

Toward Better Military PT Tests

A frontline report on why military fitness tests are important and how they might be improved.

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Courtesy of U.S. Army

I write this from an iffy Internet connection in Iraq at Joint Security Station Loyalty. My current vantage point as a U.S. Army Platoon Leader assigned to 5-73 Cavalry (Panther Recon) has caused me to wonder whether current PT tests might be improved to better measure what's most important: the ability to perform strenuous physical tasks in combat situations. What follows is one soldier's modest attempt to identify problems and solutions.

Current tests don't always pinpoint strengths and weaknesses. The feedback they provide to service members and their chains of command is not always as useful as it might be. It's no secret that the basic tests are not designed to measure the fitness of the elites—or even the moderately fit. The tests are an attempt to ensure a minimum standard of fitness for all service members. The tests yield easily quantifiable results that can be rewarded or punished.

The tests also make sense from an organizational point of view. For example, the U.S. Army Airborne School at Fort Benning, Georgia, runs hundreds of potential students through the Army Physical Fitness Test (APFT) in a period lasting only a few hours every week. Elite schools have higher standards. They may add distance to runs or repetitions to exercises or require a ruck march lasting several hours. But there is still not enough focus on combat readiness.

The current APFT bills itself as a test of muscular strength and endurance. The test consists of two minutes of timed push-ups, two minutes of timed sit-ups and a two-mile timed run. The scoring is scaled based on both age and gender and is plotted on a 300-point scale. Obviously, a soldier of any age who struggles to perform a single

push-up suffers from a serious lack of strength. But what about an 18-year-old soldier who can perform 72 push-ups in two minutes but cannot press his body weight over his head? According to the Army's test of upper-body strength, he gets the highest possible score of 100 points. He comes across as an exceptional performer. The soldier could be left with a dangerous misperception of his own strength.

The running component of military fitness tests varies from service to service. But all suffer from the same flaw: attempting to measure both speed and endurance in the same test. Two soldiers of the same age and gender who each run two miles in 12 minutes will receive the same score. But the result does nothing to differentiate between a soldier who runs a steady six-minute-mile pace and a soldier who hammered through the first quarter mile in 70 seconds and then slowed down dramatically.

Combat and combat-support roles are physically challenging. Operations test service members in all 10 of the fitness domains familiar to CrossFitters: cardiovascular/respiratory endurance, stamina, strength, flexibility, power, speed, agility, balance, co-ordination and accuracy.



Courtesy of U.S. Army

The author suggests the standard two-mile run may not be the best way to measure combat readiness.

Service members must be fit enough to perform constant work for weeks on end interspersed with periods of exertion lasting from seconds to hours. But current tests don't measure how well a soldier can perform a variety of non-standard physical tasks. These include lifting and carrying unusually shaped and unevenly distributed objects—usually under the weight of anywhere from 40 to 90 pounds of equipment.

The soldier could be left with a dangerous misperception of his own strength, all because the APFT has failed to provide enough information to pinpoint the soldier's weaknesses.

The tests do a poor job at evaluating the first four or five of CrossFit's fitness domains. The other domains are ignored entirely. Non-athletes can and do perform well by training specifically for the tests even though they aren't really in good shape and lack essential combat fitness.

In recent years we have seen some movement toward more functional military fitness testing. The Canadian Forces Land Force Command has a fitness test that includes digging a trench, marching 13.2 kilometers in gear with a weighted load and evacuating a casualty 100 meters. The U.S. Marine Corps has recently implemented a Combat Fitness Test (CFT) that includes lifting a 30-pound ammo can overhead and dragging a casualty.

Here are some preliminary ideas about how the APFT might be improved. The proposal includes five tests, a 500-point base scale and the elimination of maximum scores. Elite performances could produce scores above 500. The format would also eliminate age and gender grading because gear weighs the same for everyone and the enemy doesn't discriminate.



Cpl. Jessica Hampton/US Army

CrossFit's emphasis on functional movements makes it ideal for military application.



Lance Cpl. Patricia D. Lockhart/USMC

A buddy carry is a much better test of combat readiness than push-ups and sit-ups.

Courtesy of U.S. Army



Will push-ups, sit-ups and a two-mile run prepare this soldier for battle?

Modified Murph

Run 800 meters, 50 pull-ups, run 800 meters, 100 sit-ups, run 800 meters, 100 push-ups, run 800 meters. A time of 20:00 earns 100 points. A point is either added or deducted for every six seconds from that time. For example, a soldier who completed the event in 18:00 would earn 220 points. This would incorporate all the events of the current APFT into one workout and add an aspect of mental toughness. The scoring system eliminates the incentive to conserve energy by quitting once the maximum has been achieved.

CrossFit Total

Many former high-school athletes are familiar with the basic lifts in CrossFit Total: the squat, the press and the deadlift. CrossFit Total is primarily a test of strength, and it eliminates the size advantage held by smaller, lighter soldiers. I'm five foot four and agree with the common complaint that the current APFT is biased in favor of soldiers shaped like me. Soldiers would perform all three lifts on the same day. Dividing the weight total for the three lifts by 10 gives the soldier a score on the 100-point scale, with scores over 100 possible if any soldier manages to break 1,000 pounds.

Any military base with gym equipment, including Joint Security Stations and Combat Outposts that house only 20 soldiers, will have barbells and flat benches.

Cardio/Respiratory Endurance, Part I

This would be a five-mile off-road run wearing the standard physical training uniform of shorts and running shoes. The test will be worth only 50 points. A time of 32 minutes—a six-minute-mile pace—would score the 50 points. Every 15 seconds slower will cost a point, and every 15 seconds faster will earn a point. Implementation of this test poses the greatest practical challenges.

Cardio/Respiratory Endurance, Part 2

This would be a 400-meter sprint run on a flat surface or track if possible. It balances the advantage that a distance-focused runner would otherwise have. It tests anaerobic capacity and provides information the two-mile test leaves blurry and the five-mile test barely touches on. This test is also worth only 50 points. A soldier who can run the course in 60 seconds will earn the 50 points, with one point added or subtracted per second over or under that time.

The Combat Fitness Challenge

From evacuating casualties to resupplying ammunition, moving irregular objects quickly is a necessity of almost any combat situation. That's why this challenging test would be conducted in full combat gear. It's also why the test would be worth 200 points—much more than any of the others.

The test would make use of equipment ubiquitous on military bases. The workout is as follows:

- Run 100 meters.
- Pick up two 20-pound sandbags and carry them 400 meters.
- Climb over a six-foot-tall wall or barrier.
- Pick up a 70-pound ammunition can and press it overhead in any way.
- High crawl 50 meters.
- Hit an eight-foot, 10-foot and eight-foot target five times each with a 20-pound sandbag. There will be a sandbag in front of each target, and the targets will be about five feet apart. This is a sort of "sandbag wall ball."
- Pick up a duffle bag filled with sand weighing around 150 pounds and run back to the starting point.

All the movements in this test are completely functional. Carrying tough-to-grip objects; climbing; moving with a low profile; lifting a large, irregularly shaped object; and carrying a large amount of shifting dead weight are all good approximations of realistic tasks soldiers face in the field.

The scoring mechanism for this event would differ from the others. While there would be no limit on the points available for the event, the test would also have a competitive aspect. The soldier can score 175 points with a time of 15 minutes. Every five seconds will either win or cost the soldier one point. The remaining 25 points would come from the soldier's placing within his unit.

The competitive factor in this event is unique and essential. A cliché often heard in war movies goes something like this: "In war, a silver medal is a body bag." That's a bit melodramatic, but it's nevertheless important to reinforce the value of winning. Competition is a great way to differentiate between those who excel under pressure and those who freeze under it.

Practical Problems

The implementation of this form of fitness testing presents several problems. First, it would be nearly impossible to test a large number of people at once. A week would be required for complete testing, with one event scored each day. Otherwise, results will be skewed by fatigue. Schools that process large numbers students would have to dramatically alter their schedule or use an alternate test. Conducting all testing at the squad level would require more oversight in order to ensure standards are properly enforced. Finally, the test might simply be too challenging for all soldiers in all units. Some will suggest having separate tests based on a soldier's Military Occupational Specialty.

But current operations in the War on Terror have shown that everyone in uniform needs to be a warrior.



About the Author

1st Lt. Matthew Hoff is the Scout Platoon Leader assigned to First Platoon, Bandit Troop, 5-73 Cavalry (Panther Recon), 3rd Brigade Combat Team, 82nd Airborne Division. He is currently deployed in support of Operation Iraqi Freedom. He is a graduate of the United States Military Academy at West Point (2007). An Infantry Officer, he has achieved Ranger, Airborne and Air Assault qualifications.



Courtesy of 1st Lt. Hoff.

Recognizing that he won't fight terrorists while wearing board shorts, the author trains for combat in full gear.