

The Strength of the Pack is the Wolf

Redefining an infantry Marine's required aptitude

by Capt Robert K. Gervasio

In his classic book *First to Fight*, LtGen Victor H. Krulak argues that the American people believe the Marine Corps is fundamentally good for the Nation. Further, they feel

that Marines are masters of a form of unflinching alchemy which converts unoriented youths into proud, self-reliant stable citizens—citizens into whose hands the nation's affairs may safely be entrusted.¹

The former is still true. Nearly 30 years after the book was first published, the American people view the Marine Corps as the most prestigious branch of the United States Armed Forces.² While the Marine Corps' entry-level training regimen is world class and builds combat-ready warriors, however, the quality of Marine produced is dependent on the quality of young man or woman recruited.

In the wake of over 15 years of combat operations, the United States finds itself in an increasingly volatile and uncertain security environment. The character of warfare has evolved continuously; however, the prevalence and nature of present national security threats distinguishes this era from others. As outlined in the *MOC (Marine Corps Operating Concept)*, the future security environment is defined by complex terrain, technology proliferation, information warfare, the need to protect and exploit battlefield signatures, and increasingly contested maritime domain.³ Innovations in the fields of secure communications, autonomous targeting platforms, and precision munitions highlight some of these challenges. As its Nation's expeditionary, middleweight force, the Marine Corps recognizes the need to evolve. At the

>Capt Gervasio wrote this article while a student at EWS, AY17. He joined 3d Bn, 6th Marines, in September 2017.

tactical level, emerging threats will place far greater demands on infantrymen to orient to the environment, make decisions, and execute with increasingly advanced technology. Given the challenges of the future-operating environment, the Marine Corps must enhance infantry Marines' entry-level mental and physical qualifications to maintain its place as a superior force and prevail in tomorrow's battles.

The Marine Corps must enhance its mental aptitude standards to adapt to an operating environment marked by multi-dimensional threats and technological proliferation. As stated in *MCDP 1, Warfighting*,

Mental forces provide the ability to grasp complex battlefield situations; to make effective estimates, calculations, and decisions; to devise tactics and strategies; and to develop plans.⁴

The Marine Corps has outlined a path forward that recognizes the diverse challenges of the future operating environment. Specific to the infantry, the *MOC* demands that its force set the mental and physical standards for Marine infantry to conduct dismounted operations in austere environments.⁵ Regarding technological innovation, it calls for the Service to

incorporate as quickly as possible unmanned sub-surface, ground, and air vehicles across the MAGTF to enhance survivability, increase lethality and reduce manpower requirements.⁶

This signifies an institutional understanding that Marines must employ technologically advanced systems to maintain an edge over the enemy.

Recent exercises demonstrate the Marine Corps' aim to enhance the technological capabilities of its force. To experiment with emerging concepts and technologies, the Marine Corps designated 3d Bn, 5th Marines (3/5) as its experimental infantry unit. Partnering with the MCWL (Marine Corps Warfighting Lab), 3/5 trained throughout 2016 aboard Camp Pendleton and Twentynine Palms, CA, conducting force-on-force training against opposing Marines with cutting-edge technology. Reflecting combat operations in a distributed operating environment, 3/5's training focused at the squad level. Each infantry squad was outfitted with unmanned ground and aerial vehicles, robots, quad-copters, remote targeting assets, and improved tactical vehicles among other assets. To assist in asset integration, the battalion employed an assistant squad leader for each squad. In 3/5's AAR (after-action report) for one of its exercises, the battalion made several observations that forecast impending changes. One of these observations stated that with the addition of substantial technology, "it quickly becomes a challenge to manage and employ the squad, the technology, and increased information in a timely, decisive manner."⁷

Considering the complexity of the future operating environment and increased cognitive demands on the infantry squad, the Marine Corps must redefine its mental aptitude standards. Currently, the Marine Corps uses the GT (General Technical) score from the

ASVAB (Armed Services Vocational Aptitude Battery) to “estimate an individual’s general mental ability and aptitude for a specific assignment or selection to a military program.”⁸ Scored out of 151, the GT scores required to qualify for infantry MOSs range from 80 to 105, the lower scores qualifying for the most populated MOSs of rifleman, mortarman, and machine gunner. Much of what infantry Marines will be responsible for in tomorrow’s fight is currently the responsibility of Marines from different MOSs. For instance, UAS (unmanned aircraft systems) operations and terminal attack control are two fields with MOSs devoted to them. For each of those fields, the required GT scores are 110 and 100, respectively.⁹

The *MOC* states that in tomorrow’s operating environment, Marines will fight

with an information warfare approach integrated with C² (command and control), ISR (intelligence, surveillance, and reconnaissance), and precision fires ... to the small-unit level.¹⁰

In a fluid environment marked by disorder and replete with uncertain and oftentimes conflicting information, infantry Marines need to have the mental capacity and flexibility of thought to orient, decide, and communicate. Because of this, the Marine Corps needs to implement higher requirements on the GT scores for these warfighters who form the core of the MAGTF’s GCE. A GT Score of 100 would ensure that infantry Marines have the mental capacity to deal with the challenges of the future operating environment. It would have the additional benefit of increasing the percentage of Marines who will meet the requirements for secondary MOSs of UAS operator and terminal attack controller.

Though the future security environment will place greater demands on the cognitive abilities of Marines, the Marine Corps must continue to enhance its entry-level physical fitness standards to set conditions for a superior force. Combat will continue to be the most challenging of physical endeavors, especially for infantry Marines. As explained in the Marine Corps’ *MOS Manual*, “Regardless of specialty, infantrymen

Ground Combat Arms IST (Initial Strength Test)

Pull-ups	1.5 mile run	Crunches	Ammo-Can Lifts
3	13:30	44	45

Table 1. GCA IST.¹²

Ground Combat Arms MCS (MOS Classification Standard)

Pull-ups	3 mile run	Ammo-Can Lifts	Movement to Contact	Maneuver under Fire
6	24:51	60	3:26	3:12

Table 2. GCA MCS.¹³

are primarily employed ... to locate, close with and destroy the enemy in all environments and weather conditions, day and night.”¹¹ Given the physical toll combat imposes on its participants and the proliferation of technology to the infantry squad, the Marine Corps must set conditions for a physically superior infantry that can overcome any challenge. Furthermore, a physically superior force, less overwhelmed by the physical demands of combat, will be more adept at dealing with its mental and moral challenges.

Presently, the Marine Corps does not adequately screen for physical fitness in its recruiting process. There are currently three phases of the physical screening and assessment process for prospective infantry Marines. To physically qualify for entry-level training, an applicant must first pass the IST (initial strength test). (See Table 1 for the necessary scores.)

Subsequently, between training days 55 and 60 at the Marine Corps Recruit Depot, the same individuals, now “recruits,” must complete the MCS (MOS classification standard). The purpose of the MCS is to provide assurance that recruits will be able to perform the physically demanding tasks at their respective MOS schools. (See Table 2 for the minimum MCS scores.)

Upon completing their initial recruit training, infantry Marines report to ITB (infantry training battalion) where they must complete the MSPS (MOS specific performance standards). The

MSPS is designed to provide assurance that a Marine will be able to perform the physically demanding aspects of their MOS. The events, the Marines who must participate in each event, and the standards for the MSPS can be referenced in Appendix A (see page 34).¹⁴

The current IST and MCS standards are below what is required of infantry Marines and do not reflect the potential for superb fitness. Rather, those standards reflect an institutional notion that as long as an individual meets the minimum requirements, recruit training and subsequent MOS schools will transform that young man or woman into a physically elite infantry Marine. However, data collected by the Marine Corps’ Manpower and Reserve Affairs proves otherwise. The average first recorded and last recorded PFTs (physical fitness tests) for all infantry Marines who joined between 2009 and 2016 were compared. The mean PFT score declined by two points.¹⁵ This data signifies that, despite effective training, the result of a Marine’s physical fitness is largely tethered to their entry-level physical aptitude. The Marine Corps’ entry-level training may be superb, but its ability to mold the highest quality junior Marines is contingent upon the reception of high quality young men and women to train.

The *MOC* states that a superior infantry is the Marine Corps’ greatest advantage.¹⁶ A superior infantry force is constructed of individuals of the highest mental and physical caliber. The

current physical fitness screening and assessment standards were implemented in 2012 and reflect an increased demand for higher fitness standards; however, the current screening and assessment standards are simply inadequate to build a superior infantry. Additionally, neither of the three assessments measure baseline strength. Combat is a grueling crucible that requires both physical strength and endurance. Strength and endurance produce speed, both spatially and temporally, and speed is a tactical advantage. As stated in *MCDP 1-3, Tactics*, “Physical speed, moving more miles per hour, is a powerful weapon in itself.”¹⁷ The Marine Corps must increase its entry-level IST standards and adequately screen for baseline strength. Appendix B (see Sidebar B) outlines a sample physical screening assessment that simply raises the standard of the current IST qualification requirements to reflect MCS standards and measures a prospective infantry Marine’s baseline physical strength. This will ensure that each prospective infantry Marine, upon reporting to recruit training, can perform the physically demanding tasks at his MOS school and has the baseline strength to perform MOS-specific tasks not easily measured by the IST or MCS.

Critics will argue that raising the entry-level mental and physical standards limit the qualified pool from which the

Marine Corps will be able to recruit. As the Marine Corps produces more than 35,000 enlisted Marines each year through its recruit depots,¹⁸ this is a valid concern. Any increase in mental and physical standards threatens to cause the force to miss its annual accession goals. Additionally, there is a concern that raising the baseline mental aptitude standard from a GT score of 80 to 100 threatens the existing force structure in the infantry, as most infantry Marines have below a 100 on their GT score. Lastly, the Marine Corps’ superb combat performance is proof enough that there is no need to change the current standards.

In his address to the Senate Armed Service Committee, LtGen Mark Brilakis, the Deputy Commandant of Manpower and Reserve Affairs, summarized the Marine Corps’ FY15 recruiting goals by stating,

Last fiscal year, we successfully achieved all enlisted and officer recruiting goals ... and completed the year with a FY16 start pool of nearly 55 percent.¹⁹

Having identified over half of the individuals to meet its annual accession goal, the Marine Corps can be more selective. Regarding the concern that the majority of infantry Marines achieve well below a 100 on the GT, data shows that concern to be largely invalid. In surveying all infantry Ma-

rines recruited into the Service between 2009 and 2016, the average annual GT score ranged between 106 and 109, more than 25 points greater than the lowest current qualification score and at least 5 points higher than the proposed standard of 100. Additionally, the percentage of Marines with a 100 or greater on their GT score is over 74 percent.²⁰ For the Marines who currently fall below 100 on their GT, the Marine Corps must provide opportunities to retake the ASVAB to achieve the requisite scores. Lastly, the future operating environment, replete with multi-dimensional threats and high-technology assets, portends an environment that requires elite infantry Marines. The Marine Corps has an obligation to improve entry-level standards to ensure that its Marines are fit to succeed in such an environment.

To adapt to the demands of the future operating environment and secure its place as a superior infantry force, the Marine Corps must enhance its entry-level mental and physical standards. As outlined in the *MOC*, the Marine Corps recognizes the need for improvement to prevail in tomorrow’s battles. In addition to investing in technology to compete with near-peer and hybrid threats, the Marine Corps must invest in building an infantry that has the mental and physical aptitude to dominate its adversaries. The Marine Corps infantry is undoubtedly a formidable force; however, the demands of tomorrow’s operating environment will present challenges the force is currently unequipped to face. As stated by Gen Alfred M. Gray, the Marine Corps’ 29th Commandant,

Like war itself, our approach to war-fighting must evolve. If we cease to refine, expand, and improve our profession, we risk being outdated, stagnant, and defeated.²¹

The *MOC* calls for the Marine Corps to, “Set the mental and physical standards for Marine infantry to conduct dismounted operations in austere environments.”²² Future operating environments defined by increasingly-complex battlefields and technology proliferation demand that the Service heeds that call.



Quality Marines require quality recruits. (Photo by LCpl Jose VillalobosRoche.)

MOS Specific Physical Standards

Task	MOS	Task Description	Standard
Casualty Evacuation	All GCE MOSs & LAAD	While wearing a fighting load and carrying a Service rifle, sprint 25 meters to a simulated casualty, evacuate the casualty 25 meters.	54 sec
ML-19 Lift	All GCE MOSs & LAAD	Lift the MK-19 heavy machine gun from the deck to overhead height.	Pass
Scale a Wall	03xx	Scale a 56" wall unassisted while wearing the fighting load and carrying a Service rifle.	30 sec
20km Hike	0302,0311, 0331,0341, 0351, 0352	March 20 km with MOS-specific weapons & equipment while wearing the fighting load.	5 hours
Rush 300m to Objective	0302 0311	While wearing a fighting load and carrying a Service rifle, run/rush for 300 meters through a course with an agility network.	3 min 56 sec
200m Movement as MG Ammo Bearer	0331	While wearing a fighting load and carrying a Service rifle, spare barrel bag and two ammo cans, run/rush for 200 meters through a course with an agility network.	2 min 11 sec
200m Movement w/60mm Mortar	0341	While wearing a fighting load and carrying a Service rifle and a 60mm mortar in handheld mode, run/rush for 200 meters through a course with an agility network.	1 min 45 sec
200m Movement w/SMAW	0351	While wearing a fighting load and carrying a Service rifle and a SMAW, run/ rush for 200 meters through a course with an agility network.	1 min 40 sec
Breach Door w/ Battering Ram	0302 0351	While wearing a fighting load and carrying a Service rifle, breach a door with a battering ram.	14 sec
200m Movement w/Javelin	0352	While wearing a fighting load and carrying a Service rifle and a Javelin, run/ rush for 200 meters through a course with an agility network.	1 min 43 sec
Disassemble M242 25mm Gun	0303 0313	Disassemble/Assemble the M242 25mm automatic gun by manipulating the receiver and feeder.	3 min 21 sec
LAV CASEVAC	0303, 0313, 2147	Clean & press Olympic bar with total weight of 115 lbs. (Surrogate).	Pass
Lift LAV Towbar	0303, 0313, 2147	Deadlift & hold Olympic bar with total weight of 150 lbs. at knuckle height for 30 seconds (Surrogate).	Pass

Source: Fragmentary Order 4 (Implementation) to Marine Corps Force Integration Campaign Plan

Appendix A.

Notes

1. LtGen Victor H. Krulak, USMC(Ret), *First to Fight: An Inside View of the U.S. Marine Corps*, (Annapolis, MD: Naval Institute Press, 1984).
2. Dave Goldich and Art Swift, "Americans Say Army Most Important Branch to U.S. Defense," *Gallup*, (Online: May 2014), available at <http://www.gallup.com>.
3. Headquarters Marine Corps, *Marine Corps Operating Concept: How an Expeditionary Force Operates in the 21st Century*, (Washington, DC: September 2016).
4. Headquarters Marine Corps, *MCDP 1, Warfighting*, (Washington, DC: June 1997).
5. *Marine Corps Operating Concept*.
6. *Ibid.*
7. Third Battalion, Fifth Marines, *SEA DRAGON 2025: After Action Report for ITX 1-17*, (Camp Pendleton, CA: December 2015).
8. Headquarters Marine Corps, *MCO 1230.5C, Classification Testing*, (Washington, DC: February 2014).
9. Headquarters Marine Corps, *NAVMC 1200.1A, Military Occupational Specialties Manual*, with Change 1, (Washington, DC: September 2015).
10. *Marine Corps Operating Concept*.
11. *Military Occupational Specialties Manual*.
12. Commandant of the Marine Corps, *Fragmentary Order 4 (Implementation) to Marine Corps Force Integration Campaign Plan*, (Washington, DC: December 2015).
13. *Ibid.*
14. *Ibid.*
15. Personal email correspondence between the author and Timothy L. Johnson, (Manpower and Reserve Affairs), on 13 January 2017.
16. *Marine Corps Operating Concept*.
17. Headquarters Marine Corps, *MCDP 1-3, Tactics*, (Washington, DC: 1997).
18. *Testimony Before the Subcommittee on Personnel of the Senate Armed Services Committee Concerning Military Personnel Posture*, 114th Congress (March 2016) (statement of LtGen Mark A. Brilakis, Deputy Commandant for Manpower and Reserve Affairs) available at <https://www.armed-services.senate.gov>.
19. *Ibid.*
20. Personal email correspondence between the author and Timothy L. Johnson.
21. Commandant of the Marine Corps, *36th Commandant's Planning Guidance*, (Washington, DC: 2015), available at <http://www.marines.mil>.
22. *Marine Corps Operating Concept*.

Event 1. Modified Initial Strength Test to reflect current MOS Classification Standard (MCS)

Pull-ups	1.5 mile run	Crunches	Ammo-Can Lifts
6	24:51	61	60

Event 2. Baseline Strength Test (BST)

Uniform: Standard physical training attire

1. **Back squat (100% body weight)***
 - a. **Gear required: 45lb barbell with appropriate weight and squat rack**
 - b. **Evaluation: minimum 3 repetitions**
2. **Deadlift (100% body weight)***
 - a. **Gear required: 45lb barbell with appropriate weight**
 - b. **Evaluation: minimum 5 repetitions**
3. **Bench press (100% of body weight)***
 - a. **Gear required: 45lb barbell with appropriate weight and bench press**
 - b. **Evaluation: minimum 1 repetition**
4. **Event: 15 minute AMRAP**—5 pull-ups/5 burpees/ 400m sprint**
 - a. **Gear required: pull-up bars**
 - b. **Evaluation: minimum 3 rounds**

Notes: No more than 10 minutes between each event.

* **Weight will be rounded up to nearest five pounds from Marine's weight (e.g. LCpl Marine weight 181 pounds; he/she will perform back squat, deadlift, and bench press events with 185 pounds).**

****As many rounds as possible in time allotted.**



Appendix B.