



## MWR Fitness Specialist NOFFS Surface Ship Series, Level II Demo

[HTTP://WWW.MED.NAVY.MIL/SITES/NMCPHC/HEALTH-PROMOTION/PAGES/SHIPSHAPE.ASPX](http://www.med.navy.mil/sites/nmcphc/health-promotion/pages/shipsape.aspx)



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## Getting Started – Selecting a Program

### Example: NOFFS

1. Choose a program: Surface Ship Series
2. Choose a strength training choice:
  - a) Fit-Kit (resistance tubing)
  - b) Free Weights
3. Choose a level: There are 3 levels.  
**● Short = 30 minutes    ● Medium = 45 minutes    ● Long = 60 minutes**
4. Choose how long you want to work out
5. **POWER UP -- Get Started!**

*(NOFFS Workout System, 2010 – present)*



Handout: NOFFS Surface Ship Series - Level 2

\*MWR Fitness Specialist Note: This section will help to standardize the information that is emphasized for the ShipShape participants. It is recommended that participants have a functional knowledge of the NOFFS Surface Ship Series.

Distribute the *NOFFS Surface Ship Series - Level 2* handout and mention that participants can use the app or download a hard copy from the Navy Fitness website.

Use the first page of the handout, *3 Simple Steps to Get Started*, to cover the information on this slide.

# 1: Pillar Preparation

- Your Pillar = hips, torso, and shoulders
- The pillar represents the foundation for all your movement
- These first exercises in a workout act as a “bridge” seamless transfer of energy throughout the body
- Helps to protect you from injury



\*MWR Facilitator Note: Use the Pillar Preparation page of the handout to cover the information on this slide.

Pillar Preparation and movement preparation are the warm up portion of your workout. They are important to prepare the body for the workout and to also assist in preventing injuries. Whether you decide to do NOFFS or not, this portion of the workout is very important.

Your pillar, which consists of your hips, torso, and shoulders, represents the foundation for all of your movement.

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.

\*MWR Fitness Specialist Note: To show the importance of pillar preparation as a visual example, the facilitator can provide the following visual examples:

- Example 1: The light switch - Most likely everyone in the classroom has a muscles that are not currently “engaged” because they are sitting in the classroom and not

moving. If the facilitator goes to the light switch to the room and turns it off, this is a perfect example of individuals having their pillar (core) part of their body being turned “off”. Pillar Preparation exercises help to “turn on” (facilitator then turns on the light switch) or wake up the muscles that will help to protect, stabilize, and strengthen your pillar, which is the foundation for all of body movement. Pillar preparation exercises also let the body know to “wake up” and let the body know to prepare for movement. Normally, this part of the exercise session normally lasts for only 5 minutes, but it is a very important component for injury prevention.

- Example 2: The bike wheel – Another great example the facilitator can show their class to demonstrate the importance of pillar preparation is to bring in a bike wheel (or any wheel that has spokes). If you think of the body as a wheel, the pillar is the hub (the center piece) and the limbs are the 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.”

The 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.

All movement requires the production or absorption of forces; this force is then transferred throughout your body in order to execute the movement.

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.

Our lifestyles create imbalances. This helps to eliminate these imbalances. Examples of how we may get body imbalance might be from wearing heeled shoes or body mal-alignment, such as from sitting often with legs crossed.

## 2: Movement Preparation

- Designed to help you prepare of the specific demands of a training session.
- “Movement Prep” = a series of active and dynamic stretching involving movements that imitate those similar 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.



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\*MWR Fitness Specialist Note-Use the Movement Prep page of the handout to cover the information on this slide.

Movement Preparation is also part of the warm-up. The NOFFS movement preparation provides you with a complete and balanced warm-up session that will help you prepare for the specific demands of a training session.

During movement preparation, muscles are stretched through a series of controlled, active movements, holding them only for 1-2 seconds instead of an extensive period of time.

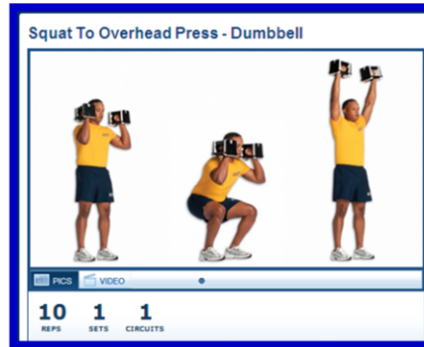
The movements included in this training component have a focused purpose, and are designed to increase your core temperature; lengthen, strengthen, stabilize, and balance your muscles; and, as the name suggests, prepare your body for the upcoming movement, providing you with the biggest “bang for your buck”.

It’s not that static stretching is a bad idea; it can be a great tool after a workout. You want to avoid doing any form of static stretching before a workout though. Static stretching actually turns “off” the nervous system, and you want to turn “on” the nervous system for a workout!

### 3: Strength

- Focus is on using multi joint movements & integrated movements that work through multiple planes of motion, not the old traditional workouts that included only on single planes of motion.

- We train body movements instead of body parts because everything is about the body's engineering is connected.



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\*MWR Fitness Specialist Note: For this part of the workout, you can choose between free weights and rubber mini-bands and resistance tubing.

\*MWR Fitness Specialist Note-Use the Strength Options A or B page of the handout to cover the information on this slide.

- Show the class an example of their strength training equipment options:
  1. Free weight (possibly a 15 lb. weight)
  2. Mini band and at least 4 options of the resistance tubing different color strength/resistance bands: yellow, green, red, purple or blue.

For weight loss, strength training increases lean body mass. An increase in lean body mass increases your body's metabolism because the muscle requires calories to function. The body's metabolism, or your caloric burning "furnace," grows due to an increase in muscle mass.

Traditionally, strength programs are designed with specific body parts in mind; they use single joint movements, and work through a single plan of motion. An example of this would be like a seated leg extension performed on a weight machine.

We have tried to break from this traditional approach in our strength training program design and focus instead on training movement patterns, using multi joint movements that work through multiple planes of motion.

\*MWR Fitness Specialist Note: Have the participants stop and imagine the body movement that occurs when they are performing this regular activity of daily living movement.

Think about what movement patterns occur when you are squatting to pick up a box that needs to be placed in a storage closet at your house. Then imagine having to lift that box high to fit on a shelf...you just performed a squat to overhead press!”

An example of training movement patterns is the squat to overhead press (demonstrated on the slide). This exercise, which can be performed either with free weights OR resistance bands, relates more closely to what you do day to day with your body. These multi-planar and integrated movements are included in the NOFFS workout.

The reason we train body movements instead of body parts is because everything about the body’s engineering is connected.

Many workout programs do more damage than good by producing muscle imbalances and inefficient movement patterns that sabotage this highly coordinated operating system. For example, 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.

## 4: Cardiovascular Fitness

- Cardiovascular Interval training is the alternative approach to long slow duration training.
- It will take you from an effort level that is easy, up to a hard effort, & then back to an easy level.
- Benefits:
  - Increase caloric burn
  - Increase in metabolism
  - Motivational
  - Improve PRT run time



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\*MWR Fitness Specialist Note-Use the 2 pages that include Cardiovascular Fitness on the handout to cover the information on this slide.

Typically, when people 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, this isn't necessarily the most effective training approach to elicit great improvements in cardiovascular fitness. In addition, research has proven that metabolic training or interval training elicits greater improvements in cardiovascular fitness and in weight loss.

Interval training includes the cardiovascular component of NOFFS. It is an alternate approach to long, slow duration training. This involves training that alternates between short intensive 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.

\*MWR Fitness Specialist Note: To ensure participants understand, ask the following question: "What are some examples of interval exercises?" The answer is anything that you normally do for cardiovascular fitness, you just perform the movement at different levels throughout the workout (elliptical trainer, cycling, rowing, stair stepping, running/walking, walk/run the ends of the basketball court, jump roping, etc.).

\*MWR Fitness Specialist Note: For optional equipment, a heart rate monitor is very beneficial



to have during this training. If you have a heart rate monitor on hand, you may consider showing the tool to the class.

The following are some of the key benefits of interval training and weight loss:

1: Increased caloric burn: You can actually burn more total calories in the same amount of training time.

2: Increased Metabolism – both during and after the workout: Another benefit of interval training is that it increases your metabolism, both during your training session and after. As discussed earlier in the presentation, 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 (like running at a continual steady pace).

3: Motivation is also very important. By including intervals into your cardiovascular session, you are provided with variety across each workout. The cardiovascular exercise actually becomes more “engaging” or more exciting to perform rather than just exercising at the same set pace on a piece of cardiovascular equipment. The working intervals are kept to about five-minute work sets, balanced with the appropriate amount of recovery to help facilitate this motivation.

4: Improving your PRT Run: The NOFFS cardiovascular interval training improves your personal cardiovascular fitness. A 12 week study of the NOFFS, called the San Diego Waterfront Study, conducted in the Summer 2013 by Indiana University identified that the NOFFS Cardiovascular Fitness Program yielded a more significant improvement in the PRT 1.5 run time than did the “traditional” CFL fitness training.

## 5: Recovery

- **Allowing your body to properly recover, reduces your injury potential.**
- **Without recovery exercises as part of your program, you could find yourself with nagging aches & pains that eventually lead to injury.**
- **Benefits:**
  - **Increases flexibility**
  - **Ensures body is balanced**
  - **Isolates and relieve build up**



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\*MWR Fitness Specialist Note-Use the 2 pages that include Flexibility on the handout to cover the information on this slide.

Recovery is the fifth and final component included in your workout plan.

Activities of Daily Living and exercise workouts are 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. Recovery activities will relieve your body of aches and pains, decrease inflammation, and improve tissue quality.

Within the Recovery training component, NOFFS focuses on:

- Increasing your flexibility
- ensuring your body is balanced
- Isolating and relieving built up

Instead of passive static stretching, the movements in the recovery portion of your workout 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 work can be done using an 8 to 10 foot length of rope, or no equipment at all.

MWR Fitness Specialist Note: Show the class a stretch strap and a home made stretch strap using an 8 to 10 foot of rope and knotting a loop to hold the foot at the end of the rope.