

A Foundation of Innovation

Enhancing our culture of innovation in the Marine Corps

by Maj Austin M. Duncan

Innovation and adaptation, in both garrison and combat, are central to success. Diversity, force-on-force training in free-play environments, and the freedom to learn from failure enhances the ability of an armed force to innovate and adapt. In a time where the return of great power competition and rapid development and proliferation of technologies are driving the changing character of warfare, the demand and associated pace of innovation must accelerate considerably. Our service needs a culture of innovation to not only maintain relevancy in a changing world but, more importantly, to bend the changing character of warfare to our advantage. Enhancing our culture of innovation is best achieved by ensuring all Marines understand our Nation's security challenges and how they translate to their level, thus maximizing the diversity of education and experience across the force, training against opposing forces in free-play environments, and allowing Marines the opportunity to learn from failure.

On the surface, the desire for innovation and the accompanying tenets of diversity, force-on-force training, and learning from failure are seemingly obvious recommendations. However, these tenets oppose time-tested institutionalized approaches that we developed to shape careers, train to standard, and ensure mission success. Specifically, we manage personnel and promotions based on *standard* career development; train in scripted scenarios and evaluate with a common standard across all units; and rarely endorse excess time and resources to train, fail, and remediate. Although these methods were likely formulated with good intentions

>Maj Duncan is assigned to Headquarters Marine Corps. He wrote this article as a student at Marine Corps Command and Staff College.

during a different time in history, they now serve as barriers to innovation in many ways. Our future success will be determined by our ability to re-evaluate historic institutional approaches and replace them with methods conducive to inspiring a culture of innovation.

The foundational premise for an innovative culture is understanding the strategic context of the problem. An innovative Marine Corps is no value added if we are oriented on the wrong problem set and do not appreciate how

our Service's contributions fit into the larger national security dialogue. For most Marines, this means reading and studying the local area commander's guidance, the *Commandant's Planning Guidance*, and our Service concepts. The more nuanced discussion is then translating the guidance and intent to one's level and ensuring junior Marines clearly understand the linkage of their efforts to the greater strategic context. This orientation is critical to ensure we are innovating with the appropriate end state in mind. In an organization with finite resources, it is imperative that we focus our time, energy, and resources to the missions the Marine Corps is tasked to execute.

Once oriented on the appropriate strategic context for innovation, we should build teams to enhance our in-



Obvious recommendations to improve training run into resistance from institutionalized, methodical approaches developed over long periods of time. (Photo by Sgt Justin Toledo.)



We can leverage education and training to diversify the force. (Photo by Sgt Justin Toledo.)

novative culture. One way to do so is by increasing our diversity of thought and experience across the force through recruitment, training and education, and career development. Decades of research indicate diverse teams correlate with more creativity, diligence, and critical thinking—prerequisites for innovation.¹ Evidence of diversity can be found in varying inherent traits, such as gender and ethnicity, along with acquired traits including education, experience, and culture. The combination of inherent and acquired traits forms unique perspectives and biases. When combined in a group, the sum can safeguard against individual biases while also illuminating countless alternative vantage points—again, critical ingredients in order to innovate. We must recruit and train with the goal of increasing diversity in mind. Our goal should never be to find or create a *prototype* Marine; they should come from all walks of life and edges of the earth. Similarly, the Service should leverage training and education venues across the globe—outside of traditional military and government education facilities—to diversify the force. Leaders must stress the importance of training and education opportunities while paving a clear path for Marines to attend. Moreover, we should consider the value of diverse education and experiences for promo-

tion and retention, not penalize the personnel who do not follow a typical track. Diverse education and training should be heralded as the model. Our Service should strive to eliminate the notion of a prototype Marine only built through a checklist of key billets and experiences. Such a manpower model lends itself to a non-diverse force trending toward homogeneity. Career development and screening boards should not focus solely on key billets while indirectly discounting education and B-billets. Diverse

Training to standard is not about conforming to canned scenarios ...

experiences and education should be revered and viewed as a force multiplier. Our institutional prototype should be a Marine who can think critically and innovate because of their rich training, education, and experience.

Realistic training against opposing forces in free-play environments also enhances the forces ability to innovate. Training to standard is not about conforming to canned scenarios in a manner expected by evaluators; rather, training to standard in the modern

era means preparing for competition in the so-called “grey zone” and the prospect of war. The nature of competition and war is best characterized by chaos, incomplete information, and demands driven by necessity. Training environments must replicate the nature of competition and war by presenting countless unpredictable events stemming from a thinking enemy and constantly evolving environment. Opposing forces and unscripted scenarios not only enable a viable testing ground for emerging technology and concepts, more importantly, they instill the necessity of constant adaptation. Additionally, training against opposing forces provides immediate, honest feedback by distinguishing clear winners and losers. Losing to a thinking human is much different than failing to execute a static range properly.

Training against pop-up targets and non-thinking enemies may enable brilliance at the “basics” through repetition, but it also breeds compliance—commonly with the absence of innovative thought. In his book, *Antifragile*, Nicholas Taleb introduces the term “antifragilista,” an individual able to recognize and adjust to unpredictable events.² Creating antifragilistas, or true innovators, requires an environment with unpredictable events and a demand for adaptation. Critics of opposing forces and free-play environments commonly fear the training audience will fight an unrealistic adversary and miss the opportunity to train to standard. Ironically, both thinking adversaries and the nature of war are inherently unpredictable. Training to standard is more than accomplishing mission essential tasks, it requires constant adaptation and innovation in preparation for competition and war against a free-thinking enemy with unbounded constraints. Enhancing a culture of innovation in the Marine Corps requires a deliberate focus on drastically increasing the frequency of training against opposing forces in free-play environments.

Finally, cultivating a culture of innovation also requires affording our Marines the time and resources to experience failure during training before remediating appropriately. Although

the Marine Corps demands mission accomplishment and strives to avoid failure at all costs, leaders need environments that permit the opportunity to experiment, fail, innovate, and learn. Paradoxically, affording opportunities to fail will enable success. Failure serves as a great teacher and motivator because it prompts critical review and engrains the evolutionary thought necessary to inspire innovation. A common mantra from the capital of innovation, Silicon Valley, is “fail fast, fail often.” While hyperbole, the mantra is reflective of the culture responsible for innovations such as Facebook and the iPhone, both are revolutionary innovations that changed the world and continue to evolve. The primary hindrance in the Marine Corps is that our training programs do not afford us the freedom to fail because of time and resource constraints. Units do not have an adequate amount of time to experiment with innovation, fail, reflect, learn, and then remediate. As a former commander astutely reflected, “We need time to lose.”³ Moreover, any hint of failure during exercises and pre-deployment training can result in significant negative consequences, oftentimes tarnishing careers and jeopardizing an endorsement for deployment. Fear of failure thereby instills a risk averse propensity to avoid innovation or any deviation from the norm. To enhance the culture of innovation, the Marine Corps must build in more time to train and create an environment that fosters the freedom to fail and learn. By doing so, Marines will embrace the opportunity to innovate.

Historically, Marines cite evidence of innovation in the Marine Corps by harkening back to the Higgins Boat and its role in amphibious operations or the vision of using helicopters to support vertical envelopment. While notable contributions to our legacy, these innovations are now more than seven decades old and were derivative of a much different era. Our proud heritage will continue to be defined based on our ability, or inability, to innovate and win today and tomorrow. Over the years, we have developed models for traditional career development, standardized training scenarios against



Our heritage of innovations depends on our willingness to step out and challenge ourselves to generate new methods, equipment, and education. (Photo by Cpl Kenny Gomez.)

scripted threats, and inculcated risk aversion at the expense of innovating and potentially failing. If we are honest with ourselves, we recognize, as the *38th Commandant's Planning Guidance* clarifies, that we are no longer postured, manned, trained, or equipped to meet the demands of the future. We cannot expect our institutionalized models and methods to remedy the problem: they got us here. As Col George Reed, U.S. Army(Ret), keenly notes, “One of the hardest things for successful professions to do is question the assumptions on which their success is founded.”⁴ But that is exactly what is required today. The Marine Corps’ legacy of excellence is built upon a foundation of innovation and adaptation. The essence of innovation requires challenging the institution to generate new methods. We can start enhancing our culture of innovation by maximizing the diversity of education and experience across the force; training against opposing forces in free-play environments; and empowering Marines with the freedom to train hard and try new things, potentially fail, and then learn from it. Instilling these tenets will not be easy because they tend to disrupt institutional models. However, if we are to “re-establish our primacy within the Department as the most innovative and revolutionary thinkers,” it is time

to re-evaluate our institutional norms and innovate new ones for the future.⁵

Notes

1. Katherine Phillips, “How Diversity Makes Us Smarter,” *Scientific American*, (New York, NY: Springer Nature, 2014).
2. Nicholas Taleb, *Antifragile: Things that Gain from Disorder*, (New York, NY: Random House, 2012).
3. Col Francis Donovan, interviewed by Capt Dennis Dunbar, 20 February 2015. Quoted in Capt Dennis Dunbar, “Exercises Doomed to Succeed,” *Marine Corps Gazette*, (Quantico, VA: September 2015).
4. George Reed, et al., “Leadership Development: Beyond Traits and Competencies,” *The Future of the Army Profession*, 2nd edition, (Boston, MA: McGraw-Hill, 2005).
5. Gen David H. Berger, *Commandant's Planning Guidance: 38th Commandant of the Marine Corps*, (Washington, DC: July 2019).

