CHAIRMAN’S TOTAL FORCE FITNESS FRAMEWORK

References: See Enclosure E.

1. Purpose. This instruction identifies a framework for adopting and implementing total force fitness (TFF). The TFF framework is a methodology for understanding, assessing, and maintaining Service members' well-being and sustaining their ability to carry out missions. This instruction identifies terms, definitions, descriptions, and responsibilities.

2. Cancellation. None.

3. Applicability. This instruction applies to the Military Services, the Office of the Chairman of the Joint Chiefs of Staff, the combatant commands, Defense agencies and DOD field activities, other organizations in DOD where Service members are assigned, and Service members. The terms "Service member" and "Armed Forces" refer to the Active and Reserve Components of the U.S. Army, Navy, Air Force, Marine Corps, and U.S. Coast Guard, while that Service is serving with DOD under the provisions of federal statute.

4. Policy
   a. Establishes the TFF framework as a key readiness component.
   b. The instruction establishes TFF as a key component to the DOD’s Force Health Protection Program and the Chairman’s Health of Force (HoF) priorities in accordance with CJCS Guidance for 2011.
   c. The TFF framework is designed to enhance and support the Secretary of Defense force health policies and Service Title 10 responsibilities.
   d. This instruction supports, augments, and informs the responsibilities defined in references f-m in Enclosure E.
5. Definitions. See Glossary.

6. Responsibilities. See Enclosure C.

7. Releasability. This instruction is approved for public release; distribution is unlimited. DOD components (to include combatant commands), other federal agencies, and the public may obtain copies through the Internet from the CJCS Directives Home Page--http://www.dtic.mil/cjcs_directives.

8. Effective Date. Effective upon receipt.

M. G. Mullen
Admiral, U.S. Navy

Enclosures:

A -- Total Force Fitness Framework
B -- Total Force Fitness Integration
C -- Responsibilities
D -- Metrics
E -- References
GL -- Glossary
DISTRIBUTION

Distribution A, B, and C plus the following:

Copies

Secretary of Defense................................................................. 2
TABLE OF CONTENTS

ENCLOSURE A -- TOTAL FORCE FITNESS (TFF) FRAMEWORK

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>A-1</td>
</tr>
<tr>
<td>TFF Framework</td>
<td>A-1</td>
</tr>
<tr>
<td>TFF Domains</td>
<td>A-1</td>
</tr>
<tr>
<td>TFF Tenets</td>
<td>A-3</td>
</tr>
<tr>
<td>TFF Strategies</td>
<td>A-3</td>
</tr>
<tr>
<td>TFF Metrics</td>
<td>A-3</td>
</tr>
<tr>
<td>Summary</td>
<td>A-3</td>
</tr>
</tbody>
</table>

Appendix A -- Physical Fitness.................. A-A-1
Appendix B -- Environmental Fitness .......... A-B-1
Appendix C -- Medical and Dental Fitness .... A-C-1
Appendix D -- Nutritional Fitness .......... A-D-1
Appendix E -- Spiritual Fitness ................ A-E-1
Appendix F -- Psychological Fitness ........ A-F-1
Appendix G -- Behavioral Fitness ........ A-G-1
Appendix H -- Social Fitness .................. A-H-1

ENCLOSURE B -- TOTAL FORCE FITNESS INTEGRATION

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Guidance</td>
<td>B-1</td>
</tr>
<tr>
<td>Joint Doctrine</td>
<td>B-1</td>
</tr>
<tr>
<td>Joint Capability Area</td>
<td>B-1</td>
</tr>
<tr>
<td>DOD Programs</td>
<td>B-1</td>
</tr>
<tr>
<td>Service Programs</td>
<td>B-1</td>
</tr>
</tbody>
</table>

ENCLOSURE C -- RESPONSIBILITIES

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Guidance</td>
<td>C-1</td>
</tr>
<tr>
<td>The Joint Staff</td>
<td>C-1</td>
</tr>
<tr>
<td>Combatant Commands and DOD Agencies</td>
<td>C-3</td>
</tr>
<tr>
<td>Military Services</td>
<td>C-3</td>
</tr>
</tbody>
</table>

ENCLOSURE D -- METRICS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>D-1</td>
</tr>
<tr>
<td>Physical Fitness</td>
<td>D-1</td>
</tr>
<tr>
<td>Environmental Fitness</td>
<td>D-3</td>
</tr>
<tr>
<td>Medical and Dental Fitness</td>
<td>D-3</td>
</tr>
<tr>
<td>Nutritional Fitness</td>
<td>D-3</td>
</tr>
<tr>
<td>Spiritual Fitness</td>
<td>D-4</td>
</tr>
<tr>
<td>Psychological Fitness</td>
<td>D-5</td>
</tr>
<tr>
<td>Behavioral Fitness</td>
<td>D-6</td>
</tr>
<tr>
<td>Social Fitness</td>
<td>D-7</td>
</tr>
<tr>
<td>Conclusion</td>
<td>D-7</td>
</tr>
</tbody>
</table>
ENCLOSURE E -- REFERENCES................................................................. E-1

GLOSSARY OF ACRONYMS AND ABBREVIATIONS ............................... GL-1

FIGURES

1. TFF Domains .......................................................................................... A-1
2. Physical Fitness Metrics ........................................................................ D-2
3. Spiritual Fitness Metrics ........................................................................ D-4
4. Psychological Fitness Metrics ................................................................. D-5
ENCLOSURE A

TOTAL FORCE FITNESS FRAMEWORK

1. Introduction. The most valuable resource in our military is our people. After nearly 10 years of conflict, members of the Armed Forces are confronted with considerable, sustained, and diverse stressors that significantly impact the readiness of the force. To be fully prepared to continually execute our central mission -- to fight and win the country's wars -- the approach to how we understand, assess, and maintain the fitness of the force needs to be adjusted. This instruction introduces a TFF framework. Leaders throughout the force need to understand, establish, and support TFF within their organizations.

2. TFF Framework. The TFF framework is a methodology for understanding, assessing, and maintaining the fitness of the Armed Forces. The TFF framework consists of eight distinct domains whose interrelated functionality is informed by five overarching tenets. In its application, the TFF framework and its tenets are designed to keep Service members resilient and flourishing in the current environment of sustained deployment and combat operations.

3. TFF Domains. The TFF domains are derived from various sources, including current practices on medical fitness, such as the Army's Comprehensive Soldier Fitness (CSF) Program, the Navy's Total Family Fitness and the Combat Operational Stress Program, the Total Airman Comprehensive Fitness Program, and the integrative health care approaches being piloted in the Air Force and the National Guard. Central to the responsibility for achieving total fitness is our ability to define processes and influence a disciplined culture that integrates the TFF domains. The individual TFF domains are:

   a. Physical Fitness. Physical fitness refers to the ability to physically accomplish all aspects of the mission while remaining healthy and uninjured. See Appendix A.

   b. Environmental Fitness. Environmental fitness refers to the ability to perform mission-specific duties in any environment. See Appendix B.

   c. Medical and Dental Fitness. Medical and dental fitness refers to the ability to meet established standards for medical readiness. See Appendix C.

   d. Nutritional Fitness. Nutritional fitness refers to the ability to recognize and select the requisite nutrition to sustain and optimize physical and cognitive performance and health. See Appendix D.
e. **Spiritual Fitness.** Spiritual fitness refers to the ability to adhere to beliefs, principles, or values needed to persevere and prevail in accomplishing missions. See Appendix E.

f. **Psychological Fitness.** Psychological fitness refers to the ability to effectively cope with the unique mental stressors and challenges needed to ensure mission readiness. See Appendix F.

g. **Behavioral Fitness.** Behavioral fitness refers to the relationship between one's behaviors and health. See Appendix G.

h. **Social Fitness.** Social fitness refers to the ability to engage in healthy social networks that promote overall well-being and optimal performance. See Appendix H.

![Figure 1. TFF Domains](image)

1. **TFF Tenets**

   a. Total fitness extends beyond the Service member; total fitness should strengthen resilience in families, communities, and organizations.
b. A Service member's family's health plays a key role in sustained success and must be incorporated into any definition of total fitness.

c. Total fitness metrics must measure positive and negative outcomes, and must show movement toward total fitness.

d. Total fitness is linked to the fitness of the society from which the Service members are drawn and to which they will return.

e. Leadership is essential in achieving total fitness.

2. **TFF Strategies.** Effective TFF strategies are inclusive, innovative, and preventive; these strategies should be focused on strengthening resilience in our Service members, families, communities, and organizations. TFF strategies should enable Service members to achieve and sustain optimal performance. When an imbalance arises among the TFF domains, developing prompt and dynamic responses are essential for maintaining total force readiness. TFF strategies should also address eliminating the stigma and other factors that prevent Service members (and their families) from seeking help early and focus on achieving increased performance. These strategies should equip our people with the tools and skills required to continually assess and adjust, or calibrate, their environment, allowing them to maintain the necessary balance of intellectual skill, physical endurance, and emotional stamina needed to carry out missions.

3. **TFF Metrics.** Leaders must identify the metrics that will set the right conditions to promote fitness. Metrics must be feasible, effectively measuring the desired outcome and accurately assessing whether the TFF program is meeting its goals. They must also demonstrate progress toward achievable and realistic outcomes, addressing positive as well as negative outcomes that clearly indicate the overall readiness of the Armed Forces. Metrics must tell us whether we are improving the fitness of the force in each TFF domain. Enclosure D lists some metrics currently being used and recommends others for consideration.

4. **Summary.** TFF is an integrated process to optimize the well-being and readiness of the individuals and families of the total force. Success in establishing TFF will enable individuals to sustain optimal well-being and demonstrate the resilience needed to carry out assigned missions.
APPENDIX A TO ENCLOSURE A

PHYSICAL FITNESS

1. Physical fitness includes a set of characteristics that people have or can achieve relating to their ability to perform physical activity. Our Service members must demonstrate the ability to physically accomplish all aspects of the mission while remaining healthy and meet the criteria for deployment, retention, and continued military service.

2. Many components of physical fitness are shared across the Services. The common thread among them is that Service members and their families benefit from a holistic approach to physical fitness. A well-rounded physical fitness program should include varied cardio training; balanced strength training that includes core strengthening exercises, flexibility, speed, and agility training; appropriate amounts of sleep and recovery; and effective mind-body programs, such as yoga, martial arts, and meditation.

3. Physical fitness is a fundamental element of one's physical and mental health, mission performance, and readiness. By integrating physical fitness into the other seven domains of TFF, Service members and their families can prepare themselves for the intensity of today's operational demands.
1. Environmental fitness includes the ability to perform mission-specific duties in any environment and withstand the multiple stressors of deployment and war. The physical environment in which our Armed Forces must operate has historically played a huge role in military operations. Environmental factors on the battlefield have been described as the “first enemy you meet,” and one of the most formidable. However, many theater-specific environmental stressors can be identified, assessed, and mitigated before deployment.

2. Environmental fitness is composed of physiological readiness and personal protection that prepare Service members to perform their missions, while enduring various environmental stressors. These stressors include physical (temperature, altitude, noise, air quality, and radiation); biological (food, water, and vector-borne disease); and chemical (food, water, and occupational and environmental contaminants).

3. Varied environmental conditions may require specific physiological and behavioral adaptations as well as personal protective equipment and training to achieve or sustain optimal environmental fitness. Understanding the environmental component of TFF will equip leaders with the training and skills needed to optimize human performance and military effectiveness.
APPENDIX C TO ENCLOSURE A

MEDICAL AND DENTAL FITNESS

1. Medical and dental fitness is a condition of mental and physical well-being as determined by medical standards and prerequisites for individual mission accomplishment and worldwide deployability. Medically fit Service members can perform their job without risk to themselves or others, and possess the physiological, anatomical, and psychological capacities to adapt to their specific occupational environment.

2. Medical and dental fitness components are Service and individual specific, but generally encompass the following:

   a. Screening for overall wellness, diseases, physical and duty limiting conditions, and behavioral and disease risk factors.

   b. Immunizations to assist in mitigating or eliminating future risk to Service members and optimizing success during training and on the battlefield.

   c. Prevention and pretreatment against disease and injury by implementing strategies that cannot be accomplished through wellness or immunization.

   d. Medical conditions related to dental, vision, and auditory health is critical to individual readiness and is often a potential marker for underlying physical illness.

3. The components of medical fitness converge to establish that an individual Service member is free of contagious diseases and medical conditions or physical defects that would require excessive lost duty time or affect performance of duties. The Service member is capable of satisfactorily completing required training or effectively performing mission-specific duties in a deployed environment.
APPENDIX D TO ENCLOSURE A

NUTRITIONAL FITNESS

1. Nutritional fitness includes the provision and consumption of food in quantities, quality, and proportions sufficient to preserve mission performance and to protect against disease or injury.

2. Members of the Armed Forces need to be educated on how to make wise nutritional choices; eat for balance, variety, and moderation; and be exposed to new foods in a positive way. Many factors, such as social interaction and enjoyment, religion and culture, family traditions, social status and cost factors, dieting, and a quick-fix mentality, impact individual food choices.

3. The goal of nutritional fitness is to achieve optimal health and performance. Our leaders, Service members, and their families must be taught how to promote, implement, achieve, and maintain healthy eating behaviors and to create an environment that makes healthy food and beverage options an easy and appealing choice.
1. Spiritual fitness includes an individual's or group's ability to maintain beliefs, principles, and values needed to provide support in times of stress. Spiritual fitness includes the development of personal qualities needed to sustain a person in times of stress, hardship, and tragedy. These personal qualities may come from religious, philosophical, or human values and form the basis for character, disposition, decision making, and integrity. Human spirit development provides people with an understanding of who they are in terms of core values and identity. This awareness contributes to consistent behavior in accordance with one's values and identity and living with integrity.

2. Spiritual fitness has several traditional rather than scientific components. Those components include spiritual beliefs, values and practices; core beliefs: purpose and meaning; self-awareness, reflection and introspection; transcendence; relationships beyond self; and spiritual experiences. These components overlap, interpenetrate, and have somewhat different meanings in different traditions.

3. A strong spirit promotes resiliency and enhances one's ability to mitigate adverse responses to stress. Promoting spiritual fitness is a vital component of a TFF program and fully complements the other seven fitness domains.
APPENDIX F TO ENCLOSURE A

PSYCHOLOGICAL FITNESS

1. Psychological fitness includes the integration and optimization of mental, emotional, and behavioral abilities and capacities to optimize performance and strengthen resilience. It describes a Service member's ability to effectively cope with the unique mental stresses and challenges of Military Service.

2. Given the current demands placed on our forces, a Service member's resilience -- ability to withstand, recover, grow, and adapt under challenging circumstances -- is vital to readiness and mission accomplishment. Without resilience, Service members and their families are at risk of burnout, psychological stress, and physical danger due to impaired functional abilities.

3. Bolstering psychological fitness in Service members can help ensure mission readiness and decrease the potential risk that they may face stress-related injury or illness down the road.
[INTENTIONALLY BLANK]
APPENDIX G TO ENCLOSURE A

BEHAVIORAL FITNESS

1. Behavioral fitness includes the ability to adopt behaviors that support individual readiness and health. Behavioral health refers to the integration and optimization between one's behaviors and positive or negative health outcomes. A high degree of behavioral fitness highlights the importance of individual responsibility and leader awareness to help shape healthy behaviors.

2. Behavioral fitness is not simply about avoiding negative behavior; it is also about supporting and affirming positive behavior. The success of reinforcing positive behavior lies in positive examples and continuous feedback by leaders and is crucial to preventing risky behavior that adversely affects the health of Service members and families.

3. The majority of our Armed Forces and their families have endured hardship and separation. Many are exposed to significant ongoing stress by living under an unrelieved threat of danger. Most adjust well, but some have a harder time, requiring leaders who are observant, caring, and involved.
APPENDIX H TO ENCLOSURE A

SOCIAL FITNESS

1. Social fitness includes the ability to engage in healthy social networks that promote overall well-being and optimal unit performance. Social fitness intertwines the individual, unit, family, and community. All four components are necessary for enhancing and sustaining social fitness within the context of TFF.

2. Individual social fitness is the most basic element that must be achieved for greater conditions of social fitness within a unit, family, and military community. It is best achieved through development of purpose, clarity of personal values, understanding and awareness of mission, and preparation for the challenges Service members and their families will face.

3. Unit fitness is characterized as the healthy connections within the social network of the unit structure for overall well-being and optimal unit performance. When unit members earn the trust of their leader, they can be more autonomous and lead independent missions as required. Leaders know that they can trust their subordinates to accomplish the assigned tasks. Likewise, subordinates must believe that leaders care and consider their well-being when making decisions.
(INTENTIONALLY BLANK)
ENCLOSURE B

TOTAL FORCE FITNESS INTEGRATION

1. Strategic Guidance

a. “Improve Health-of-Force” is one of three priorities in the CJCS Guidance for 2011, which includes caring for our people and their families, and restoring readiness.

b. DOD Force Health Protection Policy.

(1) Service members are physically and mentally fit to carry out their missions.

(2) Commanders and supervisors promote, improve, sustain, and restore the physical and mental well-being of members of the Armed Forces.

(3) DOD components implement programs and processes that promote and sustain a healthy and fit force; prevent injury and illness; protect the force from health hazards; and deliver the best possible medical and rehabilitative care to the sick and injured anywhere in the world.

2. Joint Doctrine. The TFF framework is captured in Chapter 6 (Joint Force Development) in Joint Publication 1, Doctrine for the Armed Forces of the United States, illustrating its importance in the purposeful preparation of individual members of the Armed Forces, and the units that contain them, to produce a force capable of executing DOD missions.

3. Joint Capability Area (JCA). JCAs serve as a common language that support DOD planning. The Force Support JCA provides the ability to establish, develop, maintain, and manage a mission-ready Total Force. Health Readiness, Force Health Protection, and Human Performance Enhancement are components of the Force Health JCA.

4. DOD Programs. The DOD approach to well-being lists TFF as one of four key pillars, along with the Service’s well-being programs, DOD well-being of the force, and external well-being programs outside DOD. The TFF framework will support a unified, coherent construct for measuring well-being to strengthen individual and mission readiness and family support.

5. Service Programs. The TFF framework is intended to support and augment the individual Service fitness efforts. TFF is prevention focused and centered on the Service member, family, and environment collectively.
a. The Army's CSF Program contains several overlapping areas of emphasis: family-Soldier relationships, assessment and training from accession to retirement, and leadership engagement as a key component in individual growth.

b. The Air Force has undertaken a quest to improve human performance. They moved from a traditional model founded on force protection to a holistic approach to managing Airmen using a performance-based force projection model that concentrates on human performance.

c. The USMC Combat Operational Stress Control (COSC) Program objectives promote maintaining a ready, resilient force and providing for long-term health and well-being. The primary goals of the COSC program are to maintain a ready fighting force and to protect and restore the health of Marines and their family members.

d. The Navy's Operational Stress Control Program seeks to help create an environment where Sailors, commanders, and their families are able to thrive during stressful operations. The program aims to teach Sailors that asking for help and guidance for stress is not a sign of weakness, but a sign of strength. It accomplishes the mission by educating Sailors, families, and command leaders to take care of themselves by remaining fit and healthy.
ENCLOSURE C

RESPONSIBILITIES

1. General Guidance. TFF is an emerging framework, evolving toward defining a balance between readiness and well-being that are mutually supportive. A total force that has achieved total fitness is healthy, ready, and resilient, capable of meeting challenges and surviving threats. Leaders at all levels, scientists, health care providers, and Service members must synchronize and harmonize efforts to:

   a. Develop tangible and results-oriented measures of TFF.
   b. Give Service members the guidance and support they need.
   c. Give leaders the tools to know when to intervene.
   d. Assess and report TFF metrics that are results-oriented and clearly demonstrate progress toward achievable and realistic goals and standards.
   e. Explore the anecdotal evidence regarding TFF and develop scientific protocols to put these observations to objective tests.
   f. Keep your mind open to creative new concepts and possibilities.
   g. Create an environment that supports behaviors needed to achieve TFF.

2. The Joint Staff

   a. Directorate for Manpower and Personnel (J-1) and Joint Staff Chaplain.

      (1) Synchronize the Joint Staff TFF effort with Service component and Office of the Secretary of Defense, Personnel and Readiness (OSD (P&R)) well-being, quality of life, and family readiness efforts. The TFF framework will complement the OSD approach to well-being.

      (2) As required, assess, integrate, and report TFF measures/metrics related to quality of life, family readiness, and well-being measures currently in place.

      (3) Develop and, where required, revise joint plans, policy, and guidance on manpower and personnel support matters to reflect HoF priorities and the TFF framework.
(4) Assist as needed with developing metrics and measures for assessing behavioral, social, psychological, and spiritual fitness. As required, facilitate integration of the TFF framework between the combatant commands and Service chaplains.

b. Directorate for Operations (J-3).

(1) Serve as Office of Coordinating Responsibility (OCR) for developing and reporting TFF measures/metrics related to quality of life, family readiness, and well-being measures currently in place.

(2) Serve as OCR for developing procedures for reporting TFF measures/metrics into the Chairman's Readiness System.

c. Directorate for Logistics (J-4), in particular the Joint Staff Surgeon and Health Services Support Division.

(1) Serve as the Joint Staff TFF Cross Functional Team lead, acting as the Office of Primary Responsibility (OPR) for the TFF synchronization efforts across the Joint Staff.

(a) Annually develop and report TFF progress (one-to two-page snapshot) that illustrates and clearly highlights where we are doing well and where we need to focus TFF and HoF efforts.

(b) For the initial report, use existing medical, personnel, training, and readiness data and apply it to the TFF framework. Where there is no existing data, illustrate where the gaps are and recommend solutions.

(c) As required, and in collaboration with the Military Services, assess and report TFF measures/metrics related to health service support.

(d) Integrate and synchronize the TFF framework with joint health service support efforts.

(e) Provide SME input into the Chairman's Readiness System on the impact of health service support-related readiness issues.

(2) Provide J-8 with SME support for monitoring and assessing medical reporting and data evaluation.

d. Directorate for Joint Force Development (J-7).

(1) Integrate the TFF framework and desired results into doctrine and force development.
e. Directorate for Force Structure, Resources, and Assessment Directorate (J-8).

   (1) Provide the TFF OPR with staff SME as needed to synchronize the Joint Staff TFF effort with ongoing or developing requirements and acquisition programs that may be related to the TFF framework.

   (2) Ensure JCA development, refinement, management, and implementation demonstrate HoF priorities.

f. The Senior Enlisted Advisor to the Chairman (SEAC)

   (1) Serve as the Chairman's TFF primary senior enlisted advocate to the total force. Advise the Chairman and the Joint Staff on all enlisted matters as they relate to the overall fitness of the force.

   (2) Synchronize and influence the TFF effort across DOD and the total force.

   (3) In conjunction with the JS J-4, provide annual written TFF status reports and quarterly TFF briefings in support of the Chairman’s HoF priorities.

g. Assistant to the Chairman for Reserve Matters. Provide guidance and expertise required for integrating the TFF framework within the Reserve Components.

3. Combatant Commands and DOD Agencies. Ensure adherence to TFF standards, policies, and programs for the sustainment and protection of all forces assigned or attached to their command.

4. Military Services

   a. Use the TFF framework to enhance and/or refine current fitness programs. Continually evaluate the TFF program and recommend changes or improvements as required.

   b. Review and, when required, modify readiness reporting standards to account for health and fitness issues impacting the Services’ ability to provide organized, trained, and equipped forces.

   c. Continue to promote healthy lifestyles, optimize safety and healthy working conditions, facilitate access to health care, and conduct periodic health assessments.
d. Monitor the total fitness of personnel; identify and mitigate the threats, stressors, and other risks to their health and safety; and ensure the availability of countermeasures and preventive methods.

e. Continue to ensure that deploying personnel are holistically fit for worldwide duty in accordance with the TFF standards.

f. Provide appropriate medical support, training, equipment, and supplies to implement these policies.
ENCLOSURE D

METRICS

1. **Introduction.** TFF metrics should measure positive and negative outcomes. Measures should show movement toward total fitness rather than just a reduction in the many problems exposed by today’s ongoing operations. The following metrics are illustrative and intended to help leaders begin to think about how to effectively assess total fitness. Additionally, several DOD-level working groups are in the process of evaluating and recommending metrics that align with the TFF framework. Leaders should consider the recommendations of these and similar working groups when thinking about how to effectively assess TFF.

2. **Physical Fitness**

   a. Current available metrics include fitness tests, injury statistics, and profile data. Most fitness tests primarily evaluate muscular strength and cardiovascular endurance. Physical training primarily consists of distance running, push-ups, pull-ups, and sit-ups. Physical fitness tests should complement the physical tasks required by the mission so that Service members are training effectively for mission accomplishment.

   b. Metrics should include physical fitness tests that reflect mission tasks and measures mobility in addition to muscle strength and cardiovascular endurance. The metrics listed below are examples within the components of fitness and require little equipment or specialized locations.
<table>
<thead>
<tr>
<th>Component</th>
<th>Field Assessment Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>Functional Movement Screen</td>
</tr>
<tr>
<td></td>
<td>The Functional Movement Screen is a seven-part test that assesses mobility and flexibility.</td>
</tr>
<tr>
<td>Strength</td>
<td>P/U, Pull-Ups, Squat Test, Grip Strength</td>
</tr>
<tr>
<td></td>
<td>Push-ups, pull-ups, and squat tests assess muscular endurance of the upper and lower extremity.</td>
</tr>
<tr>
<td>Power</td>
<td>Vertical leap, Horizontal leap, Seated Med Ball Throw</td>
</tr>
<tr>
<td></td>
<td>Vertical and horizontal leap assess muscular power in height of jump and length of jump. Seated med ball throw assesses upper extremity power.</td>
</tr>
<tr>
<td>Speed</td>
<td>30-meter sprint</td>
</tr>
<tr>
<td>Balance</td>
<td>Lower Extremity Y-Balance &amp; Upper Extremity Y-Balance</td>
</tr>
<tr>
<td></td>
<td>The Lower Extremity Y-Balance test assesses the ability to maintain single limb balance with a dynamic movement. The Upper Extremity Y-Balance assesses trunk mobility.</td>
</tr>
<tr>
<td>Agility</td>
<td>Illinois Agility Test, T-Test of Agility</td>
</tr>
<tr>
<td></td>
<td>Agility tests assess the ability to change the body's direction efficiently while accelerating and decelerating through a series of cones.</td>
</tr>
<tr>
<td>Aerobic capacity</td>
<td>1.5-mile run</td>
</tr>
<tr>
<td>Anaerobic capacity</td>
<td>Running Anaerobic Sprint Test</td>
</tr>
<tr>
<td></td>
<td>The Running Anaerobic Sprint Test assesses quick, explosive activity endurance and provides measurements in peak, average, and minimum power along with fatigue index.</td>
</tr>
<tr>
<td>Body composition</td>
<td>Skinfold Measurement</td>
</tr>
<tr>
<td></td>
<td>Skinfold thickness measures using calipers is an effective way to assess and monitor changes in body fat composition.</td>
</tr>
</tbody>
</table>

Figure 2. Physical Fitness Metrics

3. Environmental Fitness
a. The environment in which war is fought is central to fitness for combat. Tools to assess the environmental stresses that occur during wars include biomedical and mission-related metrics. Biomedical methods include nutrition, acclimation, and hydration. Mission-related methods include the clothing and equipment our Service members wear and use. Acclimation and tolerance are also key indicators when members of the Armed Forces are deployed to an adverse environment.

b. One possible metric that could significantly contribute to evaluating environmental fitness is having Service members assess their individual limits. However, leaders must be aware of the potential that Service members may downplay symptoms that, left unchecked, put themselves and others at greater risk.

4. **Medical and Dental Fitness.** The existing metrics for medical fitness include deoxyribonucleic acid; dental, anthrax and other immunizations; hearing and vision readiness; ongoing PHA; and other metrics tracked by service-specific information management systems. Others include:

a. The Alcohol Use Disorders Identification Test (AUDIT C) for alcohol screening, rates of alcohol-related incidents (e.g., DUI/DWI, assaults, sexual assaults), and rates of tobacco use (captured in periodic health assessments (PHA) and the Armed Forces Health Longitudinal Technology Application) indicate the contributions of some behaviors to medical fitness. A body mass index (BMI) would also provide a metric for medical fitness at the individual and aggregate levels.

b. Women's health could be measured through routine PAP and mammogram screenings, clinical breast and pelvic exams, contraceptive counseling, unplanned/unintended pregnancy counseling, sexually transmitted infection counseling, and compliance with post-partum pregnancy physical training guidance.

c. Adequate sleep has been shown to provide improved cognitive performance and judgment, improved resilience, and more rapid recovery from injury and illness. Sleep could be measured through self-reporting, or through the addition of a sleep instrument such as the Pittsburgh Sleep Quality Index or the Epworth Scale to the PHA, Post-Deployment Health Assessment (PDHA), and the Post-Deployment Health Reassessment (PDHRA).

5. **Nutritional Fitness**

a. Research has already demonstrated dietary requirements for nutritional fitness. The challenge in this domain is changing behavior and culture. The optimal metrics are those that quantify the availability and consumption of
healthy options (some of which already exist and are discussed below) and those that measure the commander's effectiveness in changing individual behavior.

b. Some tools already exist for monitoring the components of nutritional fitness at the unit level, such as the Choose Healthy Options for Wellness (CHOW) and Develop Improved Nutrition Environment (DINE) surveys used in the Navy and Air Force, respectively. At the installation level, the Military Nutritional Environment Assessment Tool (m-NEAT) can determine the supportiveness of the nutritional environment. One simple metric would be whether or not a unit or facility is using these tools. Another metric could be the capability of food services to meet the specific energy and nutritional requirements of unit activities.

c. Web sites such as HOOAH4HEALTH (www.hooah4health.com) offer animated tools for guidance on healthy eating and a weight management tracker.

6. **Spiritual Fitness.** Evidence exists that spiritual fitness plays a key role in total fitness. Capturing spirituality's contribution to total fitness is essential to optimizing the well-being and resiliency of the total force. Some relevant metric examples include:

<table>
<thead>
<tr>
<th>Desired Outcome</th>
<th>Possible Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual and unit fitness –</td>
<td>• Mental Health Advisory Team (MHAT)</td>
</tr>
<tr>
<td>• Unit cohesion</td>
<td>• Prevalence of unit disciplinary problems</td>
</tr>
<tr>
<td>• Citizenship behaviors</td>
<td>• Qualitative methods, e.g., inspections, focus groups, surveys</td>
</tr>
<tr>
<td>• Appreciating diversity differences</td>
<td>• HEXACO Personality Inventory – agreeableness subscale</td>
</tr>
<tr>
<td>Productivity and performance</td>
<td>• Health and Work Performance Questionnaire</td>
</tr>
<tr>
<td>Effective coping</td>
<td>• Coping Style Questionnaire, General Self-Efficacy Scale</td>
</tr>
<tr>
<td>Retention</td>
<td>• Trends in early separation and re-enlistment rates</td>
</tr>
<tr>
<td>Perceived Stress</td>
<td>• Perceived Stress Scale</td>
</tr>
<tr>
<td>Resilience</td>
<td>• Connor-Davidson Resilience Scale, Deployment Risk and Resilience</td>
</tr>
</tbody>
</table>
Figure 3. Spiritual Fitness Metrics

7. Psychological Fitness

a. The relevant fitness factors are organized under general headings of mental, emotional, and behavioral, but many key components span two or more of these headings. In choosing metrics, it is important to differentiate between ultimate outcomes and intermediate outcomes.

(1) Ultimate outcomes are the impact on performance and function.

(2) Intermediate outcomes are the changes in psychological fitness domains (e.g., coping) that will lead to ultimate outcomes (indicators of improved performance and resilience).

b. The following metrics address psychological fitness:

<table>
<thead>
<tr>
<th>Outcome Category</th>
<th>Outcome Variable</th>
<th>Sample Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>Individual job performance</td>
<td>Annual performance appraisals, on-the-job training records, rates of people completing professional and/or general military education</td>
</tr>
<tr>
<td>Performance</td>
<td>Individual task performance</td>
<td>Scores on written and practical tests, 360 surveys, customer</td>
</tr>
<tr>
<td>Performance and Resilience</td>
<td>Exercise and sleep</td>
<td>feedback, and cognitive adaptability scale.</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Performance</td>
<td>Team/organizational job performance</td>
<td>Organizations inspections (e.g., compliance), unit surveys (e.g., climate)</td>
</tr>
<tr>
<td>Performance</td>
<td>Team task performance</td>
<td>Evaluation of team coordination and maneuvering in simulated performance scenarios</td>
</tr>
<tr>
<td>Performance and Resilience</td>
<td>Unit cohesion and morale</td>
<td>Cohesion assessments, Behavioral needs assessments, Deployment Risk and Resilience Inventory</td>
</tr>
<tr>
<td>Performance</td>
<td>Ethical decision making</td>
<td>Ethical beliefs and behaviors, AF culture survey</td>
</tr>
<tr>
<td>Performance and Resilience</td>
<td>Team/organizational safety mishap rates</td>
<td>Civilian lost day rate, vehicle fatality rate, motorcycle fatalities, Four-wheel vehicle fatalities, class 'A' mishap rates, safety center data</td>
</tr>
<tr>
<td>Performance and Resilience</td>
<td>Organizational Citizenship behavior</td>
<td>CFC participation rates, Status of Forces survey, rates of humanitarian medals granted</td>
</tr>
</tbody>
</table>

**Figure 4. Psychological Fitness Metrics**

8. **Behavioral Fitness**

   a. Metrics should focus on measuring the positive behaviors that the military would like to encourage. The outcomes and benefits of behavioral fitness include improved performance as well as the reduction of healthcare costs and lost duty time due to injury or infection.

   b. The behavioral fitness domain addresses risk mitigation, substance abuse, and hygiene.
(1) Metrics for risk mitigation could include percentage of seatbelt and use over the last month, or percentage of use of hearing and sight protection. Other metrics could measure the outcomes of poor behavior, such as percentage accidents, musculoskeletal injury, emergency room reports, and sick call attendance related to accidents.

(2) Metrics for substance abuse could include the rates of non-tobacco use, rates of non-binge drinking, and other measures of responsible or irresponsible use of substances. Data sources for these metrics could include risk reduction data, PDHA and PDHRA data, safety data, and command surveys.

(3) Metrics for hygiene could include rates of communicable diseases drawn from hospital data and sexual behavior (as a subset of risky behavior) measured through rates of sexually transmitted diseases. Additionally, existing data supports links between relationships and sexual behavior, and outcomes such as depression and suicide (particularly in the case of young Service members).

9. Social Fitness. Existing metrics that could assist leaders in capturing selected aspects of social fitness include:

(a) A Group Environment Questionnaire as a metric of task cohesion and social cohesion. The questionnaire measures individual attraction to the group (task), individual attraction to the group (social), and group integration (one for task and one for social).

(b) The Global Assessment Tool used by the Army’s CSF program has a social component. (Note: the purpose of this program is the self-improvement of the individual member and it would have to be modified to provide unit level information to leaders).

(c) The Navy Bureau of Medicine and Surgery (BUMED) developed a “stress thermometer” that Service members and their family members can use to assess their own stress levels and to initiate conversations on stress and stress management.

(d) Measures of social fitness could also evaluate the effectiveness of the leadership, e.g., who do Service members trust in the organization, who do they go to for leadership and counsel.

10. Conclusion. These metrics are not all encompassing and are not universally applied among the Services. However, they can serve as examples to measure current progress with a clear vision of total fitness.
ENCLOSURE E

REFERENCES

a. Title 10, United States Code, Section 153

b. Secretary of Defense, “Guidance for Development of the Force”

c. Chairman of the Joint Chiefs of Staff, “National Military Strategy of the United States”

d. CJCS Annual Guidance for 2011

e. Joint Publication 1, “Doctrine for the Armed Forces of the United States”


g. DOD Directive 1010.10, current as of 24 November 2003, “Health Promotion and Disease/Injury Prevention”

h. DOD Instruction 1308.3, 5 November 2002, “DOD Physical Fitness and Body Fat Programs Procedures”

i. DOD Instruction 6025.19, 3 January 2006, “Individual Medical Readiness”

j. DOD Instruction 6490.3, 11 August 2006, “Deployment Health”

k. DOD Instruction 6490.4, 28 August 1997, “Requirements for Mental Health Evaluations of Members of the Armed Forces”

l. DOD Instruction 6490.06, 21 April 2009, “Counseling Services for DOD Military, Guard and Reserve, Certain Affiliated Personnel, and Their Family Members”

m. DOD Instruction 6495.02, 23 June 2006 incorporating through change 1 dated 13 November 2008, “Sexual Assault Prevention and Response Program Procedures”

n. JSM 5100.01D, 23 January 2009, “Organization and Functions of the Joint Staff”

o. Uniformed Health Services University Conference Report, 30 December 2009, “Total Fitness for the 21st Century”


# Glossary

## Part I -- Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHOW</td>
<td>choose healthy options for wellness</td>
</tr>
<tr>
<td>CSF</td>
<td>comprehensive soldier fitness</td>
</tr>
<tr>
<td>DINE</td>
<td>develop improved nutrition environment</td>
</tr>
<tr>
<td>DOD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>FHP</td>
<td>force health protection</td>
</tr>
<tr>
<td>HoF</td>
<td>health of force</td>
</tr>
<tr>
<td>J-1</td>
<td>Manpower and Personnel Directorate, Joint Staff</td>
</tr>
<tr>
<td>J-3</td>
<td>Operations Directorate, Joint Staff</td>
</tr>
<tr>
<td>J-4</td>
<td>Logistics Directorate, Joint Staff</td>
</tr>
<tr>
<td>J-7</td>
<td>Force Development Directorate, Joint Staff</td>
</tr>
<tr>
<td>J-8</td>
<td>Force Structure, Resources, and Assessment Directorate, Joint Staff</td>
</tr>
<tr>
<td>JCA</td>
<td>joint capability area</td>
</tr>
<tr>
<td>JSS</td>
<td>Joint Staff Surgeon</td>
</tr>
<tr>
<td>MHAT</td>
<td>medical health advisory team</td>
</tr>
<tr>
<td>OCR</td>
<td>office of coordinating responsibility</td>
</tr>
<tr>
<td>OPR</td>
<td>office of primary responsibility</td>
</tr>
<tr>
<td>PDHA</td>
<td>post-deployment health assessment</td>
</tr>
<tr>
<td>PDHRA</td>
<td>post-deployment health reassessment</td>
</tr>
<tr>
<td>PHA</td>
<td>periodic health assessment</td>
</tr>
<tr>
<td>SME</td>
<td>subject matter expert</td>
</tr>
<tr>
<td>TFF</td>
<td>total force fitness</td>
</tr>
<tr>
<td>USPSTF</td>
<td>U.S. Preventive Services Task Force</td>
</tr>
<tr>
<td>USUHS</td>
<td>Uniformed Services University of the Health Sciences</td>
</tr>
</tbody>
</table>
PART II -- TERMS AND DEFINITIONS

**Domain** -- A sphere of knowledge, influence, or activity.

**Fitness** -- The relationship between one's behaviors and their positive or negative health outcomes.

**Force Health Protection** -- Measures to promote, improve, or conserve the mental and physical well-being of Service members. These measures enable a healthy and fit force, prevent injury and illness, and protect the force from health hazards (also called FHP).

**Health** -- A state of complete physical, mental, social, and spiritual well-being and not merely the absence of disease or infirmity.

**Human Performance Optimization** -- The process of applying knowledge, skills and emerging technologies to improve and preserve the capabilities of military members, families and organizations to execute essential tasks.

**Resilience** -- The ability to withstand, recover, and grow in the face of stressors and changing demands.

**Total Force Fitness** -- The state in which the individual, family, and organization can sustain optimal well-being and performance under all conditions.

**Well-being** -- The state of being happy, healthy, or prosperous.

**Wellness** -- Force health protection program that consolidates and incorporates physical and mental fitness, health promotion, and environmental and occupational health.