Lie on your side with your forearm on the deck under your shoulder. Feet stacked together.

## **Procedure:**

With your body in a straight line and your elbow under your shoulder, push your hip off the deck, creating a straight line from ankle to shoulder. Keep your head in line with the spine. Lift your top leg into the air as if you were doing a lateral jumping jack.

## **Coaching Key:**

Keep your body in a straight line and keep your stomach tight.

## You Should Feel It:

In your shoulders and trunk.

## **Curl – ½ Kneeling Dumbbell**

## **Starting Position:**

In a ½ kneeling position, hold dumbbells at your side.

## Procedure:

Keeping your elbows still, lift the dumbbells towards your shoulders as you rotate your palms to the ceiling. Return to the starting position and repeat until you've completed all your reps. Switch forward leg midway through the set.

### Coaching Key:

Keep your stomach and the glute muscles of your rear leg tight throughout the movement. Do not allow your back to move. Do not rock forward or backward, and don't move your elbows.

## You Should Feel It:

In your biceps, glutes, and hip flexors.













## **Crunches**

## **Starting Position:**

Lie faceup with your knees bent, and your arms crossed in front of your chest.

#### Procedure:

Lift your chest until your shoulder blades are off the deck, and at the same time rotate your pelvis toward your belly button. Slowly return to the starting position. Repeat until you've completed your reps.

### **Coaching Key:**

Do not pull your head with your hands. Feel each segment of your spine flexing as you crunch.

#### You Should Feel It:

In your abdominals.

# Level 3 - Warm Up & Strength

# **Pillar Preparation (Level 3)**

## Plank - w/ Alternating Hip Flexion

### **Starting Position:**

Start in a push up position with your hands directly beneath your shoulders and your feet shoulder width apart.

#### Procedure:

With your torso engaged and hips still, draw your right knee towards your chest and return to the start position. Repeat with the left leg and continue alternating this movement for the prescribed repetitions.

## **Coaching Key:**

Keep your back flat and torso engaged throughout the entire movement. Move with control and keep your hips still as you alternate leg positions. One foot should always be in contact with the deck.

### You Should Feel It:

Working your torso, hips, and shoulders.

## Glute Bridge – Marching (Hip Flexion)

## **Starting Position:**

Lie face up on the deck with your arms to your sides, knees bent, and your heels on the deck.

### Procedure:

Lift your hips off the deck until your knees, hips, and shoulders are in a straight line. Hold the position while lifting your left knee to your chest. Return your foot to the deck and repeat with your right knee.

### **Coaching Key:**

Do not let your back hyperextend. Do not let your hips drop as your knee comes to your chest.

## You Should Feel It:

Working mainly in your glutes, and secondarily in your hamstrings and low back.

## T's - Bent Over

## **Starting Position:**

Stand bent over at the waist with your back flat and your chest up.

### Procedure

Glide your shoulder blades back and down, then raise your arms out to your sides to form a T. Return to the starting position and continue for the prescribed number of reps.

### Coaching Key:

Initiate the movement with your shoulder blades, not your arms and keep your thumbs up.

## You Should Feel It:

Working your shoulders and your upper and lower back.













## **Quadruped Thoracic Rotation**

## **Starting Position:**

Start on your hands and knees with your elbows straight, hands directly below your shoulders, knees directly below your hips, and your right hand behind your head.

#### Procedure

With a controlled movement rotate toward the right as far as possible while exhaling, stretching the front of the torso, and hold 2 seconds. Rotate trunk to the deck, taking right elbow to left knee while exhaling, feeling a stretch in the back, and hold for two seconds. Continue for the prescribed number of reps, switch sides, and repeat.

### Coaching Key:

Keep your torso engaged throughout the movement. Allow your eyes to follow where your chest is pointing as you rotate through your torso.

#### You Should Feel It:

Stretching your upper, mid, and low back, and anterior torso.

# **Movement Preparation (Level 3)**

## Mini Band - Straight Leg Lateral Walk

## **Starting Position:**

Stand in a tall position with your feet hip width apart, hands on your hips and a mini band at your ankles.

#### Procedure:

Walk laterally with small steps as your elbows drive back with each step. Push with your back leg, and pick up your leading foot. Be sure not to reach with your leading leg.

#### Coaching Key

Keep your chest up and your back flat. Keep your knees pushed apart and over your toes at all times. Keep tension on the mini band at all times.

## You Should Feel It:

Working your glutes.

## Reverse Lunge, Elbow to Instep – In Place w/ Rotation

## **Starting Position:**

Stand with your back straight and your arms at your sides.

## **Procedure:**

Step backwards into a lunge with your left foot. Place your left hand on the deck and your right elbow to the inside of your right foot, and hold the stretch for 1 to 2 seconds. Rotate your right arm and chest to the sky as far as you can. Hold for 1 to 2 seconds. Take your elbow back and down toward your instep and reach through to your opposite side. Place your left hand outside your foot and push your hips to the sky. Return your right elbow to the inside of your right foot and repeat for the prescribed number of repetitions on each side.

## **Coaching Key:**

Keep your back knee off the deck. Contract your glute and reach your heel as far away from your hips as possible

### You Should Feel It:

Stretching in your groin, your back leg hip flexor, your front leg glute and hamstring.











## Lateral Lunge - Alternating

#### **Starting Position:**

Stand with good posture with your hands at your sides and feet shoulder width apart.

#### Procedure:

Step to the right with your right foot, keeping your toes forward and your feet flat. Squat through your right hip while keeping your left leg straight. Squat as low as possible, holding this position for 2 seconds. Push back to the starting position and repeat for the prescribed number of repetitions, then repeat with the left leg.

#### Coaching Key:

Keep your knee on your "working" side behind your toes. Keep your opposite leg straight, your back flat, and your chest up.

### You Should Feel It:

In your glutes, groin, hamstrings, and quads.

## Reverse Lunge – w/ Rotation

## **Starting Position:**

Stand with your back straight and your arms at your sides.

#### Procedure:

Step backward with your left foot into the lunge, your right foot forward, then contract your left glute. Place your left hand on the outside of your front leg, and your chest by rotating towards your right – hold for 2 seconds. Return to the starting position and repeat on the opposite side. Continue, alternating sides, for the desired number of repetitions.

## **Coaching Key:**

Maintain your posture throughout the movement. Contract your back glute during the stretch. Keep your front knee behind your toes. Don't let your back knee touch the deck. Keep your chest up and fire your front glute as you return to the starting position.

## You Should Feel It:

Stretching in the hip flexor of your back leg, in the glute and groin area of your front leg, and in the mid to upper torso.

## Leg Cradle - In Place

## **Starting Position:**

Stand with your back straight, your knees unlocked, and your arms at your side.

## **Procedure:**

Lift your left foot off the deck and slightly squat back and down on your right leg. Bring your knee to your chest, placing your left hand under the knee and your right hand under your ankle. Pull your left leg as close as you can to your chest in a gentle stretch while contracting your right glute. Return to the starting position and repeat with your right knee. Continue, alternating legs, for the prescribed number of repetitions.

### Coaching Key:

Keep your chest up. Contract the glute of the leg you are standing on.

### You Should Feel It:

Stretching on the outside of your hip in your front leg and in the hip flexor of your back leg.











## **Inverted Hamstring**

### **Starting Position:**

Stand on one leg with perfect posture, your arms raised out to your sides, your thumbs up, and your shoulder blades back and down.

#### Procedure:

Keeping a straight line between your ear and ankle, bend over at the waist and elevate your other leg behind you. When you feel a stretch, return to the standing position by contracting the glute and hamstring of your planted leg. Continue with the same leg for the prescribed number of repetitions, then switch legs.

## **Coaching Key:**

Keep your back flat and your hips parallel to the deck. Maintain a straight line from your ear through your hip, knee, and ankle. Try not to let your foot touch the deck between repetitions. Be sure to keep your knee slightly unlocked on your stance leg during the movement.

#### You Should Feel It:

Stretching in your hamstrings.

# Strength - Fit Kit Equipment (Level 3)

## Romanian Deadlift - 1 Arm 1 Leg (Bands)

## **Starting Position:**

Wrap the band around one foot until the tension is challenging enough & hold both handles in the opposite hand.

## Procedure:

Hinge over at the waist, lowering the handle as your non-supporting leg lifts behind you. Return to the standing position by contracting your hamstring and glute. Repeat for the prescribed number of repetitions, then switch legs.

## **Coaching Keys:**

Do not let your back arch. Your torso and leg should move as one unit. Fire the glute of your extended leg to keep it straight. Keep your shoulder blades back and down throughout the movement, and keep the handle of the band close to your shin.

### You Should Feel It:

In your glutes, hamstrings, and torso.

## Push Up - 1 Leg

### **Starting Position:**

Assume a push up position with your hands and feet on the deck. Keeping your torso engaged and hips square to the deck, slowly lift one foot 2 – 3 inches off the deck while keeping your leg straight.

### Procedure:

Holding this position, lower your body to the deck, then reverse the movement without touching the deck. Keep your body in a straight line. Repeat for the prescribed number of reps and then repeat with the opposite foot in the air.

### Coaching Key:

Push your sternum as far away from your hands as possible at the end of the movement.

### You Should Feel It:

In your chest, arms, and torso.











## Single Leg Squat - w/ Mini band

## **Starting Position:**

Stand on one foot with your arms at your sides with good posture, with a mini band just above your knees.

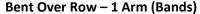
#### Procedure:

Initiate movement with your hips, squatting back and down on one leg as you reach forward. Picture you are reaching your hips back to sit down softly on a chair. Return to a standing position using only the leg you are balancing on. Repeat for the prescribed number of repetitions, then switch legs.

### **Coaching Key:**

Keep your weight balanced on the center of your arch and so not let your knee collapse to the inside. You Should Feel It:

In your glutes, hamstrings, and quads.



## **Starting Position:**

Wrap the band on one foot until the tension is challenging enough and hold the handle in the opposite hand. Stand, hinged over at the waist.

#### Procedure

Slide your shoulder blade toward your spine and then lift the handle to your body by driving your elbow to the ceiling. Return to the starting position and repeat for the prescribed number of repetitions.

### **Coaching Key:**

Move with your shoulder, not your arm, to initiate the row. Keep your back level – your shoulders should stay parallel to the deck. Keep your torso engaged and your back flat throughout the movement.

#### You Should Feel It:

In your back, torso, lats, and shoulders.

## Squat – 1 Arm (Bands)

## **Starting Position:**

Wrap the band on one foot to ensure appropriate tension & hold both handles in the opposite hand. Stand with your feet slightly wider than shoulder-width apart.

### **Procedure:**

Drop your hips towards the deck until you're in a squat position. Leading with your chest, stand up, and then repeat. Continue for the prescribed number of repetitions, then switch sides.

### Coaching Key:

Keep your feet flat on the deck with your weight in your arches. Maintain a flat back with your chest up.

### You Should Feel It:

In your glutes, hamstrings, and quads.

## Glute Bridge - 1 Leg

## **Starting Position:**

Lie faceup on the deck with your arms at your sides, your knees bent, and your heels on the deck. Lift one knee to your chest.

## Procedure:

Lift your hips off the deck until your knee, hips and shoulders are in a straight line. Hold for 1-2 seconds and return to the starting position. Repeat this movement for the prescribed amount of repetitions, then switch legs and repeat.

### **Coaching Key:**

Fire your glute to lift your hips off the deck. Do not let your back extend during the movement.

### You Should Feel It:

In your glutes, and, to a lesser degree, in your hamstrings and low back.













## Overhead Press – Low Split (Bands)

## **Starting Position:**

Stand in a low split position, with the majority of your weight on your front foot in the middle of your arch. Place the middle of the band underneath your front foot and hold a handle in each hand.

#### Procedure

Keeping your arms in line with your body, press the bands straight overhead. Return to the starting position and repeat for the prescribed number of repetitions.

#### Coaching Key:

Be sure not to allow the bands to pull your arms forward, they should move straight up and down. Maintain a tall posture during the movement and engage your back glute. Switch legs midway through the set.

### You Should Feel It:

In your shoulders and upper back.

## Pillar Bridge - Rolling

## **Starting Position:**

Lie face down with your forearms on the deck under your chest.

#### Procedure:

Push up off your elbows, supporting your weight on the forearms. Tuck your chin so that your head is in line with your body. Pull your toes towards your shins. Hold the position for 1-2 seconds. With your torso engaged and back flat roll into a lateral pillar bridge. Hold this position for 1-2 seconds. Return to the start position and repeat on the opposite side. That's one repetition.

## **Coaching Key:**

Keep your torso engaged and back flat throughout the movement. Tuck your chin and keep your spine as tall as you can. You should maintain a straight line from ankle to ear.

## You Should Feel It:

In your torso and shoulders.

# Strength - Full Equipment (Level 3)

## Romanian Deadlift – 1 Arm 1 Leg Dumbbell

## **Starting Position:**

Stand on one foot while holding a dumbbell in the opposite hand, using an overhand grip.

## **Procedure:**

Hinge over at the waist, lowering the dumbbell as your non-supporting leg lifts behind you. Return to the standing position by contracting your hamstring and glute. Repeat for the prescribed number of repetitions, then switch legs.

### **Coaching Keys:**

Do not let your back arch. Your torso and leg should move as one unit. Fire the glute of your extended leg to keep it straight. Keep your shoulder blades back and down throughout the movement, and keep the dumbbell close to your shin.

### You Should Feel It:

In your glutes, hamstrings, and back.











## Bench Press - 1 Arm (w/ Half Off Bench)

## **Starting Position:**

Lie on a bench, with your left glute and left shoulder blade on the bench and right glute and right shoulder blade off the bench. Hold a dumbbell in your right hand and hold on to the bench with your left hand, above your head.

#### Procedure:

Slowly lower the weight until your arm just breaks parallel with the deck, then push it back up. Continue for the prescribed number of repetitions, then switch sides.

### Coaching Key:

Keep your stomach tight and don't let anything move except your arm.

#### You Should Feel It:

Working your chest and stabilizing your torso.

## Single Leg Squat - To Bench

## **Starting Position:**

Stand on one foot in front of a bench or chair.

#### Procedure:

Initiate movement with your hips, squatting back and down on one leg as you reach forward until your glutes touch the bench. Return to a standing position using only the leg you are balancing on. Repeat for the prescribed number of repetitions, then switch legs.

## **Coaching Key:**

Keep your weight balanced on the center of your arch and do not let your knee collapse to the inside.

## You Should Feel It:

In your glutes, hamstrings, and quads.

## Bent Over Row - 1 Arm Dumbbell

### **Starting Position:**

Stand, hinged over at the waist, holding a dumbbell in one hand and lightly holding a stable object for support.

## **Procedure:**

Slide your shoulder blade toward your spine and then lift the weight to your body by driving your elbow to the ceiling. Return to the starting position and repeat for the prescribed number of repetitions.

## **Coaching Key:**

Move with your shoulder, not your arm, to initiate the row. Keep your back level – your shoulders should stay parallel to the deck. Keep your torso engaged and your back flat throughout the movement.

## You Should Feel It:

In your back, lats, and shoulders.

## Squat – 1 Arm Dumbbell

## **Starting Position:**

Stand with your feet slightly wider than shoulder-width apart, with a dumbbell in your hand between your legs.

## **Procedure:**

Drop your hips towards the deck until you're in a squat position. Leading with your chest, stand up, and then repeat. Continue for the prescribed number of repetitions, then switch sides.

### **Coaching Key**

Keep your feet flat on the deck with your weight in your arches. Maintain a flat back with your chest up.

## You Should Feel It:

In your glutes, hamstrings, and quads.













## Glute Bridge - 1 Leg

## **Starting Position:**

Lie faceup on the deck with your arms at your sides, your knees bent, and your heels on the deck. Lift one knee to your chest.

#### Procedure:

Lift your hips off the deck until your knee, hips and shoulders are in a straight line. Hold for 1-2 seconds and return to the starting position. Repeat this movement for the prescribed amount of repetitions, then switch legs and repeat.

### Coaching Key:

Fire your glute to lift your hips off the deck. Do not let your back extend during the movement.

#### You Should Feel It:

In your glutes, and to a lesser degree, in your hamstrings and low back.

## Curl to Overhead Press - 1/2 Kneeling Dumbbell

## **Starting Position:**

In a ½ kneeling position, hold dumbbells at your side.

#### Procedure:

Perform a biceps curl so that the dumbbells are at your chest. Press your both hands over your head. Repeat for the prescribed number of repetitions, switch forward leg midway through the set. Contract the glute of your back leg to stabilize yourself.

## **Coaching Key:**

Maintain perfect posture, with your belly button pulled in and your shoulder blades pulled back and down. Do not let your back arch when the weight is pressed overhead.

#### You Should Feel It:

In your biceps and shoulders, and throughout your pillar.

## Pillar Bridge - Rolling

## **Starting Position:**

Lie face down with your forearms on the deck under your chest.

### Procedure:

Push up off your elbows, supporting your weight on the forearms. Tuck your chin so that your head is in line with your body. Pull your toes towards your shins. Hold the position for 1-2 seconds. With your torso engaged and back flat roll into a lateral pillar bridge. Hold this position for 1-2 seconds. Return to the start position and repeat on the opposite side. That's one repetition.

### **Coaching Key**

Keep your torso engaged and back flat throughout the movement. Tuck your chin and keep your spine as tall as you can. You should maintain a straight line from ankle to ear.

## You Should Feel It:

In your torso and shoulders.











## **Metabolic Circuit**

## Reverse Lunge - Alternating

### **Starting Position:**

Stand with good posture with your hands at your sides and feet shoulder width apart.

#### Procedure:

With your feet together, step back with your right leg into a lunge, maintaining your weight primarily on the arch of your front foot. Return to standing by pushing through your front hip. Repeat with the opposite leg and continue for prescribed reps.

#### **Coaching Key:**

Maintain weight on the arch of the front foot throughout the movement, and focus on using your front hip to return to standing. Do not let your back knee touch the deck.

#### You Should Feel It:

In your glutes, hamstrings, and quads.

## Pillar Bridge - w/ Arm Lift

## **Starting Position:**

Assume the pillar position with your feet wider than shoulder width apart.

#### Procedure:

Without moving your torso, lift your left arm up and slightly to the left and hold for 1 to 2 seconds. Return to the starting position and repeat with your right arm. Repeat for the prescribed number of reps.

## **Coaching Key:**

Try to keep your weight even on both feet as your arm lifts. Do not let your trunk move as your arm leaves the deck. Keep your torso engaged throughout the movement.

## You Should Feel It:

Working your shoulders and torso.

## Lateral Lunge – Alternating

### **Starting Position:**

Stand with good posture with your hands at your sides and feet shoulder width apart.

## **Procedure:**

Step to the right with your right foot, keeping your toes forward and your feet flat. Squat through your right hip while keeping your left leg straight. Squat as low as possible, holding this position for 2 seconds. Push back to the starting position and repeat for the prescribed number of repetitions, then repeat with the left leg.

## **Coaching Key:**

Keep your knee on your "working" side behind your toes. Keep your opposite leg straight, your back flat, and your chest up.

## You Should Feel It:

In your glutes, groin, hamstrings, and quads.











## Reverse Lunge, Elbow to Instep – w/ Rotation

## **Starting Position:**

Stand with your back straight and your arms at your sides.

#### Procedure:

Step backwards into a lunge with your left foot. Place your left hand on the deck and your right elbow to the inside of your right foot, and hold the stretch for 1 to 2 seconds. Rotate your right arm and chest to the sky as far as you can. Hold for 1 to 2 seconds. Take your elbow back and down toward your instep and reach through to your opposite side. Place your left hand outside your foot and push your hips to the sky. Return your right elbow to the inside of your right foot and repeat for the prescribed number of repetitions on each side.

### **Coaching Key:**

Keep your back knee off the deck. Contract your glute and reach your heel as far away from your hips as possible.

#### You Should Feel It:

Stretching in your groin, your back leg hip flexor, and your front leg glute and hamstring.

## Plank - Running

### **Starting Position:**

Start in a push up position with your hands directly beneath your shoulders and your feet shoulder width apart. Keeping your hips and torso still, draw one knee towards your chest keeping your back leg straight.

## Procedure:

With your torso engaged, switch your leg position by driving your straightened knee towards your chest while straightening your bent knee. Continue alternating this movement for the prescribed repetitions.

## **Coaching Key:**

Keep your back flat and torso engaged throughout the entire movement. Try to keep your hips still as you alternate leg positions, do not bounce.

### You Should Feel It:

In your torso, hips, and shoulders

## Single Leg Balance – Alphabet

### **Starting Position:**

Standing tall on one leg, with the opposite foot floating directly beside your stance foot.

### **Procedure**

Sit your hips down and back into a quarter squat. Keep your weight balanced on the center of your arch. With your floating foot spell the letters of the alphabet in the air in small letters for the prescribed amount of time.

## **Coaching Key:**

Keep your torso and hip engaged throughout the movement.

## You Should Feel It:

In your glutes and quads.











## Split Squat - Alternating 5 Sec Holds

## **Starting Position:**

Stand in a tall split position with feet shoulder width apart, and your weight primarily on the arch of your front foot.

#### Procedure:

Drop your hips to the deck by bending your front knee without letting your back knee touch the deck. Hold this position for 5 seconds, then switch legs and repeat until working time has elapsed.

## **Coaching Key:**

Maintain the majority of your weight on the arch of your front foot with very little on your back foot. Your front hip should be bearing the majority of the load during this movement. Keep your torso engaged and back flat.

## You Should Feel It:

In your glutes, hamstrings, and quads.

# **Drop Lunge – Alternating**

## **Starting Position:**

Stand with your back straight, your knees unlocked, and arms at your side.

#### Procedure:

Reach your left foot 2 feet behind and across your right foot. Square your hips back to the starting position, and sit back and down into a squat. Stand and step laterally with your right foot, then repeat the stretch on the other side. Continue until you've completed the prescribed reps on each side.

#### Coaching Key

Keep your chest up and sit your hips back. Maintain your weight on the heel of your front leg. You will be moving around the room during this exercise, so give yourself plenty of space.

#### You Should Feel It:

Stretching in the outsides of both hips.

# Flexibility – Stretch Strap

## Calf Stretch (Strap)

## **Starting Position:**

Lie on your back with the stretch strap wrapped around your right foot and your leg raised 45 degrees into the air.

## Procedure:

Actively pull your right foot to your shin and then give assistance with the strap. Hold the stretch for 1 to 2 seconds and then relax. Perform 10 reps, then switch legs.

## **Coaching Key:**

Exhale during the stretch. Continue to actively pull your foot to your shin even when assisting with the strap.

### You Should Feel It:

Stretching your calf.











## Straight Leg Hamstring Stretch (Strap)

## **Starting Position:**

Lie on your back with your right leg straight and a stretch strap wrapped around your foot.

#### Procedure:

Keeping your right leg straight, actively lifting it as high as possible, then give gentle assistance with the strap until you feel a stretch. Hold 2 seconds and relax. Repeat for 10 repetitions, then switch legs.

## **Coaching Key:**

Keep your opposite leg on the deck by pushing your heel as far away from your head as possible, contracting the glute. Pull the strap above your head.

#### You Should Feel It:

Stretching in the hamstring of the raised leg, and stretching in the hip flexor of the bottom leg.

## Adductor Stretch (Strap)

## **Starting Position:**

Lie on your back with the stretch strap wrapped around one foot. The strap should be wrapped around the inside of your lower leg. Hold the end of the strap in the hand on the same side as your strapped leg.

## Procedure:

Actively lift your leg as far to the side as possible, then give gentle assistance with the strap until you feel a stretch. Exhale and hold for 2 seconds, then relax and repeat for 10 repetitions. Then switch sides.

## **Coaching Key:**

Keep your opposite leg on the deck by pushing your heel as far away from your head as possible, contracting the glute. Keep your toes pointed to the sky. Keep your back in line and your shoulder on the deck.

## You Should Feel It:

Stretching in the inside of the thigh of the leg with the strap.

## **Abductor Stretch (Strap)**

### **Starting Position:**

Lie on your back with the stretch strap wrapped around the outside of one foot. Hold the end of the strap in your opposite hand, with your free hand out to the side.

## Procedure:

Actively lift your leg across your body as far as possible, and then give gentle assistance with the strap until you feel a stretch. Exhale and hold for 2 seconds, then relax and repeat for 10 repetitions. Then switch legs.

## **Coaching Key:**

Keep your non-strapped leg on the deck by pushing your heel as far away from your head as possible, contracting the glute. Keep your toes pointed to the sky. Keep your back in line and your shoulders on the deck.

### You Should Feel It:

Stretching in the outside of the thigh of your roped leg.











## Quad Stretch (Strap)

## **Starting Position:**

Lie on your stomach with the stretch strap wrapped around one foot. The strap should be wrapped around twice. Hold the end of the strap in the hand on the same-side as your strapped leg.

#### **Procedure**

Actively bend your knee, bringing your heel as close to your hips as possible, then give gentle assistance with the strap until you feel a stretch. Exhale and hold for 2 seconds, then relax and repeat for 10 repetitions. Then switch sides.

### Coaching Key:

Contract the glute on the leg that is being stretched. Keep your back flat and torso engaged during the stretch.

#### You Should Feel It:

Stretching your quads and hips.

## Shoulder/Triceps Stretch (Strap)

## **Starting Position:**

Stand holding a stretch strap behind your head with your right hand over and your left hand under. **Procedure:** 

Actively reach your right hand down your back and give gentle assistance with your left hand, exhaling and holding the stretch for 2 seconds. Now, actively reach your left hand up your back as high as possible, and give gentle assistance with your right hand, exhaling and holding the stretch for 2 seconds. Repeat for 10 repetitions, then switch hands and repeat.

## **Coaching Key:**

Actively move through the range of motion with the arm being stretched. Exhale during the stretch. Maintain perfect posture with your stomach tightened.

### You Should Feel It:

Stretching in the triceps of the top arm, and stretching in the shoulder of the bottom arm.

# Flexibility - No Equipment

## **Bent Knee Hamstring Stretch**

## **Starting Position:**

Lie on your back with both legs straight. Pull your right knee to your chest, grasping behind the knee with both hands.

### Procedure:

Actively straighten your right knee as much as possible without letting it move away from your chest. Give gentle assistance with your hands until you feel a stretch, hold 2 seconds, and relax. Continue for 10 repetitions, then switch legs and repeat.

## **Coaching Key:**

Keep your opposite leg on the deck by pushing your heel as far away from your head as possible, contracting your glute. Keep your knee pulled as tightly to your chest as possible throughout the entire movement. It's okay if you can't fully straighten your knee.

### You Should Feel It:

Stretching in your hamstring of the bent leg and stretching in the hip flexor of the bottom leg.













## **Knee Hug – Supine**

## **Starting Position:**

Lie on your back with both legs straight.

#### Procedure:

Actively lift one knee to your chest and then give it gentle assistance by grabbing the knee and pulling it closer to your chest. Exhale and hold the stretch for 2 seconds, then return to the starting position. Repeat for the prescribed number of repetitions. Then switch legs.

#### Coaching Key:

Keep your non-stretching leg flat on the deck by pushing the bottom of your heel away from your head.

#### You Should Feel It:

Stretching your glutes, hamstrings, and hip flexors.

## Leg Cradle - Supine

## **Starting Position:**

Lie on your back with both legs straight.

## Procedure:

Lift your right knee to your chest, placing your right hand on your knee and your left hand under your ankle. Pull your right leg as close as you can to your chest into a gentle stretch while contracting your left glute. Hold the stretch for 2 seconds, and then relax. Continue for 10 repetitions, then switch legs and repeat.

## **Coaching Key:**

Throughout the movement, contract the glute of the leg that's on the deck, point that foot toward the ceiling, and keep your belly button drawn in.

#### You Should Feel It:

Stretching in the outside of the thigh of your bent leg.

## Quad/Hip Flexor Stretch - ½ Kneeling

### **Starting Position:**

Half-kneel (put one knee on the deck) with your back knee on a soft mat or pad. Rest the hand of your opposite arm on your forward knee.

## Procedure:

While keeping a slightly forward lean in your torso, tighten your stomach and contract the glute of your back leg. Maintaining this posture, shift your entire body slightly forward. Exhale and hold the stretch for 2 seconds. Relax, repeat 10 times, and then switch legs.

## **Coaching Key:**

Avoid excessive arching in your lower back.

## You Should Feel It:

Stretching in the front of your hip and in the upper thigh of your back leg.

## **Triceps Stretch**

## **Starting Position:**

Standing with good posture with your arms at your sides.

## Procedure:

Lift one arm up over head and reach your hand back down your back as far as you can, with your opposite hand give gentle assistance until you feel a stretch. Exhale and hold for 2 seconds, then relax and repeat for 10 repetitions. Then switch sides.

### **Coaching Key:**

Keep your back flat and torso engaged throughout the stretch.

## You Should Feel It:

Stretching your triceps, lats, and shoulder.





















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## 90/90 Stretch - w/ Arm Sweep

## **Starting Position:**

Lie face up on the deck holding a towel roll, your left knee bent to 90 degrees, and your right leg crossed over the left. Roll over onto your left side and pin the towel between your right knee and the deck.

#### Procedure:

Maintaining pressure on the towel and a keeping your hips stationary, rotate your chest and sweep your right arm - palm up, bending your elbow at the end reaching for your back pocket – palm down. Hold for 2 seconds, then return to the starting position. Repeat until you've completed your reps, then switch sides.

#### Coaching Key:

Keep pressure on the towel pressed against the deck. Only rotate as far as you can without lifting or releasing the pressure on the towel. Exhale as you stretch.

## You Should Feel It:

Stretching through your torso, mid/upper back, chest, and shoulder.





