

# Combat Fitness Test: Testing to Reality

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EWS Contemporary Issues Paper 2008-09  
Submitted to  
Major D. Phillipi, CG 10  
20 February 2009

| Report Documentation Page                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                    |                                     |                                                           | Form Approved<br>OMB No. 0704-0188                  |                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------|-----------------------------------------------------------|-----------------------------------------------------|---------------------------------|
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| 1. REPORT DATE<br><b>20 FEB 2009</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                    | 2. REPORT TYPE                      |                                                           | 3. DATES COVERED<br><b>00-00-2009 to 00-00-2009</b> |                                 |
| 4. TITLE AND SUBTITLE<br><b>Combat Fitness Test: Testing to Reality</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                     |                                                           | 5a. CONTRACT NUMBER                                 |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                    |                                     |                                                           | 5b. GRANT NUMBER                                    |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                    |                                     |                                                           | 5c. PROGRAM ELEMENT NUMBER                          |                                 |
| 6. AUTHOR(S)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                    |                                     |                                                           | 5d. PROJECT NUMBER                                  |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                    |                                     |                                                           | 5e. TASK NUMBER                                     |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                    |                                     |                                                           | 5f. WORK UNIT NUMBER                                |                                 |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)<br><b>United States Marine Corps,Command and Staff College, Marine Corps Combat Develop,Marine Corps University, 2076 South Street,Quantico,VA,22134-5068</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                    |                                     |                                                           | 8. PERFORMING ORGANIZATION REPORT NUMBER            |                                 |
| 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                     |                                                           | 10. SPONSOR/MONITOR'S ACRONYM(S)                    |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                    |                                     |                                                           | 11. SPONSOR/MONITOR'S REPORT NUMBER(S)              |                                 |
| 12. DISTRIBUTION/AVAILABILITY STATEMENT<br><b>Approved for public release; distribution unlimited</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                    |                                     |                                                           |                                                     |                                 |
| 13. SUPPLEMENTARY NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                                     |                                                           |                                                     |                                 |
| 14. ABSTRACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                    |                                     |                                                           |                                                     |                                 |
| 15. SUBJECT TERMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                    |                                     |                                                           |                                                     |                                 |
| 16. SECURITY CLASSIFICATION OF:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                    |                                     | 17. LIMITATION OF ABSTRACT<br><b>Same as Report (SAR)</b> | 18. NUMBER OF PAGES<br><b>15</b>                    | 19a. NAME OF RESPONSIBLE PERSON |
| a. REPORT<br><b>unclassified</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | b. ABSTRACT<br><b>unclassified</b> | c. THIS PAGE<br><b>unclassified</b> |                                                           |                                                     |                                 |

*For it is conspicuous that what the machine has failed to do right up to the present moment is decrease by a single pound the weight the individual has to carry on his back in war.*

*S. L. A. Marshall*

S. L. A. Marshall's words still ring true today, and as an expeditionary force in readiness, the United States Marine Corps must be ready to conduct combat operations with these heavy loads in any clime and place. An aggressive combat conditioning program, measured by analogous and realistic evaluations is critical to this readiness. Every Marine must train and be ready to meet the challenges of combat from the outset and sustain those operations indefinitely until victory is achieved. The Marine Corps' Combat Fitness Test (CFT) must evaluate Marines under a prescribed weight load to provide consistency with doctrinal Marine Corps combat training and philosophy, and accurately assess the combat functional fitness of every Marine.

### **Background**

Marine Corps Order 6100.13, Marine Corps Physical Fitness Program, states the purpose of the Combat Fitness Test:

To assess a Marine's physical capacity in a broad spectrum of combat related tasks.....The CFT is a complement to the

PFT and measures the functional elements of combat fitness through execution of a series of events that represent every Marine's combat experience, emphasizing our ethos of "every Marine a rifleman".<sup>1</sup>

The CFT is currently conducted by wearing the digital camouflage uniform (cammies) through the following three events: 880-yard timed sprint, ammunition can over-the-head lift (for a maximum number of lifts in two minutes), and a maneuver-under-fire event. The maneuver-under-fire event is a timed 300-yard shuttle run that requires Marines to pair up with another Marine close to his or her height and weight, and perform a series of combat related tasks.<sup>2</sup>

### **Every Marine a Rifleman**

To justify testing under increased loads during the CFT requires validation of the "every Marine a rifleman" concept. This concept entails more than a motto that has been handed down over the generations. Marine Corps Warfighting Publication 6-11, *Leading Marines*, states, "There are no "rear area" Marines, and no one is very far from the fighting during expeditionary operations."<sup>3</sup> Since their inception, Marines have seen a noticeable increase of non-combat arms military occupational specialties (MOSSs), all ages, and both genders fighting near the

front lines. General Charles C. Krulak states, "Regardless of specialty, all Marines will be trained first as riflemen, able to defend themselves and their units."<sup>4</sup> All Marines receive basic combat training, either at Marine Combat Training (MCT) for enlisted personnel or The Basic School (TBS) for officers.

Even in today's current operating environment, the concept of "every Marine a rifleman" applies to all MOSs more than ever. Figure One, on the next page, clearly illustrates how the traditional rear area and close fight, or front lines, merge in today's operating environment.<sup>6</sup> As Marines traverse this non-contiguous Area of Operations (AO) they will routinely find themselves operating in the deep area, traditionally covered by fixed-wing air and forward reconnaissance units. Even the restriction of female Marines in combat arms MOSs, and seemingly far from imminent danger, has been impeded by operations in Iraq and Afghanistan. More women have lost their lives or been wounded in these two operations than ever before in Marine Corps history.<sup>5</sup> Marines of all MOSs find themselves fighting on several fronts; therefore, the long-standing Marine Corps philosophy of "every Marine a rifleman" is a mindset that all Marines should continue to embrace whole-heartedly.

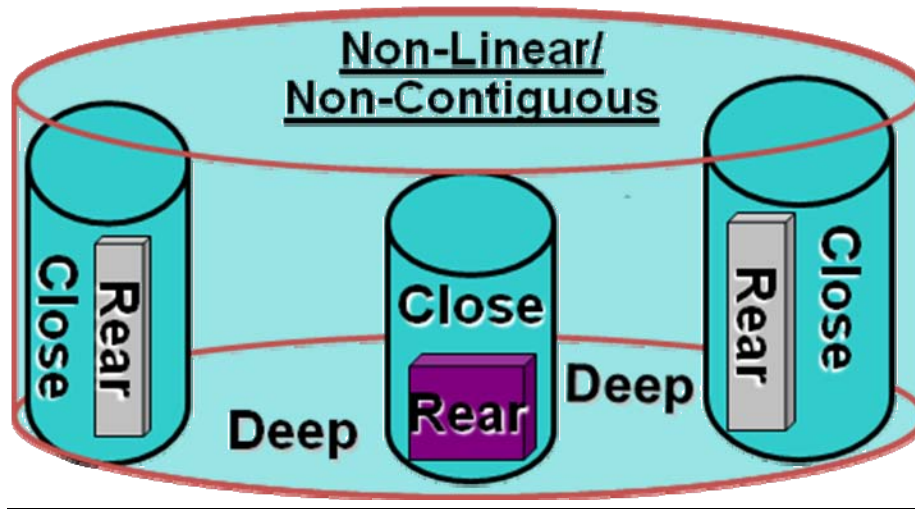


Figure 1: Graphic depiction of the single battle concept in today's current operating environment.<sup>5</sup>

### It's about Combat Functional Fitness

The CFT's design accurately measures functional fitness; however, without requiring Marines to wear gear they will use in the current operating environment, makes it drastically difficult to achieve "combat functional fitness". The *Concept for Functional Fitness* states:

Functional fitness can be described as the ability to perform a broad array of natural or realistic physical work..... A physical fitness that enables Marines to perform maximal combat-related work would be ideal. In this sense, we are arguing that fitness should follow function – that combat fitness should be functional for combat. A preparation effort in which a program based on functional movements executed with

representative intensity of combat should be most effective.<sup>8</sup>

Therefore, having Marines conducting complex, combat-oriented movements under combat-related intensity with only cammies is unrealistic. Human physiology proves that the simplest of exercises becomes increasingly difficult when adding extra weight. A combat conditioning program that lacks integration of training with combat equipment is not combat conditioning at all. The only method of determining an individual's combat functional fitness is to evaluate him or her with similar type and weight of gear utilized in the current operating environment.

### **Providing a realistic evaluation**

Understanding the current operating environment, "every Marine a rifleman" concept, and the focus on combat conditioning programs; the Marine Corps should not hesitate to implement a more realistic CFT evaluation. Marine Corps Doctrinal Publication (MCDP) 1, *Warfighting*, states, "All peacetime activities should focus on achieving combat readiness."<sup>7</sup> Marines are familiar with the fact that they will be required to conduct combat operations under increased weight loads. If

doctrine is directing all Marines to train and be ready for combat, then any evaluation should complement that training.

Marine Corps leadership has an obligation to ensure that these training events and evaluations are realistic as possible. Training and evaluating Marines under additional produces the commander a snapshot of the effectiveness in their unit's combat conditioning program, and more importantly, they can better assess how their Marines will perform in combat. Marines are encouraged to take initiative which often leads to mistakes made and corrected in garrison, with the intent of preventing those same mistakes in combat. This same philosophy should be applied to the CFT to identify combat fitness level shortfalls in garrison; where Marines lives are not at stake. Marines often say "train like you fight," and at the defining moment, any success or failure is a direct result of the training and evaluations, to include remedial actions, conducted prior to combat operations.

### **Current combat equipment and data**

Determining the prescribed weight load when conducting the CFT requires an analysis of current combat equipment and associated weights. The *Concept for Functional Fitness* states, "Marines are being required to wear body armor and combat



equipment an even greater percentage of the time. These facts are not going to change anytime soon.”<sup>9</sup> The current weight (in pounds) of the current personal protective equipment (PPE) load, as depicted in figure three on page 11 includes:

1. Kevlar: 3.5
2. Boots: 4
3. Body armor: 8
4. Small arms protective inserts (SAPI) plates  
(front/back/sides): 18
5. M16A4: 9
6. Six magazines with ammunition: 6
7. Infantry first aid kit (IFAK): 1

The total weight of this equipment is approximately 50 pounds, and is the minimum weight Marines can expect to carry when executing any mission in the current operating environment.<sup>10</sup>

### **Warrior Athlete mindset: Game Time**

Testing with additional weight would encourage commanders to integrate individual combat gear in their combat conditioning programs with more regularity. Marines would become more comfortable with their gear as they continually train to take on increased loads. Just as football players must wear their

equipment and conduct a series of movements and tests to make the team, so should Marines test in their equipment to ensure they can fight effectively in combat. Conducting the CFT in combat equipment is a bona fide reminder that Marines are, first and foremost, warfighters.

### **Gear to body weight solution**

To determine the prescribed load for conducting the CFT, and to maintain fairness in scoring, a percentage of body weight must be factored. Figure 2, on the next page, depicts recommended assault load by numerous references, including the Department of Defense (DOD), as 30% of body weight.<sup>12</sup> The assault load is referred to as the gear carried by Marines when contact with the enemy is imminent or expected. Although non-combat arms MOSs are not expected in the assault, contact in the current operating environment is ubiquitous. This unique threat has caused combatant commanders to institute the requirement that all Marines will wear the PPE load of approximately 50 pounds. Although conducting the CFT with 50 pounds of gear would be ideal, the gear to body weight percentage reduces CFT logistical requirements and emphasizes scoring fairness.

| REFERENCE (Ref #) | ASSAULT LOAD | APPROACH MARCH LOAD |
|-------------------|--------------|---------------------|
| MIL-STD-1472F (4) | 30%          | 45%                 |
| DOD-HDBK-743A (8) | 30%          | 45%                 |
| MIL-HDBK-759C (7) | 30%          | 45%                 |
| FM 21-18 (9)      | 30%          | 45%                 |
| FM 7-10 (3)       | 30%          | 45%                 |
| Science (15-27)   | 30%          | 45%                 |

Figure 2: List of references that recommend a serviceman should carry 30% of his body weight or less when conducting combat operations.<sup>12</sup>

To ease the burden of gear requirements and the time consuming process of building one's individual gear to attain an exact percentage, weight classes need to be developed. Weight categories, calculated in pounds and regardless of gender or age, could include: category 1 (less than 150), category 2 (150 – 200), and category 3 (200 or greater). For example, a Marine in category 1 would test with cammies/boots, kevlar, outer vest, and an M16; with the weight of gear totaling approximately 20 pounds. Marines in category 2 would add SAPI plates in the front and back, and increasing the total weight to approximately 30 pounds. The Marines in category 3 would add side SAPI plates and a camel back for a total weight of approximately 40 pounds. The gear to body weight ratio in each category would vary by less than five percentage points. These weight classes reduce the burden of CFT gear and time requirements, maintain fairness in scoring, and provide an enhanced combat readiness tool.

### **Counterarguments**

Critics could argue that it will be difficult for some duty stations outside the Fleet Marine Force to acquire the necessary gear for the CFT. The Marine Corps must provide funds to allow duty stations lacking access to this equipment to purchase the necessary gear. To decrease the cost to the Marine Corps only three sets of gear need to be sent to these units. These items will include small, medium, and large kevlar, protective vests, SAPI plates, and one rubber M16 in order to complete the evaluation. The requirement of all Marines to wear PPE in the current operating environment places greater responsibility on the Marine Corps to ensure the force remains combat conditioned. Furthermore, with the high number of reservists being re-called and the increased number of individual augments, Marines can find themselves in theater on short notice. These facts warrant the development and maintenance of combat functional fitness for all Marines.

Given the current dynamic combat environment, the Marine Corps must be ready to adapt combat conditioning programs and the CFT to implement emerging equipment. This may lead to a change in gear configuration and weights which would have an impact on the CFT evaluation. To ease the logistical burden throughout the Marine Corps, reduce costs and CFT set-up time,

and maintain scoring fairness; the Marine Corps could simply require all personnel to run the course with the 50 pound PPE load. A scoring system would have to be developed taking into account age, gender, and weight categories. Individual Marines would require increased training time to adapt to these increased loads, especially with Marines at the lower end of the weight scale. To meet this additional training time Marines may be required to run the first CFT with only cammies, and building up to the 50 pound weight increase for his second and subsequent CFT evaluations. Regardless of the solution taken, the Marine Corps needs to implement gear into the CFT that is common to the current operating environment in terms of size and weight.

### **Conclusion: Evaluating warrior athletes**

Evaluating Marines under prescribed weight loads during the CFT would support the Marine Corps' training objectives, reinforce the "every Marine a rifleman concept'" and better measure the ability of a Marine to handle the realities of combat. All units, and all Marines, are expected to train and meet the rigors of the current operating environment on short notice. Marines are expeditionary warriors and America's 911 force, ready to fight anywhere, and expected to carry a minimum of PPE on their person as they traverse the battlespace. If

Marines are professional warrior athletes, as described in MCO 6100.13, let them don some combat gear and get in the game.



Figure 3: Representative Marine Personal Infantry Combat Load and associated weights.<sup>10</sup>

### End Notes

1. United States Marine Corps, Marine Corps Order 6100.13: *Marine Corps Physical Fitness Program*, (USMC, 2008), 3-1.
2. Marine Corps Order 6100.13, 3-1 to 3-6
3. United States Marine Corps, Marine Corps Warfighting Publication 6-11: *Leading Marines*, (USMC, 2002), 14.
4. General Charles Krulak, "Building a Corps for the 21<sup>st</sup> Century, a National force in readiness," *Leatherneck*, April 1998.
5. Fischer, Hannah, et al, "American War and Military Operations Casualties: Lists and Statistics," 14 May 2008, <[www.fas.org/sgp/crs/natsec/RL32492.pdf](http://www.fas.org/sgp/crs/natsec/RL32492.pdf)> (4 January 2008).
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7. United States Marine Corps, Marine Corps Doctrinal Publication 1: *Warfighting*, (USMC, 1997), 53.
8. United States Marine Corps, Marine Corps Combat Development Command: *A Concept for Functional Fitness*, (USMC, 2006), 3.
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10. "Representative Marine Personal Combat Load," Marine Corps Systems Command, 2008.  
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11. Department of Defense Military Standard 1472F (MIL-STD-1472F), *Design Criteria Standard: Human Engineering*, (DOD, 1999)
12. LCDR Demetri Economos USN, *Combat Load Report* (Marine Corps Combat Development Command, (Quantico, VA. 2003), 6.

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