

Physical Fitness in the United
States Navy

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The United States Navy is dedicated to the fitness of its service members. Physical fitness is a crucial element of mission performance, vital to ensuring the member is able to performance their often-rigorous military duties. It is also strongly valued for its health benefits for the individual, both in health maintenance and disease prevention. Physical fitness promotes unit cohesiveness, improves morale and contributes to an overall sense of well being. The U.S. Navy realizes that promoting fitness has its challenges, especially with high rates of obesity, high fat diet and sedentary lifestyle all too common in the United States and feels strongly that the best way to achieve fitness is by encouraging an overall Navy culture of healthy lifestyle. This can be achieved through improvements in diet and nutrition, regular exercise incorporated into the actual workday, and providing a command environment that is supportive of individual fitness. New changes in how the Navy evaluates the fitness of its members were made this year to try to address some of the challenges. Another challenge is one that the Navy can do little about—how to support fitness during frequent worldwide deployments on a multitude of different ships, from submarines to aircraft carriers. Providing members access to quality fitness facilities whether on shore or on ship is also a top Navy priority.

There are many challenges to physical fitness in the United States Navy. The biggest is arguably the skyrocketing rate of obesity in the United States. Recent statistics show that 55% of adults in the **United States** are overweight, 22% are obese. Increasing numbers of children are also becoming affected as they spend long hours in front of the television or computer and don't get out and exercise. The impact of obesity on health is undeniable. Overweight and obese individuals are at greater risk for many diseases including hypertension, coronary artery disease, and chronic joint and back pain. The increased rate of obesity alone is thought to have directly resulted in the 30% increase in diabetes in the United States over the past 10 years. There is a huge financial cost as well—obesity costs the United States an estimated \$100 billion annually in both direct (medications, outpatient visits and hospital stays) and indirect costs (missed workdays, restricted activity).

Why such high rates of obesity? The sedentary lifestyle and the relative inactivity of most Americans play a large role. Americans spend hours sedentary in front of the television or computer and are spending less and less time doing physical work or exercise. With the fast-paced, busy lifestyle common to many Americans today, many choose not to make exercise and fitness a part of their busy lives, claiming "I don't have time". The American diet has become peppered with readily available and relatively cheap fast foods that are high in fat, cholesterol and calories. The portions are very large and the individual can nearly double the already huge meal of a coke, quarter-pounder and fries by "supersizing" may get a full day's worth of calories in just one meal. These high fat foods are aggressively advertised over and over on the television and have become a way of life. Many people feel they "don't have time to eat right".

These trends are not limited to civilians--they are cultural traits that have become a way of life in the United States. They adversely impact members of the Armed Forces as well. Most new military recruits are raised in this culture and know no other way of life.

It is up to the military to educate its members on healthy lifestyle and how to incorporate fitness and good nutrition into their daily lives.

In order to evaluate fitness of its members, the U.S. Navy conducts semi-annual **Physical Fitness Assessments (PFA)**, mandatory for all Navy personnel, regardless of age. The PFA consists of a body composition assessment, i.e. body fat assessment, and a **Physical Readiness Test (PRT)** i.e. exercise events. Individuals are required to meet minimum standards in both categories. The body composition assessment is performed by obtaining an individual's height and weight, and ensuring their weight falls within the accepted limits for their height. (See enclosure 1). If an individual's weight exceeds the standard for height, then a body fat percentage is obtained by using a U.S. Navy approved circumference technique. This technique measures distance around the neck and abdomen for men; the neck, hip and natural waist of women, and doing a calculation. Acceptable body fat for men is 22% or less. For women, acceptable body fat percentage is 33% or less.

The PRT portion of the testing consists of four exercise events designed to evaluate flexibility, muscular strength and cardiovascular endurance. Events include the seated straight-leg toe touch, two minutes of sit-ups, two minutes of push-ups and a 1.5mile run or 450meter swim. The PRT is scored not by points, but on the basis of multi-tiered fitness levels, designed to allow the individual to assess physical fitness strengths and weaknesses. The four categories are outstanding, excellent, good and satisfactory. An individual may score high, medium, low or marginal in each of these categories (see enclosure 2). Performance of "satisfactory-marginal" or better is required in each event to meet the minimum PFA standards. The overall PFA performance equals the lowest category-level performance attained for an exercise event. The standards are based on several years of research and reflect a sampling of average PRT scores for over 200,000 naval personnel. Standards are based on a standard bell-curve, with good scores reflecting center of the curve with 50% of personnel, excellent and satisfactory one standard deviation to the right and left, representing 15% each, and outstanding and unsatisfactory 2 standard deviations to the right and left representing 10% each

Prior to performing the PFA, all service members are required to complete a Physical Activity Risk Factor screening form (enclosure 3). These questions are designed to access the individual's risk for exercise related injuries. The questions range from risk factors for coronary artery disease (tobacco use, high cholesterol, hypertension, family history of heart attacks, diabetes) to sedentary lifestyle. Other questions screen for chest pain, palpitations, dizziness or shortness of breath, and of course, history of other medical problems. Individuals checking yes to any question (except tobacco use alone) must be evaluated by a Medical Officer prior to participating in the PRT. All members over age of 50 are also required to obtain a medical evaluation prior to participating, regardless if they checked "yes" to any question or not. Medical Officers may waive any or all portions of the PRT for individuals based on their medical condition. Pregnant women are automatically waived from both portions of the PFA starting at the time of diagnosis to six months post-partum.

The U.S. Navy has made significant changes to its PFA over the past year in response to the fitness challenges mentioned above. The new changes are intended to make fitness a cultural Navy-wide way of life, instead of something service members only do twice a year for a readiness test. Making fitness an expected part of the regular workday is vital, instead of something that is done only if there is time left over at the end of the day. The Navy is promoting healthy lifestyle, and intends to ensure physical fitness is a real priority for all sailors. All service members will be required to exercise 3-5 times per week for a minimum of one hour. The burden of implementing these changes and maintaining the climate of fitness is placed on the individual commanding officers and the individual commands.

One much needed change in the PFA resulted from manning and retention issues. As an all-volunteer military force, the U.S. Navy is finding it increasingly difficult to retain service members past their initial commitment, due to the strong economy and an abundance of better paying civilian jobs. These same factors also make recruiting new service members more difficult. Under the old guidelines, three PFA failures (meaning failure of either the body fat standards or the PRT) resulted in mandatory administrative discharge from the U.S. Navy. Many service members were being forced out due to PFT failures, which worsened the manning shortages. That rule was subsequently suspended, as too many people were being discharged. The new guidelines are more comprehensive and allow service members a fair chance to improve their deficient areas before undergoing administrative punishment. With the first or second PFA failure in a four-year period, the failure will be annotated on the member's annual performance evaluation but will not be held against the service member for promotion/ retention. The third and subsequent failures in a four-year period will also be annotated on the member's evaluation. These failures however will reflect adversely towards promotion and retention. "Significant difficulties" will be automatically noted on the evaluation summary along with "retention not recommended". The service member will not be eligible to promote, advance or reenlist until they have passed 3 PFT's in a row. Instead of administratively separating the member after the third PFA failure, they now will be unable to promote and will be released at the end of their obligated service, unable to reenlist.

After a PFA failure, the service member undergoes medical screening and is enrolled in the mandatory exercise program, now titled **Physical Enhancement Program (FEP)**. This involves mandatory 60-minute exercises sessions 3-5 times per week, organized and supervised by the individual commands. Any individual who scores overall below Satisfactory-Marginal will also be enrolled in this program. In addition to mandatory observed exercise, this program attempts to encourage healthy lifestyle and involves additional education and information. All body fat failures will receive the "Navy Nutrition and Weight Control Self-Study Guide" and will attend a Navy Medical Weight Management program. These service members will be eligible for help through designated Morale Welfare and Recreation (MWR) trainers to establish an individual fitness plan. They will be monitored periodically, with monthly PRT and body fat measurements to monitor progress. With these changes, the Navy, instead of punishing the service member, is attempting to give them the time and the tools necessary for them

to make positive and healthy changes in their life. Again, trying to make fitness and a healthy lifestyle part of the Navy and part of the service member's life.

By the nature of its operational demands and multiple mobile platforms, the U.S. Navy will continue to have challenges in meeting its goal of a culture of physical fitness. Namely, how to provide fitness opportunities and facilities while on a deployed on the multitude of ships, submarines, and aircraft carriers in the U.S. fleet. Most ships are older and were not designed with a fitness center in mind. Other ships simply do not have room in their design to support an extra room. Many "after factory" modifications have been made to the fleet and most ships regardless of size will have some fitness machines available. The larger ships have weight rooms (with free weights and nautilus) and several fitness machines such as treadmills, stair steppers, Nordic Track and stationary bicycles. These machines may be tucked in around other operational equipment and are often in poorly ventilated spaces, but they are there. Often smaller ships will permit personnel to swim off the bow, and larger ships such as aircraft carriers will allow runners to circle the flight deck during certain no-fly hours. Service members end up evading obstacles, like making sure the ceiling above the treadmill is high enough that you don't hit your head, and avoiding the airplanes chained down to the flight deck. This brings about a whole new group of sports-related injuries, including lacerations to the head from hitting airplane wings, bruised knees and hands from falling off treadmills, multiple free-weight injuries from when the ship suddenly maneuvers and removing non-skid out of skinned knees and elbows from the flight deck. Members realize that these are the challenges of fitness and generally have a good attitude about these new sports-related injuries.

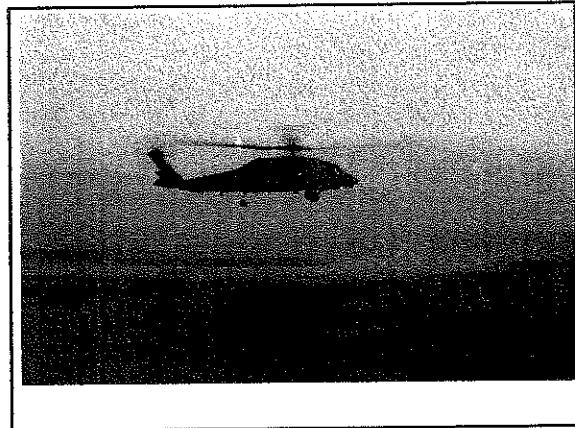
Vital to helping the U.S. Navy meet this challenge is the **Morale, Welfare and Recreation (MWR)** department. It is made largely of civilians who run and oversee fitness facilities and recreational activities both on shore and deployed. On U.S. Naval Bases, MWR supports gyms, fitness centers and swimming pools. They host 5 and 10km fun runs and organize base-wide softball, soccer and basketball leagues. They have certified trainers who help service members draw up individual fitness plans and goals. They hold "Captain's Cup" events in a multitude of sports where commands compete against each other for the honor of the cup. MWR helps ensure the facilities are state of the art, user friendly and large enough to support the numbers of personnel who are assigned to each base. MWR assists with U.S. Armed Forces Championships and plays a role in the selection of CISM teams. While deployed MWR also provides outstanding assistance to Navy personnel. They again, run and manage weight rooms and fitness centers. Equally as important, MWR provides service members with a great selection of activities to participate in while on liberty in foreign ports, including hash runs, golf trips and a wonderful selection of tourist activities.

The U.S. Navy has begun a new focus of fitness and overall healthy lifestyle. Changes in the PFA program will help make regular fitness an integral part of life in the U.S. Navy. Better nutrition and education on a healthy diet continue to be a priority. Instead of serving greasy fast foods and high fat meals, the Navy now provides healthier menus and low-fat options in the mess halls both on board ship and on shore. Salad bars have been

added as a permanent part of the menu. All entrees are now required to have their nutritional contents posted for service members to see so they can make healthy diet choices. The medical department has focused on providing a multitude of educational classes on weight management, tobacco cessation and the health benefits of regular exercise. Education of members is key, providing them a supportive environment to practice fitness and healthy lifestyle is also very important. Promoting fitness and healthy lifestyle in the U.S. Navy will continue to be a top priority well into this new century.

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Introduction

- Why fitness?
- Cultural challenges to fitness
- Former Navy fitness policy and fitness testing regulations, why they needed to be changed
- New fitness policy and testing regulations, more comprehensive
- Operational challenges to fitness

Why Fitness?

- Vital to mission performance
- Promotes unit cohesiveness, improves morale
- Health benefits
 - Health maintenance
 - Disease prevention

Challenges to Fitness

- Largely cultural
 - Obesity in the U.S.
 - Sedentary lifestyle
 - High-fat diet, large portions
 - Lack of interest
 - “No time”
 - Want to be thin, want quick fix

Former Navy Fitness Policy

- No organized or formal physical fitness
 - Unless Command mandated
- Required service member to exercise 3 times per week for 60 minutes but....
- Did not allow time during work day for exercise. Exercise during day was frowned upon (means you aren't busy enough!)
- Priority was meeting mission requirements, not fitness

Former Fitness Testing Policy

- Semi-Annual Assessment
- Two part evaluation
 - Body composition
 - Exercise events
- Grading--Pass/ Fail
- Hated evolution by service members
- Often only exercise member would get during the year*

Former Fitness Testing Policy

- Failure resulted in mandatory exercise 3 times per week (seen as punishment)
- Failure were the only members exercising during the day (stigma)
- Little command support for rehabilitating members. No counseling, education, fix it
- 3 failures resulted in mandatory discharge from the Navy (worsened already bad manning issues. Policy was stopped)

New Navy fitness policy

- Reflects a change much needed change in mindset. Old policy no longer effective
- Attempts to make fitness and healthy lifestyle an integral part of Navy culture
- Mandates exercise 3-5 days a week during working hours, making it a standard part of the workday
- Includes educational programs on fitness, nutrition, healthy lifestyle

New Navy Fitness policy

- Focus on fitness and improved facilities and
- Healthy lifestyle strongly promoted
 - Includes educational programs on fitness, nutrition, tobacco cessation, health maintenance
 - Improved menus Navy-wide with more low-fat healthy options. Salads part of every meal
 - Entrees in dining halls have nutritional information posted, subway vs. McDonalds

New Fitness Testing--PFA

- Called the Physical Fitness Assessment (PFA)--new instruction came out in May00
- PFA is mandatory for all service members semi-annually regardless of age
- Made of 2 parts
 - Body composition assessment
 - Physical Readiness Test (PRT)

Medical Screen

- Prior to each PFA, all members complete a one-page medical screening questionnaire *
- Asks about specific risk factors for coronary heart disease and other medical conditions
- All service members checking "yes" to any question (except tobacco use alone) requires evaluation by a Medical Officer
- All members over 50 also get annual evaluations

Body composition assessment

- Height and weight *
- If member does not meet standards for height, they undergo a body fat assessment
- With a tape measure, circumference testing is done neck/abdomen in men, neck--waist and hips for women. Put values into chart against height to find body fat
- Men must be less than 22%, women less than 33% body fat

Physical Readiness Test (PRT)

- Consists of 4 exercise events. Designed to measure flexibility, muscle strength and endurance, and cardiovascular fitness
- Four events
 - Seated toe touch
 - Sit-ups
 - Push-ups
 - 1.5 mile run or 450 meter swim

Physical Readiness Test (PRT) Scoring

- Each event is scored on 4 levels
 - Outstanding
 - Excellent
 - Good
 - Satisfactory
- Scores are based on gender, age and altitude (above or below 5,000 feet)*
- New scoring system, more difficult

Physical Readiness Test (PRT) Scoring

- The service member may score high, medium, good or satisfactory in any of the four levels
- The overall PRT score equals the lowest event level the service member obtained
- Must score "Satisfactory Marginal" or better in each event to pass the overall PRT
- Fail one event, fail them all

What if member fails?

- Enrolled in the Physical Enhancement Program, a comprehensive program designed to help member improve their fitness performance
- A failure for any reason is enrolled in this program (body fat, and/or any PRT event)
- Anyone scoring less than satisfactory-marginal is enrolled

Physical Enhancement Program

- Change for the better from previous program, is not punishment, is focused on giving service member the tools to improve his/her fitness and to teach them about healthy lifestyle
- Includes "Navy Nutrition and Weight Control Self-Study Guide" and attendance at a Navy Weight Management Class

Physical Enhancement Program

- Members also have access to trainers who help design an individual fitness plan specific for their needs
- Program is run at the command level and is overseen by a fitness officer
- Involves mandatory fitness 3-5 times per week, individuals monitored for progress with monthly body fat and PRT testing

How do PFA scores affect a career?

- Good performances on the PFA will reflect positively in the service member's annual evaluation. Poor performances or failures will reflect negatively
- Improvements are positively documented
- Failures may limit access into military schools (won't meet minimum fitness standards of the school), may affect career

PFA Failures

- Failures are handled in a more comprehensive way under the new policy
- Members are given a chance to improve their deficient areas through the Physical enhancement program before undergoing administrative punishment

PFA Failures

- First and second failure in a 4 year period
 - failure noted on evaluation
 - NOT held against service member for promotion or retention

PFA failures

- Third and subsequent failures in a 4 year period
 - failure noted on evaluation
 - these failures ARE held against service member for retention/ promotion
 - Performance summary on evaluation will read "Significant difficulties" with retention "not recommended"

PFA Failures

- These service members with 3 or more failures in a 4 year period will not be eligible for promotion, advancement or retention until they...
 - PASS 3 consecutive PFAs
- The member will be administratively separated after the end of their obligated service, unable to reenlist



Operational Challenges of fitness

- Unique to the Navy “haze gray and underway”
- 6 month deployments on a multitude of ships (from submarines to aircraft carriers)
- Deployed or engaged in work-ups 12 out of 18 months. Schedules may even worsen with all our militaries doing more work with less resources and less personnel

Fitness while deployed

- Difficult, but most have a good attitude about it
- Long hours, demanding work schedules
- Being fit going into deployment is vital
- Limited facilities available
 - older ships not built with fitness rooms
 - smaller ships often do not have enough room to support an extra room

Fitness while deployed

- Many ships have been modified to now include small fitness rooms--others have tucked fitness machines or stationary bikes in wherever possible.
 - often have to crawl around equipment to get to them
 - need to make sure the bulkhead is high enough so you can exercise without your head hitting head

Fitness while deployed

- Larger ships like aircraft carriers will have 2 weight rooms which include nautilus and free weights, and also an area with fitness machines
- Aircraft carriers will often allow runners on the deck during no-fly hours
- Smaller ships/submarines may allow members to swim off the bow

New types of sports injuries

- Lacerations to head, caused by running into aircraft wings on the carrier deck
- Non-skid ground into knees and hands, from tripping over a chain on the carrier deck
- Bruised knees and hips, from falling off the treadmill
- Multiple free-weight injuries from sudden direction changes while exercising

Summary...Navy's new fitness policy

- U.S. Navy is undergoing positive changes, making a commitment to promote physical fitness and healthy lifestyle of its members
- Supported by more education on fitness, nutrition and healthy , changes to policy to support exercise during the workday
- Improving food, providing healthy choices
- On the right track, may take time to see results

Morale, Welfare and Recreation Department (MWR)

- Run and managed by civilians, MWR provides vital support to the Navy in the fitness arena
- MWR runs and oversees fitness facilities and recreational activities on military bases worldwide.
- MWR supports gyms, fitness centers, swimming pools and other recreational facilities

Morale, Welfare and Recreation Department (MWR)

- MWR hosts 5k and 10k runs, intramural softball, soccer and basketball leagues
- Hold annual Captain's Cup events where commands compete in a multitude of events for the honor of being the best on base
- Are responsible for upgrading fitness facilities and equipment
- Have certified trainers to help members develop individual fitness programs

MWR

- Assists with organizing and running Navy Championships, Armed Forces Championships and CISM events
- Also assist sailors on liberty in port worldwide
 - MWR provides members with wide selection of activities to participate in, including recreational activities and tourist activities*

