



# MARINE CORPS **Gazette**

*Professional Journal of U.S. Marines*

APRIL 2017 Vol. 101 No. 4

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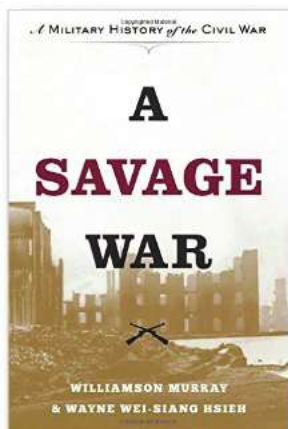




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**See p. 52 for instructions.**

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**The writing contest is open to  
active duty Marines and members  
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APRIL 2017

**Editorial: Controversy**

Several articles in the February and March editions of the *Gazette* have generated a high volume of interest. In particular, Capt Joshua Waddell's article "Innovation: And other things that brief well" in February and LtCol Greg Thiele's "Our Jena-Auerstadt," originally published online in October 2016 and appearing in print in March 2017, have been picked up by various defense and foreign affairs-related blogs, extending their exposure exponentially. In the midst of this acute enthusiasm and discussion of these articles, readers have asked repeatedly, "Why did you publish that?" and, "Did you talk to the author before he jumped off the ledge?" These are disappointing questions in that they perpetuate the idea that criticism of "the system" and contrarian thinking are liable to be "crushed" by the Corps' senior leaders. We are better than that.

Two aspects of these articles, however, do demand critical scrutiny. First, Capt Waddell's article could have provided additional recommendations to solve the problems he identifies. Second, any statement or implication by any author that the Marines and civil servants responsible for equipping the force "don't care" is patently false. The reality is that Federal laws and regulations, albeit well intended to safeguard taxpayers' dollars, combine to create sclerotic development and acquisition processes. In our Nation, all laws bind equally. To expand on the discussion of this point, turn to "A Modest Rebuttal" by Capt Jeffrey E. Little on page 23 and our Letters to the Editor section.

LtCol Paul Brickley presents an important article on page 69 entitled "ARG-MEU Employment Methods" which clarifies the modern scope of operations for our forward deployed naval expeditionary forces. Continuous combinations of distributed, disaggregated, and aggregated operations both ashore and at sea are now the rule and not the exception for our ARG-MEU teams.

This month's *Gazette* shifts focus to several issues not directly related to warfighting, but no less critical to maintaining combat readiness through good order and discipline. Two articles from the office of the Staff Judge Advocate to the Commandant provide ground truth on recent changes to the UCMJ regarding incidents of sexual assault and misconduct. The rights of the victim are discussed in "Victims of Sexual Assault and Sexual Misconduct" by Maj Rebecca Harvey on page 6 with responsibilities to protect communications in sexual assault prevention and response being the primary subject in Maj Martz and Ms. Brodie's "Let the Machine Work" on page 13. In related themes, we also present a range of articles on the Performance Evaluation System, physical fitness, and annual training requirements.

Our book section this month features two complementary reviews of the same book. Both LtCol Frank Hoffman (Retired) and Maj Skip Crawley (Retired) have provided distinct reviews of Dr. Williamson Murray and Wayne Wei-Siang Hsieh's *A Savage War*, a comprehensive analysis of the Civil War, starting on page 79.

Those readers who want to join the discussion can scale their participation based on the level of effort they choose. Consider this akin to transitioning to the defense following a successful attack: initial consolidation and reorganization, next preparation of a hasty defense and, finally, establishment of a deliberate defense. First, a reader can use the comments section following each article on the *Gazette* website to share their thoughts. With additional time, a reader can write a letter to the editor—this is as simple as typing an email. With an established priority of work, the reader can write an article to defend their position. If you have an opinion, then join the fight!

**Christopher Woodbridge**



## Reunions

**Org:** VMFA 531 Gray Ghost Squadron  
**Dates:** 15–17 June 2017  
**Place:** Crossroads Inn, Quantico VA  
**POC:** Roman Makuch  
 347-866-0962  
 Ray Holmes  
 732-267-0518  
 rayholmessr@yahoo.com

**Org:** Hotel 2/7 Vietnam Veterans  
**Reunion (1965–1970)**  
**Dates:** 22–25 June 2017  
**Place:** Crowne Plaza, Kenner, LA 70062  
**POC:** Doc. David McCann  
 504-909-9972  
 n opdret@gmail.com

**Org:** “Marines of Long Ago”  
**12th Annual Reunion**  
**Dates:** 25–28 April 2017  
**Place:** Quantico and Fredericksburg, VA  
**Guest Speakers:**  
 Col Wayne Morris, USMC(Ret)  
 and The Navajo Code Talkers  
**POC:** Joe “Red” Cullen, 203-877-0846;  
 aircooledmg7@aol.com

**Org:** The Anchor: Sharing Fellowship  
**Dates:** Open to All  
**Place:** Oceanside, CA  
**POC:** GySgt Jim Jason  
 theanchoroceanside.com

**Org:** Marine Officer BC 4-67  
**Association Reunion**  
**Dates:** 21–24 September 2017  
**Place:** Hilton Double Tree, Crystal City,  
 Washington, DC  
**POC:** Ken Pouch  
 860-881-6819  
 KPouch5@gmail.com

**Org:** USMC 1st & 3d Amtrac  
**Battalion Reunion**  
**Date:** 13–16 April 2017  
**Place:** Staybridge Suites-Austin Airport,  
 Austin, TX  
**POC:** Dave Rutherford (561-585-7445) &  
 Alex Martinez (512-385-7516)

**Org:** USS *Inchon* (LPH/MCS-12)  
**11th Reunion**  
**Date:** 15–19 October 2017  
**Place:** Beach Cove Resort,  
 Myrtle Beach, SC  
**POC:** USSInchon@gmail.com  
 (717) 203-4152  
 By postal to David F. Fix  
 Reunion Planner,  
 PO Box 6361  
 Nalcreast FL, 33856-6361

## Reserve Billet

Second Bn, 24th Marines, has ten vacant infantry officer billets in their unit. 2/24 is a Marine Reserve infantry battalion headquartered in Chicago, IL. The unit has infantry platoon commander and company executive officer openings in Milwaukee, WI; Madison, WI; and Des Moines, IA, for lieutenants and captains currently in the Inactive Ready Reserve or those coming off active duty. Interested applicants should contact LtCol Tom Przybelski at Thomas.Przybelski@usmc.mil.

## Request for Interviews

Mr. Norman Black would like to interview Marines who fought in battles associated with North Vietnam’s 1968 General Offensive (Tet (January–February 1968); the so-called May Offensive (29 April–30 May 1968); and the offensive that began on 17 August and involved attacks in I, II, and III Corps) for a private project. Veterans who are willing to be interviewed regarding their experiences should contact Mr. Black at npblack2003@yahoo.com



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**Washington, DC:** The Commandant of the Marine Corps, Gen Robert B. Neller, right, and LtGen Lee Sang-Hoon, Commandant, Republic of Korea Marine Corps, pose for a photo during an honors ceremony at the Home of the Commandants, Washington, DC, 9 February 2017. Gen Neller hosted Gen Lee for an honors ceremony and dinner. (Photo by Cpl Samantha Braun.)



## Reconnaissance

■ The Marine Corps reconnaissance capability is a timeless, valuable asset to the MAGTF. As the MAGTF's "tip of the spear," it's an organic capability not subject to the same stresses as Marines serving in Washington DC. Why? Because the battlefield is never a crowded place!

The Ellis Group article, "21st Century Reconnaissance," in the January issue of the *Marine Corps Gazette* stated there is a need for the military Services to conduct reconnaissance. This need had become even more important due to the paucity of amphibious ships. They also stated that reconnaissance forces are ideally suited to lead the fight for information. But the MAGTF needs more than just information—it needs "actionable intelligence," not verbosity! Reconnaissance forces can check out/verify what's out in front of the MAGTF, or they can confirm what other intelligence sources have provided to the MAGTF, or they can also be used as bait to seek out and destroy the enemy! Reconnaissance forces now have to rely on other detection methods, such as aviation assets, which have no ballistic protection. Let's face it, reconnaissance forces will always be the "eyes and ears" of the MAGTF. One particular point raised by the Ellis Group worth mentioning specifically is how to organize, train, and equip the MAGTF to "achieve surprise" on the 21st century battlefield.

Now to the "Reconnaissance/Counterreconnaissance Task Force," article in the February issue of the *Marine Corps Gazette*, which stated there are shortcomings in training, leadership, and education. The method that was used to address many of these problems was the RIP, a reconnaissance indoctrination program, given once-a-quarter for a week which tested everything possible to call-out wannabes. Don't know if it still exists, as it was not mentioned in either article.

MAGTF commanders will have to be constantly vigilant to also call-out the "PC" types. Reconnaissance is not meant to be easy. It is meant to be relied upon for timely, accurate, "actionable intelligence"!

**LtCol Mike Janay, USMC(Ret)**

## Cyber, Innovation, and the Backlog

■ In reading two *Gazette* articles over the past three months, "The Real Cyber Paradigm: Exploiting excess capacity," (December 2016), and "Innovation: And other things that brief well," (February 2017), both LtCol Brian Russell and Capt Joshua Wadell, respectively, bring up a similar point which, from my experience, has become a familiar theme across the Marine Corps when it comes to automation.

First, I would like to address Capt Wadell's misunderstanding of the Supporting Establishment. I agree whole-heartedly that many along the I-95 corridor between Quantico and the Pentagon have lost touch with what is needed in the field as far as innovation. I do not agree, however, in indicting the entire Supporting Establishment in the terms he did. Being a former member of Marine Corps Logistics Command and Marine Corps Installations East, I can tell you that these field organizations within the Supporting Establishment suffer from the same difficulties that the Operating Forces do when it comes to dealing with funding and resources, and convincing HQMC of their requirements and priorities. Rest assured, the whole Supporting Establishment is not "disconnected."

That out of the way, the drum beat I have heard is that of the authority to operate, or ATO, process required to implement an automated tool on the network. This required step in insuring network stability and security has, in effect, ensured that innovation and automation does not get implemented in a timely manner, many times resulting in backdoor implementations of vital capabilities and a significant delay in establishing cost and time saving tools.

An example (one of many) I can identify is the industrial control systems developed as a major part of the Unit Energy Manager (UEM) effort of the Marine Corps Energy Ethos, specifically the Energy Management Control System (EMCS). The EMCS is an automated system intended to ride the network and provide UEMs real time information on energy usage in order to identify areas where conservation can be implemented. When I left Marine Corps Installations East in October 2016, this system had yet to receive its ATO, meaning a cornerstone of the Corps' Energy Ethos was yet to be implemented, potentially losing thousands if not millions of dollars in energy usage.

While network security is paramount to Service and national security, speeding automated innovation is also paramount to success, both on and off the battlefield. HQMC C4 and/or Marine Forces Cyber have got to find a way to speed this authorization or suffer from a lack of innovation.

**Col Yori R. Escalante, USMC(Ret)**

## Maintaining Command and Control

■ I was pleased to see Maj Paul Stokes' article in the January issue of *Marine Corps Gazette*. I am even more pleased to believe that an article such as his—"Maintaining C<sup>2</sup>: Controlling the electromagnetic spectrum"—in the professional journal of Marines can be accepted as timely and important, presented cogently, and targeted to stimulate the thinking of Marine leaders at every level. There was a time in the not too distant past when such topics were largely restricted to the schoolhouse, and then principally the schoolhouses whose students were communicators, data system Marines, and signals intelligence and electronic warfare specialists. ... but times have changed, and so has the notion—it seems—that a good Marine leader can maintain command and control through sheer willpower and a jutting jaw.

**LtCol Tom Harleman,  
USMC(Ret), Ph.D**



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The entire *Gazette* is now online at [www.mca-marines.org/gazette](http://www.mca-marines.org/gazette).



# Victims of Sexual Assault and Sexual Misconduct

**Administration redress: identifying solutions for victims across the range of options available to commanders**

by Maj Rebecca Harvey

**I**n general, the current default metric for measuring the success of a campaign against sexual assault and sexual misconduct is whether the allegation resulted in a court-martial conviction. In the majority of sexual assault cases, obtaining a conviction for an offender at a criminal proceeding is the preferred course of action for both the victim and the government. That said, in many of those cases, a conviction simply cannot be achieved due to the elevated burden of proof at a criminal trial; that is, the government must prove every element of the crime “beyond a reasonable doubt.” Cases where there are few witnesses and the participants are many times impaired by alcohol often result in acquittals when this burden of proof is applied. That is not to say the sexual misconduct didn’t occur; rather, it is an accurate commentary that there is just not enough admissible evidence to sustain a criminal conviction.<sup>3</sup> One of the first order effects of prosecuting these cases is further harm to the victim and more frustration for units and their commanders. Applying a metric that does not account for these variables perpetuates a problem that can result in the appearance that efforts to prevent sexual assault are failing. The reality is many cases that cannot be successfully prosecuted in a criminal trial can be successfully handled in alternative forums, forums that reduce further harm to the victim, reduce frustration for units and commanders, and more accurately re-

*The rape victim, like any traumatized human, is left with a permanently altered brain. As part of its legacy, trauma leaves its victims with fear networks etched into the amygdala, networks that can be triggered by a multitude of cues that would ordinarily not evoke fear. Trauma also leaves its victims with fragmented and discontinuous memories of what happened to them. As a consequence of these legacies, the rape victim faces enormous challenges in the judicial process. To participate in that process—to endlessly recount their trauma, to appear in the court room where the rapist sits—is equivalent to the zebra consciously choosing to return to the water hole where the lion attacked.<sup>1</sup>*

*“Proof beyond a reasonable doubt” means proof to an evidentiary certainty ... The proof must be such as to exclude ... every fair and rational hypothesis except that of guilt.<sup>2</sup>*

**>Maj Harvey is a Marine Judge Advocate. This article reflects her opinions and are not those of the U.S. Marine Corps or the Department of the Navy.**



flect the efforts being made to protect victims and combat sexual assault.

This article proposes that the default metric for measuring success should be expanded to include results obtained via administrative separation boards (Boards). Boards, like courts-martial, determine whether misconduct was committed. In many cases, the Board process, although different in its purpose and consequences from a court-martial, can achieve the Title 10 commander's (Commander) and the victim's shared interest in the three critical areas: speed, accountability, and victim privacy. This is primarily because Boards are designed to terminate the service of "unsuitable, unfit, or unqualified Marines."<sup>4</sup> As such, the standard of proof is lower than at courts-martial. In effect, members of the Board decide whether the Marine committed the misconduct and, if so, whether the Marine should be "fired" from the Marine Corps vice being convicted of a criminal offense.

Court-martial convictions require proof beyond a reasonable doubt, a standard which requires more evidence than is often available when two people are the only witnesses to the crime. At a Board, the burden of proof is a preponderance of the evidence. This means the Board members must believe that it is more likely than not (i.e., 50.01 percent) that the respondent committed the alleged misconduct. The burden of proof at a Board is lower than at a court-martial because, although the potential consequences of a Board are significant (e.g., an honorable, general, or other than honorable discharge plus loss of benefits associated with service), they are less significant than the consequences of a court-martial conviction (e.g., imprisonment, criminal record, and a bad conduct or dishonorable discharge).

### Priority on Speed, Privacy, and Accountability

The "Long War" in the Middle East taught the United States that defining success is critical when determining how to achieve it. Success, for sexual assault victims or victims of other types of sexual misconduct, often includes solutions that will:



*Although we have training and awareness programs in place, victims must feel that the system protects them. (Photo by LCpl Rebecca Eller.)*

- Result in separation of the offender from the Marine Corps;
- Deprive offender of significant benefits (the G.I. Bill predominates);
- Happen quickly (within two to three months);
- Minimize disruption for victim at work and within his/her social group;
- Provide proof that the Marine Corps believed the victim;
- Provide evidence to peers that the accused did something wrong;
- Limit the likelihood of re-victimization caused by repeated re-telling of the offense.

Implicit in each of the above outcomes are speed, privacy, and accountability. These outcomes are also priorities for Commanders. Thus, a Commander should not immediately rule out sending an alleged perpetrator to a Board, rather than a court-martial, without first consulting with his staff judge advocate and considering victim input as well as the full range of legal and administrative options available in each case.

### Speed

Reporting a sexual assault or sexual misconduct is emotionally challenging for the victim. Often, the report occurs weeks after the sexual assault was committed. Victims routinely ask

how long the process is going to take and when they can expect to get back to their "normal" life. They also want assurances that their participation in the process is not going to adversely impact their next assignment, deprive them of a deployment opportunity, or linger divisively in their unit and increase the odds that they will be ostracized by their peers. More often than not, a Board will achieve this resolution more expeditiously than a court-martial.

Commanders may convene a Board as soon as the initial NCIS (Naval Criminal Investigative Service) investigation is delivered, following review by the appropriate command legal representatives and notification of the respondent, taking months off of the timeline for resolution for a victim.<sup>5</sup> On the other hand, Commanders who refer cases to court-martial will wait months for resolution as discovery requests are processed, requests for expert assistance from both sides satisfied, members panels identified, and witnesses procured—often from distant duty stations. Generally, numerous motions sessions will occur prior to a trial, taking multiple days. The administrative separation process, by contrast, is much faster and usually concludes in a single day. Discovery is less burdensome, the number of required board



members are fewer than the number of members required to convene a general court-martial panel, witnesses may testify via speakerphone and, in some cases, submit written statements in lieu of live testimony. The effect of these advantages for the Commanders is that upon receipt and review of the investigation, the Commander can often appoint the Board in the same month that the investigation is concluded, and the entire process may be completed in less than 60 days.<sup>6</sup> This is in great contrast to a court-martial, which routinely takes more than one year to complete.

### Privacy

A victim's privacy interest is of particular importance when the case involves sexual assault or instances of other forms of sexual misconduct directed toward them. While legal mechanisms exist to protect victim privacy at courts-martial, personal and sensitive information regarding their lives and intimate relationships are too often exposed for public consumption. During the months leading up to a court-martial, the victim's life will be dissected by the defense team to uncover any possible evidence that may be admissible to demonstrate deficiencies in his or her character; miscommunications among friends can be cast as a character for dishonesty; peers with whom the victim has had disagreements or friends of the accused who will cast

aspersions on the victim's character in interviews with the defense. This is part of the defense counsel's due diligence and, if admitted at court-martial, would be used to undermine the credibility of the victim's testimony.

While Commanders and unit leaders are aggressively pursuing policies to diminish reprisal, retaliation, and ostracism in the Marine Corps, the "lance corporal underground" is likely to discuss and debate the veracity of the allegations made by the victim without having all the facts. Given the overlapping spheres of personal and professional life in the Marine Corps, a victim often shares workspace and

---

***Finally, victims want to see the offender held accountable for his or her actions.***

---

barracks space with the same social group who may have witnessed events leading up to the allegation of sexual assault. The longer the case drags on, the more divisive speculation circulates, undermining victim well-being and unit cohesion. Additionally, well-intentioned leaders may "keep an eye" on the welfare

of the victim during the investigation and resulting accountability process, but this can heighten the victim's perception that he or she is living under a microscope. All of this makes privacy difficult regardless of how the case is ultimately resolved.

A Board compresses the timeline for resolution and allows for far less intrusion in a victim's life while maintaining appropriate due process protections for the respondent. The number of interviews a victim must attend decreases dramatically and intimate details of the victim's life receive more limited exposure. The victim does not necessarily have to testify at a Board since the victim's statement to NCIS may be admitted instead of live testimony. If a victim desires greater participation, the victim may choose to testify in person, telephonically, or via written statement affording him or her the opportunity to engage in a manner appropriate to a given stage of recovery that will not consequently imperil the victim's mental, physical, or emotional health.

Commanders who proceed to process subjects for administrative separation can leverage the shortened timeline to minimize disruption to their units and abridge opportunities for those who would retaliate against the victim for the report, limiting the potential wrongdoer's ability to carry out reprisals, and enabling a more rapid return of full focus to the mission set. Once the process is concluded, the tension surrounding the event often dissipates.

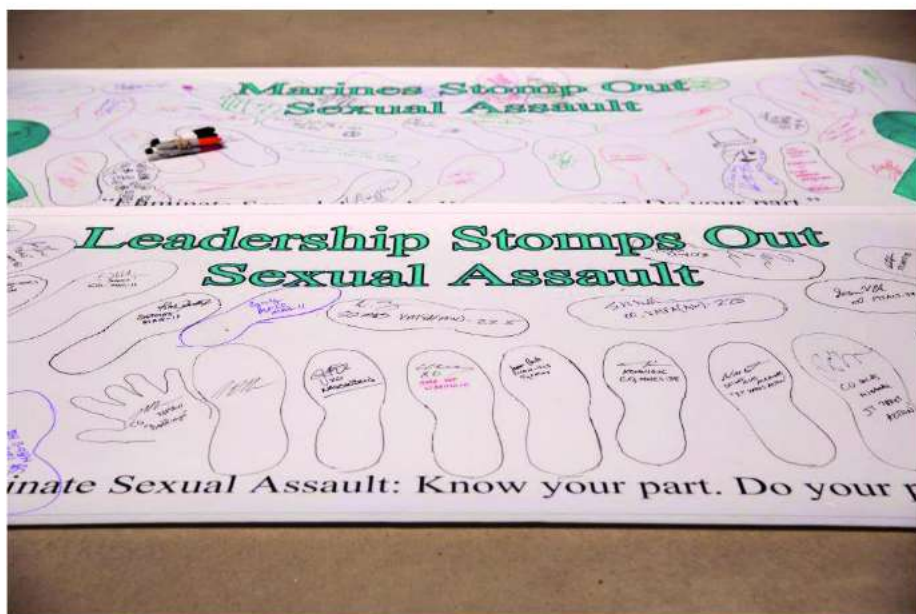
### Accountability

Finally, victims want to see the offender held accountable for his or her actions. Thus, while a Board does not equate to a criminal conviction, the decision to administratively separate a Marine for sexual misconduct operates to deprive the perpetrator of the opportunity to continue to wear the uniform and takes from him or her the benefits they would have otherwise received from honorable service (e.g., the G.I. Bill)<sup>7</sup> and other desirable benefits of service to include a veteran's hiring preference status when searching for subsequent employment. While separation will not result in the perpetrator



**Training and education about sexual assault prevention is only part of the battle.** (Photo by LCpl Alexander Cockrell.)





**Commanders at all levels can take advantage of the administrative separation process.** (Photo by Sgt Michael Thorn.)

having to register as a sex offender or serve confinement, victims rarely cite sex registration, confinement, or Federal conviction as a primary goal in a given case.

An administrative separation for the accused often serves significant victim interests much better than the court-martial process while maintaining due process protections for the respondent. Additionally, it is an avenue of redress unique to the Armed Forces in that there is no similar process at universities or in the civil system. This process recognizes the rights of the respondent, while at the same time streamlines the sexual assault victim's participation.

In recent years, the utilization of administrative separation in response to allegations of sexual assault has decreased as more cases are referred to courts-martial. Still, as rates of court-martial convictions remain low, successful separations based on administrative discharge are on the rise. In fiscal years 2012 to 2014, the number of separations for sexual assault based offenses DOD wide rose from 65, to 143, to 229 in fiscal year 2014.<sup>8</sup>

While tracking sexual assault allegation referrals to a court-martial is one measure of whether sexual assault allegations are being taken seriously, that metric should consider the

number of allegations addressed at an administrative separation board when the victim requests an alternative to a courts-martial. Commanders should more often consider a Board as a way to efficiently and effectively dispense good order and discipline within their commands in lieu of a court-martial.

### **"Marines Don't Do That"**

While an administrative separation is not perfect, it may often be the most effective way to promote speed, victim privacy, and offender accountability. Wearing the Marine Corps uniform is not an entitlement. As the Commandant of the Marine Corps recently stated, we must, "Protect what we have earned."<sup>9</sup> Marines who violate standards by engaging in sexual misconduct should not avoid being held accountable, whether the ultimate decision is to refer the case to a courts-martial or, alternatively, to a Board. The administrative process, in the right cases, promotes victim interests, proceeds much faster than the judicial system, and serves a command prerogative of maintaining good order and discipline. No civilian system can offer as much redress to victims, with lasting consequences for offenders, while minimizing re-victimization.

Commanders should feel empowered to take advantage of the administrative

separation process, where the context of the case and victim's input support such a course of action. While minor reforms of the process are still needed in order to fully protect victims, Congress should take note of the Marine Corps' ability to provide a substantial administrative remedy to victims in cases where victims would prefer to resolve the assault via Board proceedings. Victim interests of speed, privacy, and accountability will be better served in the military system by promoting redress through administrative resolution. By expanding data collection to include the results of an administrative separation board, Commanders will be more inclined to consider alternative disposition, while at the same time recognizing and respecting the goals of the sexual assault victim.

### **Notes**

1. David Lisak, "The Neurobiology of Trauma," unpublished article, (Boston, MA: University of Massachusetts, 2002), accessed at <http://www.nowldef.org>.
2. Excerpt from member's instructions on findings as read by the military judge.
3. Judicial Proceedings Panel, *2016 Report on Statistical Data Regarding Military Adjudication of Sexual Assault Offenses*, (Washington, DC: 2016), 28.
4. Headquarters Marine Corps, *Marine Corps Order 1900.16, Separation and Retirement Manual (MARCORSEPMAN)*, (30 March 2015), paragraph 6316.1 6316.1.
5. *MARCORSEPMAN*, paragraph 6102.
6. *MARCORSEPMAN*, paragraphs 6102, and 6303.3 (a)-(c).
7. The value of the Post-911 GI Bill is often estimated to be in excess of \$90,000 as of 15 March 2015, information available at <https://news.clearancejobs.com>.
8. Judicial Proceedings Panel, 43.
9. Headquarters Marine Corps, *ALMAR 032/15, Gen Robert B. Neller, 37th Commandant of the Marine Corps Holiday Message*, (Washington, DC: 2015). This sentiment has been expressed at numerous briefs provided to Marines throughout the Corps in 2015-2016.





# The Erosion Of Posse Comitatus

Protecting short-term security to the detriment of long-term liberty

by Maj Chuck Larson III

To the dismay of many conspiracy theorists, Operation JADE HELM concluded in September 2015 without the establishment of martial law across the southwestern United States. This geographically large U.S. Army Special Operations Command exercise contested joint special operations forces against a notional indigenous force located within “hostile” Texas to “master the human domain.” Certain west Texas residents, including politicians, used this exercise to qualify suspicions concerning the Obama Administration and to enlarge fears the Federal Government is deteriorating civil liberties.<sup>1</sup>

Fears of a militarized police state are understandable whenever the military conducts domestic police activities because the separation between the Armed Forces of the United States and its law enforcement agencies is unique. This codified separation is well-established in legislative law and deeply-rooted in American tradition. But since at least the 1980s, and even more so recently, the line between police and military functions has blurred with the increase in domestic terrorism and the ultimate and persuasive requirement for the Federal Government to protect the homeland.

Sizable literature within military circles advocates for a complete annulment of the 1878 Posse Comitatus Act, the Federal criminal law that prohibits the military from enforcing the domestic laws of the United States. These authors argue the Act’s purpose is archaic, rooted in racism, and its execution is no longer practical. These near-sighted arguments, while focused

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on a real and present danger, ultimately threaten long-term liberty interests. The United States should instead strengthen the Act to ensure its distinct form of government continues and its military remains relevant in future conflicts.

Defined simply as the “power of the county,”<sup>2</sup> Posse Comitatus allowed a local sheriff to summon a group of men to keep the peace, arrest felons, and suppress revolt.<sup>3</sup> The doctrine dates to the 1200s, when English communities did

not possess police departments and the individual sheriff often required assistance to enforce the law.<sup>4</sup> Posse Comitatus incorporated the notion that each individual had a responsibility to contribute to community security and local citizens—not the military—were best able to preserve peace. The colonists carried these principles to America, where the Founding Fathers harbored significant mistrust in a standing Federal military.<sup>5</sup> These fears permeated into the Constitution, which created a Federal military, but divided control between the legislative and executive branches. The Constitution also contained the Bill of Rights, which protected the right for a militia to bear arms, individual rights to privacy, access to a



**The Marine Corps can provide forces to assist local law enforcement authorities, however, the support is not intended to impinge or remove our fundamental rights as U.S. citizens. (Photo by Cpl James Trevino.)**



fair and speedy trial, right against illegal search and seizure, and rights against the quartering of soldiers. The resulting role of the military in the United States is clear: a completely necessary, but potentially tyrannical, force.

Most critics of the Posse Comitatus Act first attack its history. Following the Civil War, the military enforced martial law throughout the Confed-

Strategy designate homeland security as a paramount national security interest, and with terrorism expanding from 11 September 2001 to the 2013 Boston, 2015 San Bernardino, and 2016 Orlando attacks, homeland security is relevant. The Heritage Foundation documented at least 60 domestic terrorist attempts from 2001 to 2013,<sup>11</sup> with that number increasing through

foreign aliens operating within the territory of the United States—through the due process clause of the 14th Amendment.<sup>15</sup> Furthermore, while the military does possess the manpower and equipment to fight domestic terrorism, it does not possess the training to operate within a constitutionally-proscribed procedural process. As an occupying land force in Iraq and Afghanistan, the military conducted searches, seizures, raids, evictions, detainments, and arrests for more than a decade. The military could reproduce those efforts within the continental United States, but those overseas war functions were not limited by the 3rd, 4th, 5th, and 6th Amendments.

The desire for the military to counter domestic terrorism is understandable. Few doubt the military's commitment to liberty and freedom and its members are consistently viewed as honest. A Pew Research Center survey in 2013, for example, found 78 percent of Americans trusted the military, a much higher percentage than other professions.<sup>16</sup> Similarly, very few Americans would frown upon Marines neutralizing the Boston Marathon, San Bernardino, or Orlando terrorists. But the threat to liberty is not in the immediate, it is in the potential. Replacing long-term liberty for short-term security destroys both, and as the Founding Fathers concluded, a deliberate constitutional structure was needed to ensure that near desires did not trump fundamental rights.

Additionally, the military is already too committed globally to assume an additional domestic counterterrorism mission. Its efforts and energies must remain focused outward—to project power and protect national security interests overseas. With Iraq and Afghanistan continuing in perpetuity and additional security operations expanding into Africa, the military would not be responsive to additional contingencies if it assumed a domestic police mission. Recently, both the Army Chief of Staff and Marine Corps Commandant opined their respective forces are at “high risk” with regard to current capabilities, and both generals concluded neither the Army nor Marine Corps could fight and win another large

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***Terrorist threats to the homeland are significant, and this argument appears valid; however, it fails to recognize that Federal law enforcement entities have likewise grown since 1878 to produce a versatile and capable Federal police force.***

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eracy, to include armed protection of polling sites. This continued until the 1876 presidential election, when Republican Rutherford B. Hayes prevailed by one electoral vote, but lost the popular vote to Democrat Samuel J. Tilden.<sup>6</sup> In three disputed Southern states—South Carolina, Louisiana, and Florida—soldiers guarded polling sites to prevent fraud. After defeat, Tilden claimed these troops were supporters of Hayes.<sup>7</sup> In almost immediate response, Democrats introduced the Act, and, in concession, President Hayes withdrew military forces from the South and signed the Act into law on 18 June 1878.<sup>8</sup>

Today, the Act reads,

Whoever, except in cases and under circumstances expressly authorized by the Constitution or Act of Congress, willfully uses any part of the Army or the Air Force as a posse comitatus or otherwise to execute the laws shall be fined under this title or imprisoned not more than two years, or both.<sup>9</sup>

Courts have interpreted the Act to limit only the direct use of the military in law enforcement, defined as arrests, searches and seizures, criminal investigations, and interviewing witnesses.<sup>10</sup> A common theme among these prohibited activities is a corresponding civil liberty.

Both the current National Security Strategy and the National Military

2016. Because of this new and growing threat, critics argue the Posse Comitatus Act limits the Government's ability to defend the homeland by restricting the use of the military to engage in domestic counterterrorism.

Terrorist threats to the homeland are significant, and this argument appears valid; however, it fails to recognize that Federal law enforcement entities have likewise grown since 1878 to produce a versatile and capable Federal police force. The Federal Government employed approximately 120,000 full-time law enforcement officers within 73 law enforcement agencies in 2008,<sup>12</sup> including more than 4,000 dedicated to terrorism within the Federal Bureau of Investigation.<sup>13</sup> Similarly, cities and states employed more than 800,000 law enforcement personnel in 2014.<sup>14</sup> The United States today contains a robust, capable, and coordinated law enforcement system that ranges from local departments to nation-wide agencies. Given these resources, military manpower is simply not needed to defeat domestic terrorism.

Critics also argue the military is the most-effective response to domestic terrorism. The Constitution, however, provides a roadblock. Islamic State adherent or not, constitutional protections apply to domestic terrorists—to include



war while maintaining current commitments.<sup>17</sup> Adding a domestic police mission would further strain military readiness and resources.

As drafted, the Act works, and Congress does not need to make significant revision to its language. There are two steps, however, the Government should take to reinforce the intentional separation of military and police functions. First, if military capabilities are necessary to conduct police functions, the President should resist the urge to federalize the National Guard under Title 10 and retain those forces under state control. The National Guard, as a present day state militia, affords military assets and personnel for state security at the control of the governor. National Guard units are comprised of local citizens, reside in local communities, and are closely aligned with the friends and neighbors they protect and serve. Similar to local and state police forces, this proximity provides a layer of accountability and comfort not resident in Federal forces deployed amongst local communities.

The Act applies to the Federal military, not the National Guard, unless the Guard is federalized under Title 10. Retaining National Guard forces under state authority, or even Title 32 state control for Federal service, would allow these soldiers the ability to conduct policing functions in response to domestic terrorism. These are exactly the actions National Guard forces executed in response to 11 September 2001 while securing more than 450 state airports for nearly six months.<sup>18</sup>

Despite residing outside the Act, the National Guard is nevertheless responsible to the Constitution. While this creates the same dilemma for National Guard soldiers executing police functions as it would active duty forces, the National Guard, as a state asset in support of state aims, contains the flexibility to train for police functions. As a dual mission entity—providing trained and disciplined forces for domestic emergencies at the state level while simultaneously maintaining properly equipped units for mobilization of war at the Federal level<sup>19</sup>—the National Guard should prioritize its state mission

over its federal mission in response to domestic terrorism.

A second measure Congress should take is to create an evidentiary exclusion rule within the Posse Comitatus Act. This would strengthen the Act by ensuring any constitutional violations—for instance an illegal search or seizure by military members during the conduct of a domestic counterterrorism operation—would not result in an illegal conviction. Essentially, the military could search a home, but, if not done correctly, any evidence retrieved from that illegal search would be inadmissible. Exclusion would provide a remedy—albeit after the fact—for constitutional violations.

Calls to annul the Posse Comitatus Act in response to domestic terrorism fail to appreciate resident law enforcement capabilities and the importance of separate military and police functions. The Founding Fathers were wise to mistrust a standing federal military and created specific constitutional controls to ensure liberty. While security is a righteous pursuit, it is not the absolute pursuit, and only true liberty provides security.

Despite possessing the manpower and equipment to counter domestic terrorism, the Armed Forces are not the solution. Its focus and energies are better dedicated elsewhere. The military must remain focused on future global conflicts, not domestic policing. The U.S. Government should therefore look long term and strengthen the Posse Comitatus Act to ensure its government and constitution remain intact and its peoples remain free.

#### Notes

1. Manny Fernandez, "Unscathed as War Games Begin, Texans Keep Watch, 'Just in Case,'" *New York Times*, (New York: 16 July 2015).
2. Bryan A. Garner, editor, *Black's Law Dictionary, 3d Pocket Edition*, (St. Paul, MN: West Publishing Co., 2001), 546.
3. Sean J. Kealy, "Reexamining the Posse Comitatus Act: Toward a Right to Civil Law Enforcement," *Yale Law & Policy Review*, (New Haven, CT: 2003), 384, 389.

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8. Hammond, 961.

9. 18 U.S. Code § 1385, (2011).

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15. David Cole, "Are Foreign Nationals Entitled to the Same Constitutional Rights as Citizens?," *Thomas Jefferson Law Review*, (San Diego, CA: 2003), 367.

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18. Timothy J. Lowenberg, "The Role of the National Guard in National Defense and Homeland Security," National Guard Association of the United States, accessed at: <http://www.ngaus.org>.

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# Let the Machine Work

Protecting communications to instill confidence  
in sexual assault reporting and response

by Maj Jess Martz & Marie Brodie

**M**arines take care of Marines—it's a concept as old as the Corps. Gen John A. Lejeune reminded us of this in the 1921 edition of the *Marine Corps Manual* when he discussed the "Teacher and scholar" relationship that should exist between officers and enlisted and

especially commanding officers, [who] are responsible for the physical, mental, and moral welfare, as well as the discipline and military training of the young men [and women] under their command.<sup>1</sup>

When a Marine reports a sexual assault, it is for leaders to do everything possible to take care of that Marine. In taking care of a Marine who has been victimized, commanders may want to speak to uniformed victim advocates (UVAs) or victims' legal counsel (VLCs) to get more information. However, when leaders ask UVAs for information relating to or provided by a victim, unintended damage can be done to the victim and to the sexual assault investigation. Because of this damage that can occur, a UVA is prohibited from disclosing what the victim shares with that UVA in the course of providing the victim services.<sup>2</sup> When UVAs disclose these confidential communications, they can bring harm to the victim they are providing services to and deter future victims within the unit from coming forward. The best approach is to let the Sexual Assault Prevention and Response (SAPR) Program and military or civilian justice system run their course. UVAs are essential members of this "machine" and of the "services"

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available to a Marine victim of sexual assault. However, UVAs are particularly at risk to bring harm to a victim or to the integrity of an investigation because they are first responders and because they are typically appointed in writing by the commander. This tends to put them in a loyalty dilemma—choose between answering the unit's questions versus protecting a victim's confidentiality. A best practice for commanders and leaders is to approach reports of sexual assault with the "let the machine work"

mindset in order to protect the victim, protect the UVAs who serve the commander and the victim, and protect the military justice process that may follow the report of the sexual assault.

## Understanding Confidential Communications

To accomplish this, it is essential to understand the ethical obligations of UVAs, as well as the roles of those involved in the sexual assault process. The UVA is not the person who should be



**Being aware of the program also means knowing with whom information about sexual assault can be shared. (Photo by Cpl Joseph Scanlon.)**



providing updates to the commander on the victim. This role is filled by at least one of the other following individuals: the sexual assault response coordinator (SARC) (if not acting as a victim advocate), the staff judge advocate, Naval Criminal Investigative Service (NCIS), and/or the trial counsel. Remember, the UVA was selected by his commander to provide someone within the unit that victims of sexual assault can report to under the umbrella of confidentiality.<sup>3</sup> From the time that a UVA talks to a victim of sexual assault until eternity, that UVA must comply with certain rules pertaining to confidentiality and privilege, depending on whether or not the report is restricted or unrestricted. There are very few exceptions to the general rules of confidentiality and privileged communications between UVAs and victims when providing victims UVA services.

The most recent authority states that information regarding restricted reports should only be shared with “persons authorized to accept Restricted Reports or as authorized by law or DoD regulation.”<sup>4</sup> Persons “authorized” are typically the UVA, SARC, VLC, medical, and mental health professionals. Every Marine leader should become familiar with what information can not be disclosed under restricted and unrestricted reporting as well as the policy behind it so that the UVA is not placed in the dilemma of paying respect to his leadership while also maintaining confidentiality.

A communication is “confidential” if made in the course of the advocate-victim relationship—it is not intended to be disclosed to third persons other than those to whom disclosure is made in furtherance of the rendition of advice or assistance to the alleged victim or those reasonably necessary for such transmission of the communication.<sup>5</sup> It is presumed that such communications will be kept private so that reporting and seeking help is encouraged. There are greater limitations on what a UVA can share about the victim if the report is restricted.

## Restricted Reporting

In restricted reporting, very little is shared outside the umbrella of UVA-



*Throughout the process—training, reporting, confidence—the integrity of the UVA must never be called into question. (Photo by LCpl Jackeline Perez Rivera.)*

victim confidentiality. Keep in mind that this reporting option exists so that victims of sexual assault may privately divulge the assault to the SARC, UVA, or medical personnel in order to get medical treatment alongside SARC and UVA support.<sup>6</sup> Any personally-identifiable information related to the victim and the incident provided by the victim to the SARC, UVA, or healthcare personnel is confidential.<sup>7</sup> That means that the victim’s name and any other “information about the person or the facts and circumstances involved that could reasonably be understood to identify the person,” as well as the victim’s Sexual Assault Forensic Examination

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***There are very few exceptions to the general rule of privilege.***

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(SAFE) Kit and its information must remain confidential.<sup>8</sup> As an example, if the victim is the only female sergeant in the unit, it is advisable for the SARC to not share the victim’s rank, or if the victim is the only female in the unit, do not share the victim’s gender when reporting the crime to the installation commander.

## Unrestricted Reporting

In terms of what is shared inside UVA-victim communications once an unrestricted report is made, a victim has a privilege to refuse to disclose and to prevent any other person from disclosing a confidential communication between a victim and a SARC and SAPR VA, in a case arising under the UCMJ, if such communication is made for the purpose of facilitating advice or supportive assistance to the victim in accordance with Military Rule of Evidence (MRE) 514.<sup>9</sup> MRE 514 is a statutory privilege that protects victim communications with their victim advocate and was just recently extended to those communications made with the Department of Defense Safe Helpline staff.<sup>10</sup>

There are very few exceptions to the general rule of privilege. Some examples include when a victim advocate believes that a victim’s mental or emotional condition makes them a danger to themselves or others; the communication clearly contemplated the future commission of a fraud or crime, or if the services of the victim advocate are sought or obtained to enable or aid anyone to commit or plan to commit what the victim knew or reasonably should have known to be a crime or fraud; to ensure the safety and security of military personnel, dependents, military



property, classified information, or the accomplishment of a military mission; or when the victim is dead.<sup>11</sup>

The victim advocate-victim privilege was created to help victims. It has the additional benefit of improving the military's approach to addressing sexual assaults and responding to congressional concern. Like the psychotherapist-patient privilege, this rule establishes a UVA-victim privilege that applies to misconduct situations constituting a case that could result in UCMJ proceedings. This privilege also allows victims who otherwise might not report because of collateral misconduct, such as drug use, underage drinking, attending off-limits locations, and breaking restriction, to report the crime committed against them and seek services to recover from their assault.

To illustrate the importance of the privilege shared between victims of sexual assault and their UVAs, here are a few examples of breaches of confidentiality. These are all avoidable if those involved are educated on what UVAs should not discuss, to include the UVAs, not just their leadership.

*Example 1.* A victim, who was already a victim-witness in a pending general court-martial for a sexual assault that occurred several months before, calls her UVA to report a subsequent sexual assault. The victim tells her UVA in the course of using the UVA's services that the person who sexual assaulted her was the "same person as last time I was assaulted." The victim tells the UVA that the victim already contacted law enforcement and that NCIS was on the way to interview her. A few hours later, and after the victim completes interviews with NCIS, the UVA seeks clarification from the victim that she meant it was "the same Marine" who assaulted her several months prior. The victim denies that she ever told the UVA it was the "same person as last time." The UVA tells NCIS about the victim's differing statements.

This is a breach of confidentiality because the UVA should not be disclosing what the victim told them in the course of providing UVA services unless

it meets one of the exceptions of MRE 514.

*Example 2.* A third party reports a sexual assault to NCIS. Both the offender and the victim are Marines but belong to different commands. The commander of the victim is notified and sends a UVA to go care for the victim. The UVA returns and tells the commander what the victim told the UVA when the UVA met with the victim.

This is a breach because the UVA is not permitted to disclose communications made by the victim while the UVA was providing UVA services. Now,

*Example 3.* A UVA for her unit and her unit is deployed in a remote location. On Saturday night, the UVA stood duty as the unit's Assistant Officer of the Day. A victim contacted the UVA on her personal cell phone number that the victim obtained from a member of the command and asked for advice about restricted reporting. The UVA is not the only UVA in the unit but still helps the victim anyway. The victim decides to elect restricted reporting. The next day, the UVA tells the executive officer during duty turnover that she had to put her "UVA hat on last night." The

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***The victim advocate-victim privilege was created to help victims. It has the additional benefit of improving the military's approach to addressing sexual assaults and responding to congressional concern.***

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the UVA is a potential witness in any military justice proceedings that could stem from the NCIS investigation. To preserve the integrity of the process, the commander should have contacted the SARC and the only information provided from then on, should come from the SARC, not the UVA. The SARC would only provide information on services provided to the victim if the victim elected to use SAPR services. This protects the victim, the UVA, and also any future military justice proceedings in the event that the victim participated with the military justice process.

executive officer asks the UVA what happened. The UVA tells him that a Marine made a restricted report, and the UVA tells the executive officer that the victim is a female corporal from the S-6 (communications) section. There is only one female in the S-6 section.

This is a breach of confidentiality because in restricted reporting, PII may not be disclosed. The female corporal is the only female in the entire section. Disclosing her gender makes it obvious who the victim is and violates confidentiality within restricted reporting. The UVA cannot and should not dis-



**Banners are held up before the start of a SAPR walk at MCAS Miramar. (Photo by Sgt Michael Thorn.)**





**Some units combine physical training with PME sessions to raise awareness about the SAPR Program. (Photo by Sgt Carson Gramley.)**

close anything. It is up to the SARC to give non-PII information regarding the restricted report to the installation commander. The victim's commander would not be notified so long as the report remains restricted. The potential impact on this particular victim is that she may not want to participate in the process if what she tells the UVA is then disclosed to members of the chain of command. This may also have a chilling effect on future victims coming forward.

Leaders within the Marine Corps can preserve the integrity of the reporting process in the hopes of seeking justice—whatever that may be in a particular case and to protect the rights of the victim. By safeguarding the communications the victim shares with their UVA, leaders can proactively prevent those involved with sexual assault cases from getting into trouble for seeking or divulging too much information. The UVA is the protector of communications with victims of sexual assault, and as example, if the UVA is asked for their opinion and they give it regarding a case, that is improper. Improper disclosures under either reporting option “are prohibited and may result in disciplinary action pursuant to the UCMJ or other adverse personnel or administrative actions.”<sup>12</sup>

The purpose of a UVA sometimes gets lost in the stress of a report of sexual assault. If the purpose is kept in mind, the integrity of the services provided by the UVA will be preserved which instills confidence in the unit, encouraging future victims to come forward because they know the information they share with their UVA will be kept confidential and/or privileged. If we keep in mind what Gen Lejeune said in 1921, it makes it easier to let the machine work because it is in the best interests of justice and the victim:

The realization of this responsibility on the part of officers is vital to the well-being of the Marine Corps. It is especially so, for the reason that so large a proportion of the men enlisting are under twenty-one years of age. These men are in the formative period of their lives, and officers owe it to them, to their parents, and to the nation, that when discharged from the services they should be far better men physically, mentally, and morally than they were when they enlisted.<sup>13</sup>

#### Notes

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2. Department of Defense, *DOD Instruction 6495.02, Sexual Assault Prevention and Response (SAPR) Program Procedures*, (Washington, DC: 7 July 2015).

3. Ibid.

4. Ibid.

5. Military Rule of Evidence (Mil. R. Evid.) 514, 2016 edition, is the victim advocate-victim and Department of Defense Safe Helpline staff-victim privilege. This rule states that “a victim has a privilege to refuse to disclose and to prevent any other person from disclosing a confidential communication made between the alleged victim and a victim advocate ... in a case arising under the UCMJ, if such communication was made for the purpose of facilitating advice or assistance to the alleged victim.” The rule also discusses the definition of “confidentiality,” by explaining that a communication is confidential “if made in the course of the victim advocate-victim relationship ... and not intended to be disclosed to third persons other than those to whom disclosure is made in furtherance of the rendition of advice or assistance to the alleged victim or those reasonably necessary for such transmission of the communication.” The full text of Mil. R. Evid. 514 is available starting on page 40 of the electronic document available at <http://jsc.defense.gov>.

6. *DOD Instruction 6495.02*, 35.

7. Ibid.

8. Department of Defense, *DOD Instruction 6495.01, Sexual Assault Prevention and Response (SAPR) Program*, (Washington, DC: 20 January 2015).

9. *DOD Instruction 6495.02*, 36.

10. Mil. R. Evid. 514.

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13. *Marine Corps Manual*.





# PES Shortfalls

## How to improve the end product

by LtCol Robert G. Antolino

**T**he Marine Corps Performance Evaluation System (PES) purpose is to support selection, promotion, and retention decisions as well as aid personnel assignment decisions.<sup>1</sup> However, the current system has a fundamentally flawed grading scale, presents reporting seniors (RS) with the unresolvable dilemma that surrounds the concept of report relative values (RV), and sets the stage for ambiguous and potentially unsupported reviewing officer (RO) assessments. Fortunately, there are simple ways to improve upon each of these areas of concern.

### Attribute Grading Considerations

Minimizing report grade inflation was one of the major stimuli for our present evaluation system. The current system does offer some protection against grade inflation in mandating that RSs justify F or G attribute markings.<sup>2</sup> However, the present attribute grading system has two key flaws. First, with the exception of “fulfillment of evaluation responsibilities,” the description of each attribute’s level of demonstrated performance clearly sets the competency standard as a B marking.<sup>3,4</sup> The problem with that is RSs cannot realistically use B as the standard because it allows no room to mark a Marine as needing improvement without rendering the report adverse (A marking).<sup>5</sup> Second, the number of grade options makes the report simply too complex and allows subjectivity to creep into the evaluation process as an RS must select which of the five above average options (C through G) are appropriate. Compounding the problem, only two of the above average mark options have associated descriptions.

The first step to improving the evaluation process is to reduce the number of attribute grade options to five:

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- A: Unsatisfactory (-1 point);
- B: Needs Improvement (0 points);
- C: Meets the Standard (1 point);
- D: Exceeds the Standard (2 points); and
- E: Far Exceeds the Standard (3 points).

A vital component to ensure inflation does not creep into this process is to require justification comments for all marks that diverge from average performance (C). As with the current fitness report process, assigning a single A

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mark would render the report adverse; comments must include the unsatisfactory performance or conduct and the conditions under which they occurred.<sup>6</sup> New to this proposed grading system, assigning a B mark requires attribute justification comments to concisely define the areas of needed improvement. The difference from the present system is the report need not be rendered adverse for identifying areas of weakness. For this process to keep with the spirit of the PES, it is important in both cases for RSs to provide Marines with

appropriate counseling and adequate opportunities to improve during the reporting period.<sup>7</sup> Justifications for D and E marks would remain aligned with the present system (sustained, exceptional performance), and E markings would be reserved for extremely rare occasions.<sup>8</sup> Similar to the present system’s review of high marks, ROs would need to scrutinize all markings that diverge from average performance to ensure the PES intent is upheld.<sup>9</sup> For trend analysis and PES standards enforcement, the Marine Corps’ Manpower Management Records and Performance (MMRP) Branch should track the number of E markings each RS assigns per pay grade. Lastly, to decrease the level of subjectivity in assigning attribute marks, the three currently used level of performance descriptors associated with each attribute should be revalidated and applied to the new C, D, and E marks.

### RV Considerations

The establishment of report RVs was a second measure potentially introduced to combat grade inflation but brought with it unintended consequences. According to MMRP, the lone purpose of the RV is “to provide a promotion/selection board with a quick interpretation of a FITREP’s placement within an RS’ profile.”<sup>10</sup> Though MMRP further explains that RV was “not designed to be a stand-alone metric,”<sup>11</sup> human nature dictates that RV has been and will continue to be heavily weighted by board members in determining a Marine’s performance because it is readily available and easily compared across all Marines being screened. In fact, the *PES Manual* actually encourages individuals making personnel decisions to use RV “to weigh the merit of that report.”<sup>12</sup>

RVs are detrimental to the evaluation process for two reasons. First, there is



no way to factor into the RV equation the very real possibility that an RS may have simply been placed in an environment with a group of exceptionally well, average, or poor performing Marines.<sup>13</sup> For example, when I was assigned to the staff of The Basic School, I wrote 31 reports on 30 captains. Evidenced by my congruent report grade point averages (GPA) and RS comments, I found the vast majority to be above average to exemplary performers, yet only 10 broke out as top third Marines according to their RV. Second, the RV concept is in direct conflict with the PES directive for RSs to focus on a Marine's individual performance of assigned duties and responsibilities during the designated reporting period.<sup>14</sup> If a Marine's performance earned an above average evaluation, that assessment should not later be marginalized (i.e., viewed as middle or even bottom third) because subsequent Marines earned higher marks from the same RS; the same logic also applies to artificially elevating below average performance. However, because of that potential outcome, RSs are compelled to consider how they marked previous Marines of the same grade in order to avoid unintended skewing of their profile that could unduly impact those Marines' future opportunities in the Corps. The bottom line is if RSs are expected to confine their evaluation to that individual Marine during the designated reporting period, then individuals using the fitness report to make personnel decisions should be constrained to work within that same context.

With those considerations in mind, the second step to improving the evaluation process is to eliminate RVs. The fact that HQMC feels the need to provide identical briefings on the basics of how RVs work to both new and experienced reporting officials is proof enough that the use of RVs is too confusing and presents tremendous risk to the integrity of the PES.<sup>15</sup> More importantly, RSs, unlike ROs, are not supposed to provide a comparative assessment of Marines they observed; that is exactly what RV provides. The individual GPA is all that should be made available for personnel making decisions on promotion, selection, retention, or assignment. That is

Personal Example of Disproportionate Award of Top Reviewing Officer Marks

	O-4 Reports (#)	Top 3 Blocks (%)	Top 2 Blocks (%)
RO #1	54	87.0	40.7
RO #2	80	93.8	57.5
RO #3	66	97.0	69.7
RO #4	73	80.8	20.5

the lone numerical qualifier that details how the individual Marine performed his assigned duties and responsibilities during the report period. Furthermore, MMRP should track each RS' cumulative GPAs and ROs should be required to review this data as a proactive measure against report inflation.

#### RO Considerations

The *PES Manual* clearly provides ROs with leeway in determining if they have the sufficient knowledge and observation of a Marine's performance and future potential to fairly complete an evaluation of that Marine. However, as an apparent check and balance to the last point, the *PES Manual* also requires the RO to "characterize his or her level of observation of the MRO."<sup>16</sup> Unfortunately, the PES intent of characterizing the level of observation has seemingly been relegated to checking the sufficient observation box in lieu of providing an actual description of how the RO was in position to fairly assess the Marine. What that distinction causes is the opportunity for ROs to influence a Marine's future service opportunities without truly knowing enough about a Marine's performance or potential to warrant such authority. The perception that this could—and does—happen is enough to undermine the PES integrity.

On another front, the ambiguous nature of the various comparative assessment mark descriptions opens the door to potentially contradictory comments and RO grade inflation. The *PES Manual* requires the RO to "compare the MRO's professional abilities and potential to other Marines of the same grade whose professional abilities are

known to the RO."<sup>17</sup> Considering that statement, it is unreasonable for a well-established RO profile to be comprised almost entirely of Marines marked as either the "eminently qualified Marine" (8 block) or "one of the few exceptionally qualified Marines" (6 or 7 block). However, it is not uncommon to find extensive RO profiles that are dominated by Marines in the 6, 7, or 8 blocks. For example, my last four ROs have a combined 273 observed reports on majors; 129 (47.3 percent) were marked in the 7 or 8 block and 245 (89.7 percent) were marked no lower than the 6 block.

The problem of inflated marks is then amplified when ROs fail to match these high marks with correspondingly exceptional comments related to potential service in positions of greater responsibility. The end result is an inflated RO evaluation that at best becomes unusable to board members and at worst derails a Marine's potential for advancement, quite possibly without the RO having contributed anything to the Marine's development during the reporting period. (See chart above.)

The final step to improve the evaluation process is twofold. First, the *PES Manual* must specifically require ROs to articulate the methods of observation they used to formulate their evaluation (e.g., regular discussions with the RS or other leaders who consistently work with the Marine, consistent personal interactions, or overall unit performance if applicable to the assigned billet). This directive will (a) encourage ROs to actively participate in each Marine's evaluation process, (b) provide ROs with valuable insights on their subordinates' leadership and evaluation writing performance, and (c) provide Marines ad-





**We evaluate their performance and highlight future potential.** (Photo by LCpl Shellie Hall.)

ministrative recourse if they can prove such observation was clearly not evident. Second, the comparative assessment descriptors need to be tied directly to the factor on which the Marine is being evaluated against his peers: potential to serve in more senior positions.<sup>18</sup> Doing so would eliminate ambiguity and simplify the screening process for board members. The following is an example of recommended assessment descriptors:

- 6 block: Promote now;
- 5 block: Promote ahead of peers (below-zone);
- 4 block: Promote with peers (in-zone);
- 3 block: Continue to develop for potential promotion behind peers;
- 2 block: Has not demonstrated promotion potential; or
- 1 block: Performing below the expectations of present grade (unsatisfactory).

### Conclusion

Our current fitness report system is designed to minimize grade inflation, document performance, and highlight future potential but has multiple contributors from an RS and RO perspective that directly conflict with those goals. The system must be revised to provide reporting officials with clear grading scales and hold them accountable to support their marks with matching comments. The RV factor must be removed from the evaluation system altogether, as it is inconsistently impacted by each reporting official and

conceptually contrasts with the PES mandate to evaluate a Marine based on assigned duties and responsibilities in the current assignment. Arguably the most important point is reporting officials must be allowed to comment on areas of weakness without rendering the report adverse. Aside from that being the currently missing half of a thorough and honest evaluation, such insight would provide board members

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far greater value than vaguely positive comments or “tactical omissions” should the Marine’s performance improve or stagnate on future reports. In the end, these changes would force increased participation in the evaluation and counseling processes from all involved parties and support the PES primary purpose of clearly identifying the most qualified Marines.<sup>19</sup>

### Notes

1. Headquarters Marine Corps, *Marine Corps Order 1610.7, Performance Evaluation System*

(PES), (Washington, DC: 13 February 2015), 1-1.

2. Ibid., 4-22 to 4-23.

3. Ibid., 4-24 to 4-38.

4. Average performance for the “fulfillment of evaluation responsibilities” attribute is best described by the level of demonstrated performance listed under the D marking. See *MCO 1610.7*, 4-38.

5. Ibid., 4-22.

6. Ibid.

7. Ibid., 1-3 to 1-4.

8. Ibid., 4-22 to 4-23.

9. Ibid., 4-50.

10. “New Reporting Official PES Brief,” 56; Pennington 9.

11. Ibid.

12. *MCO 1610.7*, 8-5.

13. The relative value equation is  $[(\text{report average} - \text{RS average}) / (\text{RS max} - \text{RS average})] \times 10 + 90$ , with the caveat that 80.0 is the minimum assigned value. See Adam Clemens, et al, “An Evaluation of the Fitness Report System for Marine Officers,” (Washington, DC: Center for Naval Analysts, 2012), 8. In RS profiles where individual report averages vary only slightly from the RS mean average, the difference between the bottom and top thirds can be as little as 2 of the 98 possible grade points.

14. *MCO 1610.7*, 1-2, 4-21.

15. “New Reporting Official PES Brief,” 55–60; Pennington 8–13.

16. *MCO 1610.7*, 4-46.

17. Ibid.

18. Ibid., 1-3, 4-47.

19. Ibid., 1-1.





# The PES

Train like we fight

by Maj David R. Dixon & 1stLt Matt Ford

**“S**he will make a great Huey pilot in the Fleet.” An encouraging comment like this on a performance evaluation would certainly bode well for the career of a young aviator completing helicopter training. Unless, of course, that Marine happens to be a male in the AH-1W Cobra syllabus. While comical, this true example of a Section I comment (from an obviously aloof reporting senior) illustrates a painful fact that many of us have experienced firsthand—young Marine officers often author maladroit fitness reports (FITREPs).

This anecdote also highlights one of the numerous issues discussed during the Marine Corps Warfighting Lab’s Innovation Symposium which convened in Quantico from 23 to 24 February 2016. The symposium assembled disruptive thinkers from across the DOD in order to address the myriad uncertainties and challenges that create barriers to innovation and to propose solutions in order to develop a learning organization that is ready to meet future warfighting challenges.<sup>1</sup> This is a bold mission statement indeed, and in order to succeed as a military organization, it is paramount that we recognize, promote, and retain the most talented and fully-qualified SNCOs.

However, accurately assessing the quality of a SNCO is a difficult task for a promotion board, which relies almost exclusively on the FITREPs from the SNCOs reporting seniors and reviewing officers—many of whom have little or no experience writing performance evaluations. Frankly put, most lieutenants are unsatisfactory FITREP writers. Almost everyone reading this article has either once been a novice lieutenant or had one evaluate you at some point. How many sergeants and SNCOs have had their otherwise exemplary careers

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***“Since war is at base a human enterprise, effective personnel management is important to success. This is especially true for a doctrine of maneuver warfare, which places a premium on individual judgment and action.”***

**—MCDP 1, Warfighting**



**We train lieutenants to be infantry leaders, but we don’t do a good job teaching them how to write effectively. (Photo by LCpl Thomas Mudd.)**



damaged or possibly ruined by a well-intentioned but overzealous company-grade officer whose limited knowledge of the Performance Evaluation System (PES) caused him to write an inaccurate appraisal? This problem has existed for decades yet there has been little done to address how we train lieutenants to write FITREPS. This article proposes a solution that costs zero dollars, adds zero time to the current periods of instruction for officers, and can be implemented within a month.

Years ago, students at TBS wrote peer evaluations on each other that were more affectionately known as “spear evals.” After an assigned training periods (usually every two weeks), the student squad leaders would rank his squad, each student platoon commander would evaluate the squad leaders, and so on. The ranking criterion was extremely subjective and shrouded in the personal biases of the student evaluator. The delivery method for these spear evals was even more obscure and awkward. At the end of the six month TBS syllabus, students would tape an empty manila envelope to their barracks door, and the lieutenants would surreptitiously slip their opinions into each other’s packets. You were never really sure who said what—you just woke up in the morning with a bunch of index cards where your platoon mates anonymously vented about how great or terrible they thought you were based on whatever grading standards each person deemed most important.

Needless to say, that was an absurd system that made it extremely difficult to obtain accurate feedback. Even worse, spear evals did nothing to teach lieutenants about how the PES actually works in the Marine Corps. The process today at TBS has evolved somewhat—the mouse and keyboard have usurped the notecard and envelope—and now the lieutenants use the five TBS “horizontal themes” to rank themselves against each other. These themes are:

1. A man or woman of exemplary character.
2. Devoted to leading Marines 24/7.
3. Able to decide, communicate, and act in the fog of war.



***We use computers for everything, why not create a computer program for lieutenants at TBS that mimics FITREP grading scales and RS/RO profile formulas? (Photo by Cpl Paul S. Martinez.)***

4. A warfighter who embraces the Corps’ warrior ethos.

5. Mentally strong and physically tough.

These themes are solid, and they may be adequate for lieutenant students to critique each other; however, this is not

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### ***Years ago, students at TBS wrote peer evaluations on each other ...***

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how we actually conduct evaluations in the Marine Corps. In other words, we are not training like we fight.

The solution is simple. TBS students should write training FITREPS on each other in order to intimately learn the Marine Corps PES, master brief sheet, and promotion process. Logically, fireteam leaders would RS (reporting senior) their fireteam, and the squad leader would RO (reviewing officer) fireteam members. Squad leaders would RS their fireteam leaders, and the student platoon commander would RO the fireteam leaders, and so on and so on.

By the end of the six-month syllabus, each student will develop a comprehensive RS/RO profile in addition

to personally receiving dozens of training FITREPS—all of this would be reflected on the student’s training master brief sheet. After TBS graduation, these training FITREPS would be expunged from the system by the FITREP Division at HQMC.

If HQMC is unable or unwilling to cooperate by eliminating these training FITREPS, a pragmatic solution is for TBS to develop a program in Microsoft Excel that identically mimics the FITREP grading scale, RS/RO profile formulas, and master brief sheet profiles. We don’t need to hire computer engineers or bid out contracts to software companies in Silicon Valley. There are lieutenants at TBS right now who could easily write these formulas in Microsoft Excel. In order to get this program quickly online we could utilize the free market economic principle of competition. If the Commanding Officer, TBS, offered a Navy/Marine Corps Achievement Medal and a “96” to the student team who designed the most accurate model based on our FITREPS and master brief sheets, it would be done in less than one month. More importantly, the TBS lieutenant community would feel ownership of the process. If this does not work for some reason, then we could direct some of our bright captains and majors studying



in the computer science or manpower systems analysis curriculum at the Naval Postgraduate School to design this Excel program. The point is that we have the brainpower right now within the Marine Corps to get this up and running soon.

Training FITREPS will familiarize lieutenants with the arcane technicalities of the PES grading criteria and RS & RO rankings. Lieutenants would furthermore learn the even more befuddling intricacies of Master Brief Sheets (such as the “at processing” and “cumulative” FITREP averages, and the “upper, middle, lower”/“above, with, below” RS and RO profile scores). The profiles that students create on each other can then be used as a training aid during the promotion block to help young officers understand how their performance evaluations influence the promotion system.

Each lieutenant would surely get the uncomfortable opportunity to receive a few unjust or inaccurate training FITREPs. TBS lieutenants would then understand what it feels like to get rooked on a FITREP and how those few inaccurate FITREPS can inflict long-term carnage on their master brief sheet. These unsettling moments will emotionally seal the learning objectives into the lieutenant’s brains, thus making it less likely that they will give erroneous or half-hearted evaluations to their sergeants and SNCOs in the future. Moreover, by using training FITREPS and master brief sheets, the staff platoon commanders at TBS will have much more accurate means of evaluating their students’ leadership potential. Everyone wins.

TBS has already apportioned time in their syllabus for peer evaluations. The same amount of time will be spent evaluating, just using training FITREPs instead of the five horizontal themes. The bottom line is that the intent of this article can be met with zero money spent by the Marine Corps and zero time added to the TBS syllabus.

A very small percentage of lieutenants will actually fire their weapon in combat or call in an airstrike via a nine-line, but every single officer will write FITREPS on sergeants and SNCOs. Yet, TBS devotes only a few classes to



**Effectively written fitness reports result in the promotion of our most deserving SNCOs.** (Photo by LCpl Shellie Hall.)

teaching this vital skill. FITREPS are highly technical and writing them can become an emotionally charged ordeal. Athletes can’t learn how to play football or basketball in a classroom, and lieutenants can’t become astute evaluators without feeling the pain over many repetitions.

Historically, lieutenants write clumsy FITREPs and do not understand the impact that a few inaccurate evaluations can have on a SNCO’s career and morale. This injustice to our enlisted Marines demands bold innovation and a better way of doing business. Change of any sort is typically unpopular, especially for a monolithic organization that highly values uniformity (such as the military). LtGen Michael Dana explored the Warfighting Lab Symposium to, “Be innovative despite the machine.”<sup>2</sup> *MCDP 1, Warfighting*, also reminds us that,

Since war is at base a human enterprise, effective personnel management is important to success. This is especially true for a doctrine of maneuver warfare, which places a premium on individual judgment and action. We should recognize that all Marines of a given grade and occupational specialty are not interchangeable and should assign people to billets based on specific ability and temperament.<sup>3</sup>

We will never meet the intent of *MCDP 1* unless we recognize, promote, and

retain the most talented and fully qualified SNCOs—there are few things more important in our Corps. We can accomplish this only if company grade officers adeptly utilize the PES. In order to train like we fight, TBS should replace their five horizontal themed peer evaluations with a system that teaches about actual FITREPS, master brief sheets, and the promotion board process.

## Notes

1. Headquarters Marine Corps, *MARADMIN 041/16, Marine Corps Warfighting Lab Force Development 25: Designing The Future Force (Innovation Symposium)*, (Washington, DC: 22 January 2016).
2. Opening Comments by LtGen Michael Dana, *Marine Corps Warfighting Lab Force Development 25: Designing the Future Force (Innovation Symposium)*, (Quantico, VA: Marine Corps University, 23 February 2016.)
3. Headquarters Marine Corps, *MCDP 1, Warfighting*, (Washington, DC: 1997), 64.





# A Modest Rebuttal

Response to “Innovation: And other things that brief well”

by Capt Jeffrey E. Little

**T**he *Marine Corps Gazette* recently published an article by an active duty Marine captain who blamed the headquarters establishment for what he perceived as the Corps’ inability to embrace meaningful innovation in both our personnel and procurement policies.<sup>1</sup> Though well intended, the article poorly analyzes the obstacles that often hinder our institutional progress and blithely recommends solutions that are illegal, bad policy, or both. The Marine Corps can certainly improve its methods for responding to personnel and procurement challenges, but let’s not pretend that the only thing standing between us and utopia is a group of crusty old colonels working at HQMC.

Capt Waddell’s article begins by accusing senior Marine leaders of being out of touch with reality in much the same way that a rebellious teenager convinces himself that his parents were never his age or confronted by the challenges of youth. After concluding—without explanation—that “we lost the wars in Iraq and Afghanistan,” the article attempts to link our purported battlefield failure to the Marine Corps’ inefficient bureaucracy. Oceans of ink have been spilled discussing the merits of these wars, but the article leaves us wondering about the metrics on which the author bases his conclusion or how his analysis is different from—or better than—that of countless others. The article then implies that efforts to develop advanced technology are futile given that, in the author’s opinion, our most sophisticated technologies have been “bested” by the poorly educated jihadi-MacGyver. In every war, each side will develop weapons and tactics to counter those used by the other. It should not be surprising that poorly educated foreign fighters can employ a rifle or cellphone-

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detonated IED (improvised explosive device) despite lacking the intellectual capital and material resources necessary to design or fabricate those technologies in the first place. History gives us myriad examples of non-Western cultures adopting Western technologies.<sup>2</sup> The Native Americans used Western-made rifles against the U.S. Army and the Ottomans used Italian-designed cannons during its naval battle against the Spanish and Italian forces at the Battle at Lepanto. Are we to abandon all hope merely because the insurgents in Iraq are doing what non-Western cultures have always done?

The author has clearly not considered that much of the delay he finds so frustrating is a side effect of the Marine

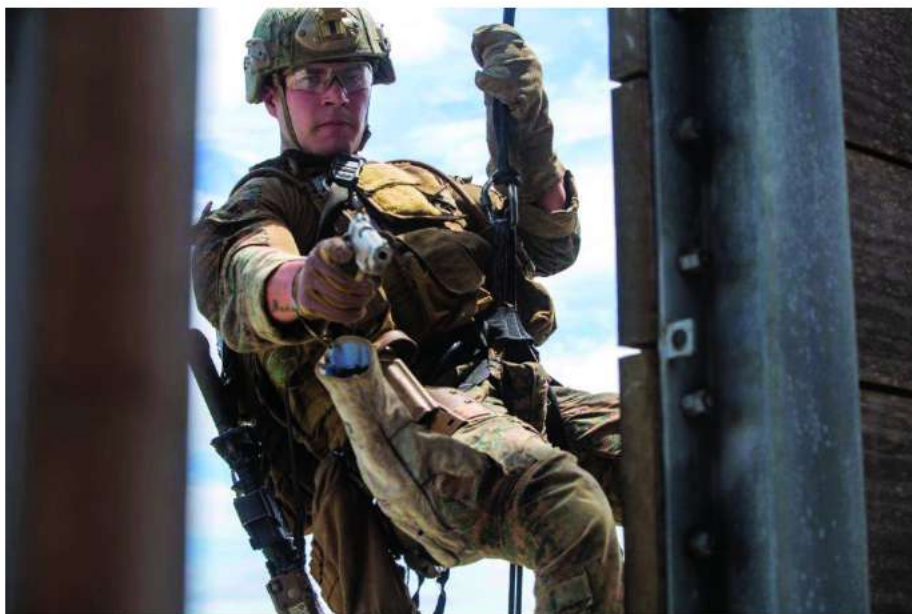
Corps’ efforts to retain transparency and fight corruption in its personnel and procurement practices. Without some level of control and supervision, scandals like the one involving Darleen Druyun would be the rule rather than the exception.<sup>3</sup> Despite this oversight, the author sets to his real task: let’s stop using words like “innovation” as an encouragement toward progress or “fiscal constraint” as an explanation for failure. I will address each idea in turn.

The article argues first that Marine leadership pays lip service to the need for innovation but doesn’t truly want to embrace new ways of doing business. Even a casual review of the news headlines disproves this assertion. Almost weekly, the media reports about some new Marine Corps initiative—whether it’s the Marine Corps’ efforts to incorporate 3D printing methods into our logistical chain or field experiments and simulations in which Marines test the utility of new technologies and tactics against a sophisticated enemy force.<sup>4</sup> We



**The Marine Corps is constantly testing new technologies to use in the field. (Photo by LCpl Esgar Rojas.)**





**We need to procure equipment for our Marines without violating procurement law.** (Photo by LCpl Carl King.)

should admonish the Marine Corps to *continue* its efforts at innovation, but to say that our leadership does not really care about improving our tactics and equipment is plainly false.

The author declares that bold leadership alone is sufficient to implement his suggested changes, and he dismisses the limitations in the Constitution or Title 10 without discussion. You may read the full text of the Constitution or Title 10 if you like, but simply put, these laws control nearly every aspect of how our military is structured and staffed. Furthermore, the author fails to discuss the fiscal and procurement laws in Title 5, Title 31, or Title 41, let alone the associated regulations of each.<sup>5</sup> The article references the procurement practices of some of the U.S. Army's special operations units as though these units have ignored the Federal procurement rules for the sake of mission accomplishment. The reference is misplaced: the rules that apply to special operations forces are different than those that apply to the conventional forces. A battalion commander for 1st Battalion, 5th Marines, would quickly be relieved of command and possibly indicted if he tried to procure communications equipment the way some special operations units do.<sup>6</sup> The Marine Corps has no authority to "boldly" ignore Federal law any more

than a Marine sergeant could ignore the orders of the Secretary of the Navy.

The article's second main argument is that the congressionally-imposed fiscal constraints are insufficient to explain our stunted progress. Without even trying to refute the recent statements by the Chairman of the Joint Chiefs or Secretary James N. Mattis regarding the negative correlation between the defense budget and our military readiness, the article makes several curious comparisons to Russia. It asserts that Russia "embarrassed our national policies" in Ukraine and Syria and, strangely, attempts to correlate Russia's political success with its military budget. It is clear that Russia's political maneuvering in Syria undermined many of then-President Barack Obama's policy objectives, but whatever success Russia achieved during this period was not because of its supposedly awe-inspiring military capabilities. Russia's military has improved over the last decade, but we should remember that this is the same military whose *only* aircraft carrier—a Soviet-era technological embarrassment—sails with a tugboat nearby in case the carrier breaks down en route to its objective.<sup>7</sup>

The article's reference to the RAND Corporation's 2016 study is equally irksome. The RAND study examined what

would likely happen if Russia mounted an attack against Estonia, Latvia, and Lithuania. Because NATO does not currently have significant heavy armor or air combat assets stationed along the border between Russia and these Baltic countries, the RAND study concluded, unsurprisingly, that Russia would find initial success before eventually being repelled by the full complement of NATO's heavy infantry, armor, and air warfare capabilities. The takeaway from the RAND study is that NATO should reconsider how it positions its forces in the region. The study does not indicate, as implied by Capt Waddell's article, that Russia's military spending is so efficient—and their capabilities so formidable—that no combination of NATO forces could stop them.<sup>8</sup> As an aside, I wonder what we would discover if we peaked behind the curtain of Russia's military procurement and compared it to ours in terms of efficiency or corruption.

After chastising the headquarters establishment for its use of the terms "innovation" and "fiscal constraint," the article proposes its own methods for creating institutional change and saving money. It is unlikely that anyone would argue against efforts to audit and eliminate redundant offices or wasteful practices within the Marine Corps, but several of the article's proposed reforms are such bad policy that they warrant further examination.<sup>9</sup>

The Marine Corps loves words like "bold" or "aggressive" so intensely it's almost comical, but the article's recommendation that we "aggressively" utilize the Joint Capabilities Integration and Development System (JCIDS) is meaningless. First, the JCIDS procedure is *joint*—meaning that the Marine Corps is only one voice in a conversation involving the Army, Navy, and Air Force. Second, unlike the other Services, the Marine Corps lacks the level of research funding or expertise enjoyed by the other Services or the Defense Advanced Research Projects Agency. Finally, how would a Marine leader aggressively review a weapons system? Does the author seriously think it would be a good idea to set arbitrary timelines within the procurement review process and hope that

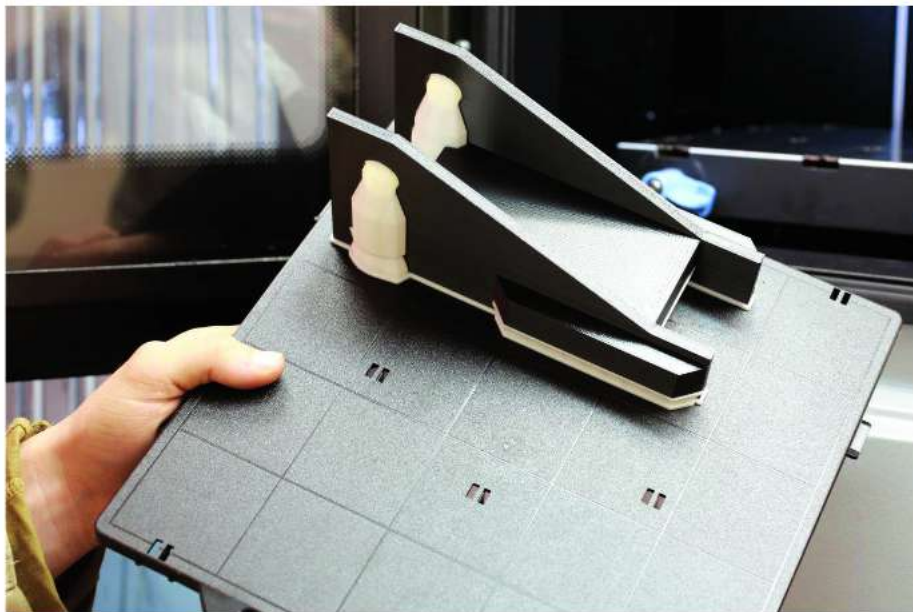


Marine Corps Systems Command can thoroughly evaluate a nascent weapons system before the deadline? There is no doubt that the process for thoroughly testing and selecting our equipment is a lengthy one, and for good reason, but delay is not caused by the Marine Corps' supposed institutional apathy.

The article's proposed reforms to the Civilian General Schedule (GS) employee system would be counterproductive. The author is justifiably wary of the number of colonels-turned-civilians throughout the Marine Corps, but requiring civilian employees to reapply for their jobs every four years undermines some of the principal reasons for having civilian GS employees in the first place: continuity and institutional knowledge. Many of the jobs held by civilian employees—and I am referring to the truly specialized positions—require decades of experience. Furthermore, there is very little chance that the Marine Corps could attract a civilian with significant management or STEM (science, technology, engineering, and mathematics) expertise for a position that we cannot guarantee he would have for more than a few years.

The author's recommendation that the Marine Corps develop a sovereign wealth fund is by far the article's least serious, and most dangerous, suggestion.<sup>10</sup> Article I of the Constitution gives Congress control over the Armed Forces, in part, by ensuring that we remain financially dependent on our elected officials. If the Marine Corps is permitted to maintain and develop its own slush fund, we would have every incentive to grow the fund to a point where we would be immune from a financial recession or, potentially, congressional directives.<sup>11</sup> If the Marine Corps was put in charge of its destiny in this manner, what would restrain it from growing its assets from a small fund to a massive one? Carrying this idea to its logical conclusion, why would a financially independent military continue to execute the orders of a toothless polity?

Even if the Marine Corps resisted all urges to overthrow its civilian leadership, what happens when the Marine Corps acquires a controlling interest



**A 3D part completed during Exercise STEEL KNIGHT, December 2015. (Photo by Capt Aaron Moshier.)**

in a private corporation? A sovereign wealth fund typically invests its money in stocks, bonds, real estate, and private equity. Would we conduct an amphibious raid in order to guarantee a return on our private investments? The image of heavily armed Marines with a strong profit motive is reminiscent of the British East India Company or the military-industrial complex that MajGen Smedley D. Butler warned us about so long ago. Additionally, a sovereign wealth fund would immediately redirect our manpower priorities. The Commandant would have to mint a few battalions of investment bankers, lawyers, and support staff to manage the Marine Corps' money instead of training the additional infantry battalions he was expecting. Even if we hired civilians to manage our money, there is little chance the Marine Corps could supply the seven figure salaries or eggshell-and-Romalian business cards necessary to attract top talent from the Wall Street investment firms.

I am by no means saying that the Marine Corps' procurement or personnel challenges are insurmountable, or that *none* of the blame rests with the headquarters establishment. This response is intended merely to correct the idea—all too common among junior officers or enlisted Marines—that each challenge our Corps faces would melt

away if only our leaders just cared a little more. Let's keep in mind, though, that the Marine Corps leadership can only do so much on its own. Take then-Secretary Ashton Carter's experience as an example. Secretary Carter made clear that reforming the military's personnel system was one of his top priorities. He had all the zeal of a young Marine infantry officer and considerably more authority, but after two years at the helm of the DOD, Congress failed to adopt the majority of his recommended reforms. Even now, many of his projects remain—at best—unfinished. The Marine Corps leadership is an easy target for both uniformed and civilian critics, but if we want radical changes in the military establishment, we must carefully articulate the challenges we face and craft intelligent and politically feasible solutions. Capt Waddell's article fails on both accounts.

#### Notes

1. Capt Joshua Waddell, "Innovation: And other things that brief well," *Marine Corps Gazette*, (Quantico, VA: February 2017), available at <https://www.mca-marines.org>.

2. Professor Hanson, in *Carnage and Culture* and elsewhere, explores the illustrative historical examples. He also argues powerfully that, in conflicts between Western and non-Western cultures, the non-Western cultures are successful



in battle—if at all—largely due to the extent to which they adopt the weapons and tactics of their Western opponents. See Victor Davis Hanson, *Carnage and Culture: Landmark Battles in the Rise to Western Power*, (New York: Anchor Publishers, 2002).

3. Ms. Druyun was the Principal Deputy Undersecretary of the Air Force for Acquisition who, in 2004, pleaded guilty to violating 18 USC § 208(a). During her tenure, Ms. Druyun abused her position to direct billions of dollars' worth of government contracts to Boeing before eventually being hired as one of Boeing's many executives.

4. See Sgt Cuong Le, "Darkhorse Marines assault California during MAGTF Integrated Experiment 2016," published on 5 August 2016, available at <http://www.marines.mil>.

5. For a small taste of the applicable laws, and especially for those among you who suffer from insomnia, feel free to peruse the rules in Title 5 regarding employees of nonappropriated fund (NAF) instrumentalities, the rules in Title 31 regarding how the DOD may spend its annual budget (Antideficiency Act, 31 USC §§ 1341

et seq.; Purpose Act, 31 USC §§ 1301, et seq.), and the rules in Title 41 that govern federal contracting (Office of Federal Procurement Policy Act of 1974, 41 USC §§ 1101 et seq.).

6. To those enterprising company commanders referenced in the article: If you think that no one—civilian or military—can crack commercially available encryption software, you're kidding yourselves. An Israeli data extraction company was able to crack Syed Farook's iPhone within a few weeks of requests for assistance from the Federal Bureau of Investigation (FBI). More recently, a team of researchers identified a design flaw in commonly used microprocessors that puts millions of computers and cellphones at risk. See Andy Greenberg, "A Chip Flaw Strips Away Hacking Protections for Millions of Devices," *Wired*, (Online: 14 February 2017), available at <https://www.wired.com>. In the tactical environment unique to a Marine special operations unit, a hostile intrusion in their private communications network would be much less damaging than a similar intrusion in the Marine Corps' general-use computer network.

7. Ben Farmer, "Belching smoke through the Channel, Russian aircraft carrier so unreliable

it sails with its own breakdown tug," *The Daily Telegraph*, (London: 22 October 2016), available at <http://www.telegraph.co.uk>.

8. You can read the full RAND Corporation publication at <http://www.rand.org>.

9. The author proposed one reform—the creation of a rapid prototyping lab—that the Marine Corps has largely already instituted. In September 2016, the Marine Corps Warfighting Laboratory developed a Rapid Capabilities Office to experiment with emerging technologies and expedite their development and acquisition.

10. A sovereign wealth fund, whether based on the model of Norway or elsewhere, is an investment fund that is typically capitalized by the proceeds from the sale of state-owned real estate or oil and natural gas deposits.

11. For that matter, it's likely that every Federal agency would clamor for its own sovereign wealth fund until the U.S. government becomes little more than a loosely bound group of governmental entities rather than a tripartite government.

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# Incentivizing Functional Fitness

Implementing a modified physical fitness test

by LtCol Aaron C. Lloyd & Maj E. Pete Abelson

**P**hysical fitness is synonymous with the Marine title—to fight and win on the battlefield, strength, endurance, and agility are prerequisites for success. To evaluate those qualities in the individual Marine, the Corps uses two tests, one conducted every six months: the physical fitness test (PFT) and the combat fitness test (CFT). *MCO 6300.13, Marine Corps Physical Fitness Program*, states,

The Physical Fitness Test (PFT) is a collective measure of general fitness Marine Corps-wide. The PFT was specifically designed to test the strength and stamina of the upper body, mid-section, and lower body, as well as efficiency of the cardiovascular and respiratory systems.<sup>1</sup>

In consonance with those goals, the CMC has initiated a review of current

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Marine Corps physical fitness programs through *ALMAR 030/15*. The Commandant's desired end state of this *ALMAR* is a physical fitness program that ensures the overall health and fitness of the Corps. It is the authors' contention, however, that the current PFT fails to adequately measure Marines' general fitness or their preparedness for the rigors of combat. To create a more physically capable Marine, the Corps should adopt a physical fitness test that

incentivizes Marines to increase their total body strength along with cardiovascular capacity.

To those ends, the Marine Corps writ largely recognizes that the PFT is an imperfect tool as it must serve a multitude of purposes. For example, the PFT must drive every unit's physical fitness program to prepare Marines to perform at a consistently high level in combat, regardless of MOS or gender. The PFT is also a tool to incentivize high physical fitness performance by tying PFT scores to retention and promotion. This characteristic incentivization is perhaps the most important aspect of the PFT.

The PFT should adhere to the characteristics outlined in *ALMAR 030/15*, in that it should be "... relevant, challenging, and incentivize behaviors that enhance cardiovascular capacity, muscular strength, flexibility, agility, and the reduction of injuries."<sup>2</sup> As a tool to incentivize behavior, the current PFT fails to adequately drive Marines to prepare for combat. It is almost certain that Marines will be carrying heavier loads in combat in future operations, as history dictates that the weight an individual has to carry inexorably rises; therefore, the requirement for greater upper and lower body muscular strength, increased flexibility, and an injury reduction mechanism is vital.<sup>3</sup>



**The current PFT fails to adequately measure the general fitness of our Marines.** (Photo by Cpl Angelica Annastas.)



Before proposing a modification to the current system, one must first possess a baseline understanding of what the PFT does and does not evaluate, as well as some history of the test itself. There are two primary energy capacities that are associated with exercise. The first capacity is aerobic conditioning. Aerobic conditioning is a process whereby the heart and lungs are trained to pump blood more efficiently. This process allows more oxygen to be delivered to muscles and organs. Aerobic conditioning is found in exercises in which an individual exercises at an intense level for longer than two minutes, i.e. the three mile run portion of the PFT. The second capacity is anaerobic conditioning, which is an exercise that lasts less than two minutes, and one in which the lactic acid levels in the body increase exponentially.<sup>4</sup> The crunches and pull-up portions of the PFT measure anaerobic conditioning in isolation.

The PFT began many years ago as it originated with a battery of tests outlined in *MCO 6100.3E*, Ch. 2 published in 1970. At that time, the test was described as follows with the Marine selecting a single event from each category.<sup>5</sup> (See charts below.)



**The three-mile run measures aerobic conditioning.** (Photo by Cpl Angelica Annastas.)

conduct physical fitness training for one hour, three times a week. The Marine Corps also codified the definition of strength and stamina. Stamina was defined as a “combination of muscular and cardiovascular endurance and is the most important aspect of fitness for Marines.”<sup>6</sup> The order went on to define strength as “the ability to manipulate weight or, for a Marine, his or her own body weight.”<sup>7</sup>

The test itself was codified in the 1975 order and approached our cur-

minutes or less. Female Marines had to complete a flexed-arm hang, bent-knee sit-ups, and a 1.5-mile run. To achieve a perfect score of 300, a female Marine had to complete a 70-second flexed-arm hang, execute 50 bent-knee sit-ups, and run 1.5 miles in 10:00 or less.<sup>8</sup>

As constructed, the current PFT and its three separate elements comprise a tool that fails to properly address the requirements the CMC has outlined. The first exercise, dead-hang pull-ups, demonstrates a direct correlation to tasks associated with combat such as scaling walls or cargo nets. However, it evaluates upper body strength in isolation. The pull-up incorporates the back, shoulders, triceps, and biceps. Additionally, while it is a compound movement, it does not measure lower body or core strength.

The second exercise, the abdominal crunch, is an exercise that engages the hip flexors along with the abdominal muscles. Again, as with the pull-up, this exercise evaluates a muscle group in isolation. There appears to be little, if any, direct correlation to combat applications and is a determinant of general fitness. In fact, the abdominal muscles are probably evaluated best in tandem with lower back muscles as the abdominals are designed more for stabilization than contraction. An exercise that offers a better measure of the ability of the core to maintain overall body stability while under a significant load is required.

The run portion of the PFT is three miles long and has been constant for

## Male Test

Group I	Group II	Group III	Group IV	Group V
Pull-ups, push-ups, or 20' knotted rope climb.	Maximum amount of bent-knee sit-ups or leg-lifts in two minutes.	Maximum amount of squat-thrusts in one minute.	Best of three attempts in the standing broad jump or the jump and reach.	In the event that the 3-mile run was not feasible, a shuttle run was an authorized substitute.

## Female Test

Group I	Group II	Group III	Group IV	Group V
Shuttle run.	Knee Push-ups.	Bent-knee sit-ups.	Best of three attempts in the jump and reach.	600-yard run-walk.

The PFT in its current form was implemented in 1975 through *MCO 6100.3G Physical Fitness, Weight Control, and Military Appearance*. In addition to creating the test itself, the order included instructions for Marines to

rent day standard. Male Marines had to complete pull-ups, bent-knee sit-ups, and a three-mile run. To achieve a perfect score of 300, a Marine had to complete 20 pull-ups, 80 sit-ups, and complete his 3-mile run in 18:00



many years. The authors could find no historical or scientific data that supports the Marine Corps' decision to make the three-mile run the standard for the PFT, although it does bear resemblance to the "Cooper Test," which was developed in the late 1960s by a U.S. Air Force surgeon. The test, originally either a 12-minute run for maximum distance or a 1.5-mile timed run, was developed specifically for the military.<sup>9</sup> However, why the Marine Corps 3-mile run is longer than the Army physical fitness test or the Cooper test may just as likely be due to the widely held assumption that it is "one mile longer than

wants led to the inclusion of the thruster in the MPFT. It will catalyze change in Marine Corps physical fitness programs. The thruster is a compound movement that effectively engages multiple large muscle groups while incorporating the lower body, core, and upper body. When performing a thruster correctly, the quadriceps, hamstrings, gluteus maximus, core with associated stabilizing muscles, back, shoulders, and triceps are all included in a compound and very dynamic movement.

In the thruster, one discovers an exercise that most closely aligns with the requirements of combat while also in-

lines to work to meet the requirement and align their training with tasks functionally related to combat performance.

Further examination of the thruster reveals an exercise that enhances flexibility through an increased requirement to improve a Marine's ability to execute the exercise. To achieve the required depth in the squat, the hips must reach a 90-degree angle relative to the deck on the downward portion of the thruster. This requirement forces a Marine to increase groin, hip, and lower body flexibility. To complete a proper thruster, the Marine is now incentivized to work on flexibility in his personal physical training program. This increased flexibility can easily be accomplished with simple stretching exercises that can be conducted in as little as 10 to 15 minutes.

The thruster also drives an increase in core strength, which is vital to completing many combat-related tasks. To maintain an upright posture during the execution of the thruster, a Marine must demonstrate abdominal and lower back muscular strength to prevent the barbell from falling forward during the proper execution of the movement. These muscles, working in concert, stabilize the centerline of a Marine's body and enhance overall body fitness. The thruster evaluates core strength of the Marine and eliminates the need for the abdominal crunch from the PFT.

Agility is also a desired physical characteristic found in *ALMAR 030/15*. The thruster both directly and indirectly incentivizes behaviors that improve agility, as well as providing a means with which to measure agility. The thruster is a compound movement executed in a very dynamic manner. By requiring maximum repetitions in a timed environment, the agility of the entire body is enhanced. Agility is, therefore, a by-product of the exercise.

Finally, the reduction of injuries is an extremely important requirement of any physical fitness program and associated evaluation tool. The thruster, combined with a three-mile run and dead-hang pull-ups, incentivizes increased overall total body strength and flexibility that can potentially aid in the reduction of injuries. A Marine who has stronger lower body muscles, increased flexibility



Figure 1.

the Army's" as it is due to any scientific rationale. This possible rationale, nonetheless, does hold its own benefits.

With the deficiencies of the current Marine Corps PFT in mind, the authors propose instituting a modified PFT (MPFT) designed to more fully meet the CMC's intent and incentivize functional and combat effectiveness. The proposed test includes the following events: a three-mile run, thrusters (see Figure 1), and dead-hang pull-ups.

The search for an exercise that encompasses as much of what the CMC

centivizing positive physical change and specific behaviors. Combat related tasks such as lifting a crew-served weapon from the ground to a HMMWV roof, carrying artillery rounds from one gun position another, carrying a litter, or simply putting packs and cargo into the back of a 7-ton truck are all examples of total body exercises that occur in the anaerobic realm. These tasks are all examples of dynamic movements that require lower body, core, and upper body strength together in a compound movement. The thruster will drive Ma-



and strength in his abdominal and lower back muscles, and is more stable in an overhead position (similar to lifting a crew-served weapon) would seem, at least anecdotally, to suffer fewer lower body injuries than a Marine who does not train toward a thruster-like exercise.

In scoring the MPFT, the Marine Corps should not make an arbitrary delineation between male and female standards. When engaging in combat operations, the enemy does not discriminate between male or female Marines when engaging them with small arms fire. In that vein, the MPFT should maintain the same standards for both genders. Upon implementation, there will be an initial decrease in women's PFT scores when compared to men due to inherent physiological differences. Nonetheless, over the course of time, Marines' performances will rise to meet the increased standards. This effect, codified within "the Pygmalion Effect," will result in stronger and more physically fit Marines.<sup>10</sup>

There is a potential for an increase in injuries during the early implementation phases of the MPFT. By specifically limiting the thruster to an anaerobic movement, injury can be minimized through limitation of exposure time to



**The Corps' current three-test system fails to meet the CMC's guidelines.** (Photo by Cpl Angelica Annastas.)

Marines will be able to execute the thruster with minimal risk.

Finally, equipment procurement will be an additional concern that requires a solution. Standard barbells and weight plates can be found commercially for under \$325 per set. Using the infantry battalion as a standard unit of measure, a simple computation illustrates that the total cost for outfitting for testing would be approximately \$9,100.<sup>11</sup> (See chart below.) Additionally, a recruiting station that was made up of 15 recruiting substations could be outfitted for approximately \$4,875.

	Line Company or Weapons Company	Headquarters and Service Company
Sets per company	5	8
Cost	\$6,500	\$2,600
Total Battalion Cost	\$9,100	

Marines as they learn the proper way to incorporate the movement into their personal fitness regime. While acknowledging the possibility of injury, the risk is probably similar to the risk incurred while conducting conditioning hikes or running. Few commanders, however, would openly advocate conducting less running or fewer conditioning hikes. Instead, it is certainly within the realm of the possible that as Marines become more proficient with thrusters and increase their overall fitness, injury rates from running and conditioning hikes will fall. Through proper instruction and a phased approach to adoption, Ma-

Marines are resistant to change, and the MPFT is certainly a change. As Marines prepare to go forward into uncertain environments, individual Marines must be as physically fit and well-rounded as possible. By incentivizing positive behavior through a modified PFT, Marines will be better prepared to achieve success in every clime and place. Marines are renowned historically for rising to meet challenges. The adoption of the MPFT would be no different.

## Notes

1. Commandant of the Marine Corps, *Ma-*

*rine Corps Order 6100.13 w/Change 1 (MCO 6100.13), Marine Corps Physical Fitness Program*, (Washington, DC: 1 August 2008), 2-1.

2. Commandant of the Marine Corps, *ALMAR 030/15, Review of Physical Fitness and Body Composition Standards*, (Washington, DC: 9 November 2015).

3. S.L.A. Marshall, *The Soldier's Load and the Mobility of a Nation*, (Quantico: Marine Corps Association, 2004), 5.

4. Definitions for aerobic, anaerobic, and lactate are from Wikipedia.com.

5. Commandant of the Marine Corps, *MCO 6100.3E w/Change 2, Physical Fitness and Weight Control*, (Washington, DC: 17 February 1970), Enclosure (5), 3.

6. Commandant of the Marine Corps, *MCO 6100.3G, Physical Fitness, Weight Control, and Military Appearance*, (Washington, DC: 1975), 3.

7. Ibid., 4.

8. Ibid., 7.

9. Kenneth H. Cooper, "A Means of Assessing Maximal Oxygen Intake," *JAMA*, (1968), 135-138.

10. Jie Chang, "A Case Study of the 'Pygmalion Effect': Teacher Expectations and Student Achievement," *International Education Studies*, (2011), 198.

11. "Rogue Beater Bar," Rogue, accessed 14 March 2016 at [www.roguefitness.com](http://www.roguefitness.com).





# Improving Physical Fitness Through Physical Therapy

Recognizing physical therapy as a preventative measure

by Maj John R. Sisson

**T**he Marine Corps can create healthier, more resilient Marines and increase unit readiness by incorporating physical therapy across the training continuum, and it can do so with minimal financial impact. The Marine Corps should resource units with physical therapists to establish individual baseline levels of functionality, enable more personalized training plans, and conduct periodic reevaluations to monitor progress. Gen Robert B. Neller, Commandant of the Marine Corps, emphasizes physical readiness in *FRAGO 01/2016: Advance to Contact* when stating that the Marine Corps will “increase the number of deployable and ready Marines across the Force” and “establish a Force Fitness Instructor program no later than the end of FY17.”<sup>1</sup> Not only will using physical therapy as a preventative measure help meet the Commandant’s intent, but it will also make the Marine Corps a more resilient force and improve readiness, essential qualities for expeditionary units operating in austere environments.

Historically, the Marine Corps has used physical therapy for rehabilitative purposes in military treatment facilities (MTFs) or the sport medicine and rehabilitative treatment (SMART) centers.<sup>2</sup> However, by employing physical therapy in all aspects of training, and not just post-injury care, readiness can increase. One study, conducted at the Washington University School of Medicine, demonstrates that physical therapists are uniquely qualified to

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**Physical therapy being performed in the field. (Photo by Sgt Timothy Lenzo.)**

identify movement and postural faults, assess the origin of those problems, and determine whether physical therapy is or is not an appropriate solution.<sup>3</sup> Moreover, the Marine Corps does staff some units with physical therapists currently, and it also conducted a pilot program with a MEU in 2009–10.

Most physical therapists reside at a MTF and treat patients after an injury; however, a gradual shift is occurring that

recognizes the value of physical therapy as a preventative measure. According to Dr. Stephen Stoecker, Physical Therapy Department Head, Naval Health Clinic Quantico, the DOD is beginning to integrate physical therapists within units to maintain the health of the Force. For example, commands in Quantico, such as Officer Candidates School and The Basic School, have physical therapists on staff.<sup>4</sup>



Marine Corps Special Operations Command (MARSOC) provides another example of the Marine Corps utilizing physical therapists. Brad Lambert, a physical therapist who serves as the Human Performance and Resiliency Program Manager, states that physical therapists are an embedded resource at the battalion level, and that the embedded nature enables quicker access to care. The average wait time for a MARSOC Marine to see a therapist is half a day as compared to the average MTF access to care of 7 to 14 days.<sup>5</sup>

A third example of the Marine Corps using physical therapists is a pilot program in which the 24th MEU command element had an embedded physical therapist from September 2009 to August 2010.<sup>6</sup> The physical therapist assigned to the 24th MEU, LT John Fraser, USN, provided early detection, diagnosis, and treatment of injuries to return Marines rapidly to full duty, reduce the time to access specialty care, develop injury prevention initiatives, and enhance warfighter performance.<sup>7</sup> The purpose of this pilot program was to increase unit readiness and test the utility of providing a physical therapist in a Marine unit, primarily by addressing musculoskeletal injuries (MSK-I). During this program, LT Fraser provided care to approximately 1,400 Marines and Sailors, managed 95 percent of MSK-I, saved 22,400 light and limited duty days, and prevented 20 potential medical evacuations during the deployment, saving an estimated \$144,000.<sup>8</sup>

Additionally, Dr. Gray Cook, an orthopedic physical therapist and a strength and conditioning specialist, developed a method, the functional movement screen (FMS), to identify deficiencies in movement. The FMS consists of seven different movements: squat, step, lunge, reach, leg raise, push-up, and rotation. The evaluator observes the patient perform each movement, and the patient has three opportunities to perform the movement. The evaluator scores each movement on a scale of 0 to 3, for a maximum score of 21.<sup>9</sup> Dr. Stoecker identifies two benefits from using the FMS. First, it can identify any concerns,

such as instability or weakness, even if there is not currently pain. Second, it can help prevent future problems by identifying potential problem areas early before they become more serious over time.<sup>10</sup> To emphasize the purpose, the FMS is a screening system designed to identify movement limitations and asymmetries.<sup>11</sup> Opponents may argue that there is insufficient time to allow every Marine to see a therapist to conduct the FMS, but the Marine Corps could gain efficiency by modifying the periodic health assessment (PHA). The medical staff could use this time that is already dedicated to the PHA to conduct the FMS since the FMS only takes 12 minutes to perform.<sup>12</sup>

Dr. Cook states,

an athlete who is unable to perform a movement correctly, shows a major limitation within one of the movement patterns, or demonstrates an obvious difference between the function of the left and right side of the body has uncovered a significant piece of information that may be the key to reducing the risk of chronic injuries, improving overall sport performance, and developing a training or rehabilitation program that helps the athlete advance to a higher level of competition.<sup>13</sup>

By adopting the FMS, the Marine Corps could be proactive and identify

weaknesses in Marines. While a Marine may have no obvious difficulty in passing the physical fitness test or combat fitness test, the Marine could benefit from an approach that examines if he is moving correctly to mitigate chronic pain or injury as well as improve performance.

The Marine Corps currently offers a functional movement program, high intensity tactical training (HITT); however, it is not capable of correcting functional movement issues for every Marine, largely due to its limited capacity. Only 12 of 26 installations currently have HITT facilities.<sup>14</sup> There are 18 HITT coordinators and 34 support staff across all the installations. There is one mobile unit, and there are 106 HITT lockers across all installations.<sup>15</sup> During fiscal year 2015, 28,751 Marines used HITT facilities, although these were not unique visits.<sup>16</sup> The usage data shows Marines are interested in this program, but the majority of Marines simply could not use HITT as a primary means to conduct training or get evaluated by a certified trainer because of the limited capacity.

In this fiscally-constrained environment, the costs of resourcing units with physical therapists may be prohibitive. The average annual total cost for a physical therapist and a physical therapy assistant is \$118,000



**Resistance and stretching exercises are part of the physical therapy protocol that can be administered in the field. (Photo by Sgt Timothy Lenza.)**





**A classroom session for force fitness instructors conducted at Quantico, October 2016. (Photo by Sgt Melissa Marnell.)**

and \$78,000 per year, respectively.<sup>17</sup> If financial constraints prevent staffing units with physical therapists, then an alternative is to have medical officers, independent duty corpsmen, corpsmen, or designated Marines after appropriate training, use the FMS to assess individuals.

Two recent studies examined the FMS's utility and noted that novice individuals can perform the FMS. O'Connor, et al., studied 874 male Marine Corps officer candidates in the summer of 2009, and the authors cite several advantages of using the FMS.<sup>18</sup> First, the potential exists to perform rehabilitative intervention.<sup>19</sup> Second, if properly trained, anyone can conduct the FMS.<sup>20</sup> A second study by Minick, et al., found that novice evaluators using the FMS could accurately assess individuals if they were trained. In the conclusion, the authors write that "individuals who have undergone the standardized training protocol will score the FMS in a similar manner."<sup>21</sup> The value of these studies is that the Marine Corps could certify Marines or medical staff if a physical therapist is unavailable to perform the FMS and use the train-the-trainer approach to implement the FMS across the Operating Forces and Supporting Establishment, thus keeping costs to a minimum.

The 2012 DOD document "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense" states that the most important military

advantage the United States possesses is "the health and quality of the All-Volunteer Force."<sup>22</sup> Perhaps a way to sustain this advantage and also meet the Commandant's intent is to use physical therapy and the FMS. If the Marine Corps is to maintain the health of the force and enhance an already good fitness program, then senior leaders should resource units with physical therapists or, at a minimum, use the FMS to assess the force.

*>This article is an adaptation from John R. Sisson, "Improving Physical Fitness through Physical Therapy and Preventative Measures," (Quantico, VA: Command & Staff College, 2016), 1–23.*

#### Notes

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2. CDR Carl Goforth, USN, Health Services, Logistics Integration Division, Combat Development & Integration, HQMC, personal email to the author via email, 29 October 2015.

3. Debra Fleming-McDonnell, et al., "Physical Therapy in the Emergency Department: Development of a Novel Practice Venue," *Physical Therapy*, (Alexandria, VA: American Physical Therapy Association, March 2010), 425.

4. Dr. Stephen Stoecker, Physical Therapy Department Head, Naval Health Clinic Quantico, personal communication with the author, 13 November 2015.

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6. LT John J. Fraser, USN, "MEU SMART Pilot Project After Action Report," slide 1, personal communications with the author via email, 2 November 2015.

7. *Ibid.*, slide 5.

8. *Ibid.*, slide 6.

9. Dr. Gray Cook, *Athletic Body in Balance*, (Champaign, IL: Human Kinetics, 2003), 27–28.

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11. Dr. Gray Cook, *Movement: Functional Movement Systems: Screening, Assessment and Corrective Strategies*, (Santa Cruz, CA: On Target Publications, 2010), 17.

12. *Ibid.*, 60.

13. *Ibid.*, 27.

14. "Fitness Centers and High Intensity Tactical Training Centers," *USMC Fitness Readiness Guide*, accessed 2 December 2015 at <https://fitness.usmc.mil>.

15. Ryan Massimo, Program Manager, Semper Fit and Recreation Branch, Marine and Family Programs Division, HQMC, personal communication with the author via email, 2 December 2015.

16. *Ibid.*

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19. *Ibid.*, 2229.

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21. Kate Minick et al., "Interrater Reliability of the Functional Movement Screen," *Journal of Strength and Conditioning Research*, (Colorado Springs, CO: February 2010), 486.

22. Department of Defense, *Sustaining U.S. Global Leadership*, (Washington, DC: January 2012), 7.



# The Future of Marine Corps Fitness

The functional strength and power test

by 1stLt Hunter R. Wood

**T**he Marine Corps has a fitness problem. Nearly every day, we are learning something new about fitness, human performance, and the way our bodies operate most efficiently, but the Marine Corps has dragged its feet in implementing changes to accommodate the latest information. Today, the Officer Candidates School webpage provides 90 and 180 day fitness preparation plans for interested candidates. Neither plan, however, recommends a structured strength regimen. Rather, the published plans consist only of high repetition bodyweight exercises and a high volume of moderate-intensity running. Additionally, neither the physical fitness test (PFT) nor the combat fitness test (CFT) provide a test of strength, which means the Marine Corps does not reward Marines for being strong—a critical element of fitness. Further, most Marines fail to recognize the impact functional strength has on endurance capacity. Combat readiness suffers as a result. The Marine Corps recognizes there are deficiencies, as evidenced by recent changes in the physical and combat fitness tests, the creation of high intensity tactical training (HITT), and the new Force Fitness Instructor MOS. Although these implementations may yield positive results, the concept of increasing repetition requirements and making run times faster is both unsustainable and insufficient. We are preparing the wrong way for the wrong test. The Corps needs education, functional strength, and a more complete fitness test. Intensity must be prioritized over volume—more is not better. This article serves to address fitness education, the importance of overall strength, and to

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recommend the implementation of the functional strength and power test.

First, some basic definitions:

- **Compound exercise:** More than one joint flexes and/or extends at the same time. These exercises produce the largest hormonal response, and are best for developing functional strength and power. For example, a squat requires flexion in three places: the hips, knees, and ankles. Other examples include: deadlift, clean, press, and bench press.
- **Isolation exercise:** One joint flexes or extends at a time. These exercises have a lower hormonal response, require less energy, and are not as effective for functional strength. For example,

a bicep curl requires flexion followed by extension at the elbow.

- **Adenosine triphosphate (ATP):** The molecule that is broken down and used to provide energy to the human body. The human body uses three energy systems to turn ATP into usable energy.
- **Intensity:** A percentage of your maximum effort in a given event, i.e. running at 80 percent of your maximum heart rate or bench pressing 70 percent of your 1 repetition maximum (RM).
- **Volume:** The accumulation of sets, repetitions, distance, etc. For example, 5 miles of running or 2,000 pounds of squatting (10 repetitions at 200 pounds).
- **The three energy systems<sup>1</sup>** (or metabolic pathways).
- **Phosphagen or phosphocreatine (PC) pathway:** Responsible for short, high intensity exercise lasting around



**Force fitness instructor training is one of the ways the Marine Corps plans to change its approach to physical fitness training. (Photo by Sgt Melissa Marnell.)**



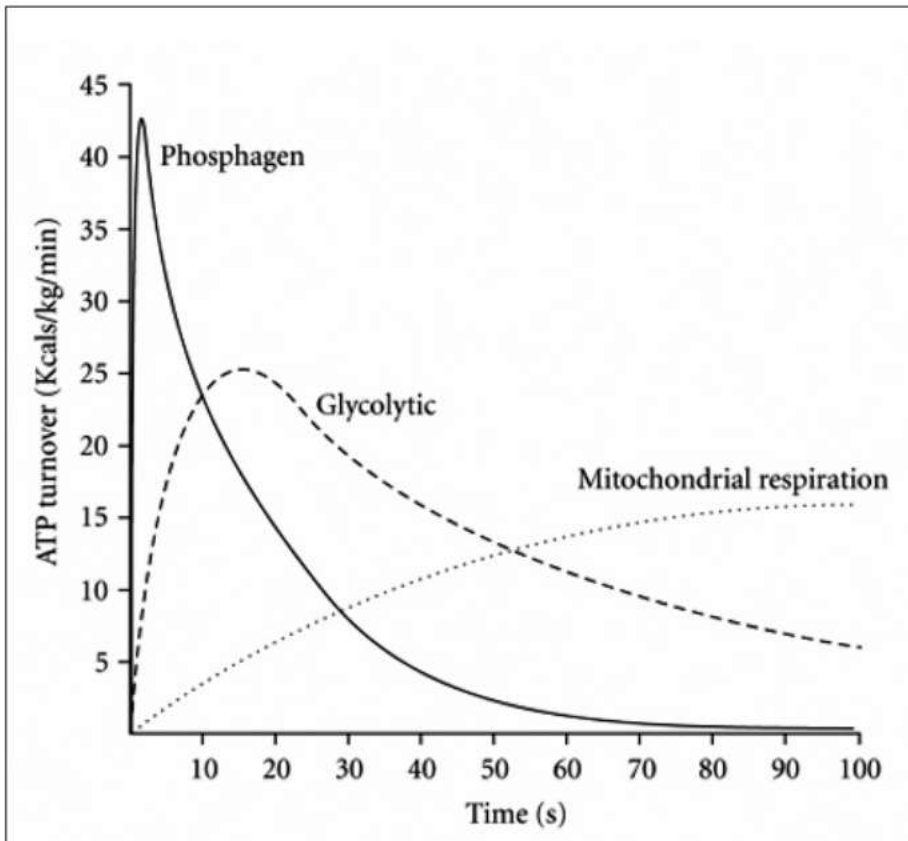


Figure 1. Energy systems.

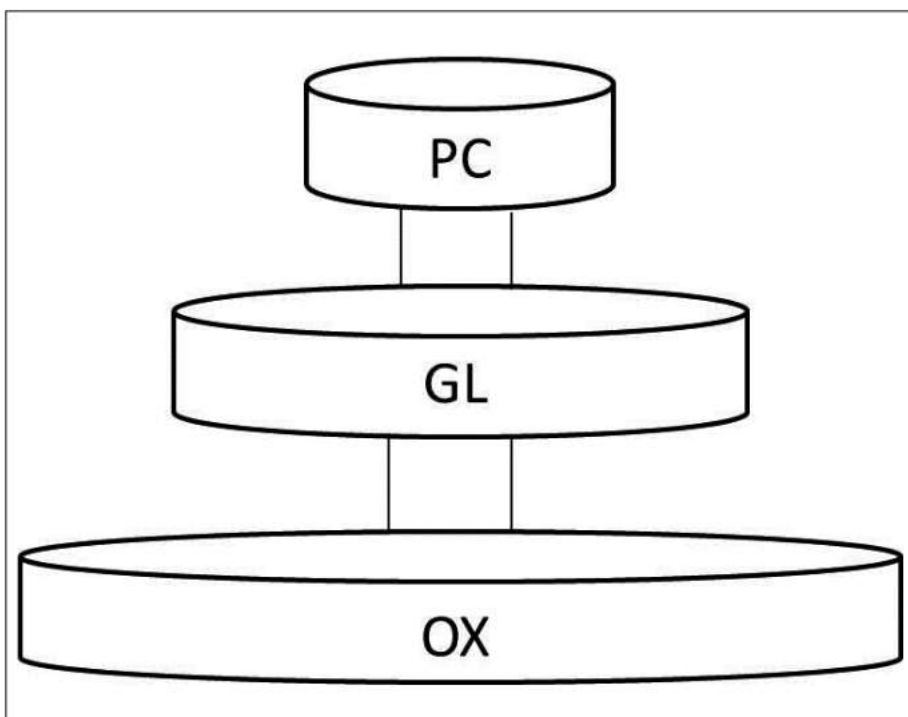


Figure 2. Three-tiered fountain.

10 seconds using ATP as its primary fuel. This is your maximal strength and power. For example, a heavy barbell back squat or 100-meter sprint.

- Glycolytic (GL) pathway: Responsible for max effort exercise lasting from 30 seconds to about 2½ minutes using blood glucose or stored muscle glycogen to convert to ATP. The movement to contact and maneuver under fire during the CFT are good examples.

- Oxidative or aerobic (OX) pathway: Responsible for longer, slower events such as a three-mile run or a nine-mile hike using oxygen to produce ATP. Indicated by the “Mitochondrial respiration” line on Figure 1.

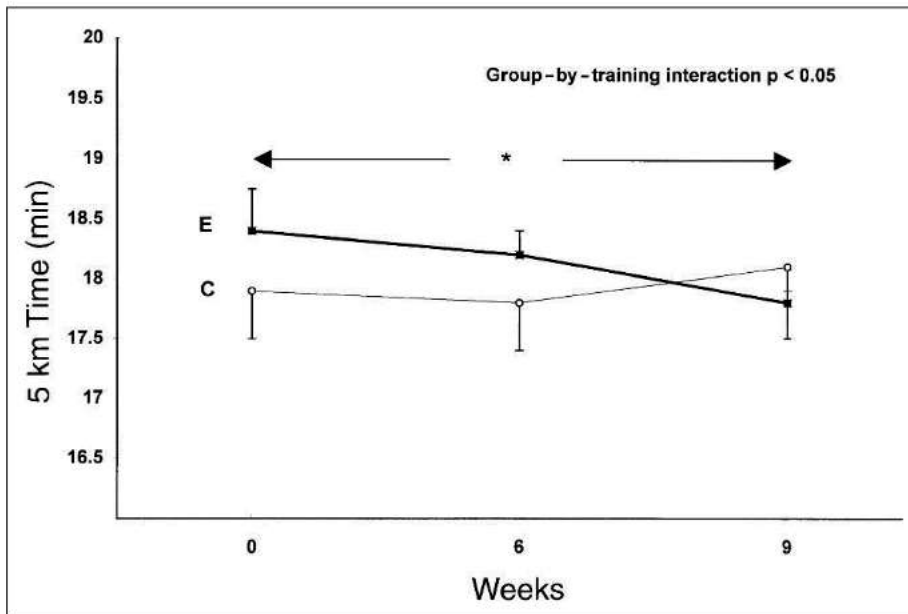
Our bodies use whichever energy system(s) is required for the task at hand. For example, if you are executing a combat patrol and take enemy contact, your body will switch from the OX pathway (patrolling at a walking pace) to the PC pathway (sprinting for cover) and will continue adjusting as required. Figure 1 provides a visual understanding of the metabolic pathways. Note that all three pathways are operating in some fashion at any time and will adjust to demand. The x-axis is duration of exertion in seconds and the y-axis is ATP turnover, or energy demand.

These systems are crucial to understanding complete fitness. Imagine the three metabolic systems (PC, GL, and OX in order from top to bottom) are part of a three-tiered fountain (see Figure 2) where filling one of the upper tiers also helps fill the lower tiers. Therefore, filling the PC tier also begins filling the GL tier and then the OX tier. If a Marine fills the top tier of the fountain (strength and power), he will also fill the other two tiers (aerobic endurance). However, if a Marine attempts to fill the fountain only filling the bottom tier (basing their training on endurance), they will never be able to effectively fill the two tiers above. Strength and power can improve endurance, but only training endurance does little to improve strength and power.

### Functional Strength, Applied

Consider the following example: Cpl Curl strength trains regularly and





**Figure 3.** 5km run times before and after in the experimental group (E) and control group (C).

focuses primarily on individual muscle groups by performing isolation exercises and rarely doing compound movements, thereby neglecting his high-end strength, power, and the PC energy system. He can squat 200 pounds for one repetition and usually does “cardio” following his workout by running 3 miles, occasionally with a flak jacket at a moderate intensity. Another Marine, Sgt Squat, does functional strength and power training with compound exercises. He squats, deadlifts, presses, and cleans regularly and with good range of motion. He can squat 350 pounds for one repetition. His cardio consists of high-intensity intervals and metabolic conditioning workouts. Both are in the same unit and have a nine-mile hike, an aerobic event, coming up. The gear list equates to a total of 100 pounds, not an uncommon load. Halfway through the hike, Cpl Curl begins to struggle and eventually falls behind while Sgt Squat handles the hike with ease. What happened?

If each step these two Marines take during the hike are like one mini-repetition, each step required Sgt Squat to exert only 29 percent of his maximum capacity (100 pounds of gear divided by a 350 pound squat) while each step Cpl Curl took required him to exert 50 percent of his capacity (100 pounds of gear divided by a 200 pound squat).

Eventually, Cpl Curl’s body was unable to keep up with the energy demand required for carrying a heavy load. In Cpl Curl’s regular physical training regimen, he only filled the bottom tier of the fountain and failed to effectively fill the two above. Sgt Squat used high intensity interval training to supplement his strength training, allowing him to effectively fill all three tiers from the top-down.

Math demonstrates the efficacy of this model, but does science? As it turns out, this is a common finding in studies that examine the relationship between

strength, power, and endurance. In a study conducted by Leena Paavolainen, et al., 22 elite male cross-country runners were split into 2 groups for a 9 week training program. The “experimental group” replaced 32 percent of their overall training volume with explosive strength training, and the control group replaced only 3 percent of their training volume with the explosive exercises. The results: the experimental group showed statistically significant improvements in their 5km run time, running economy, and maximal 20 meter speed. (See Figure 3.) Specifically, runners in the experimental group shaved approximately 30 seconds off their 5km run time whereas the control group showed no improvement, actually getting slightly slower. This was after only nine weeks using relatively light loads at explosive speeds.<sup>2</sup>

In another study, 17 well-trained male and female runners, who had not strength trained in the previous 6 months, were tested for 5km run times and were then split into a test group and a control group. For three days per week for eight weeks, the test group performed half squats with four sets of four repetitions with their 4RM. They were given three minutes of rest between sets. They used free weights and added 2.5 kilograms each time they were able to complete a set without failure—a basic progressive overload principle. The control group conducted the same tests before and after the experiment but did



**A competitor in MCAS Miramar’s HITT tactical athlete championship competition.** (Photo by Amanda Jenkins.)



not include any strength training. Results yielded a 33.2 percent improvement in 1RM half squat, a 26 percent increase in rate of force development, improved running economy (efficiency) at 70 percent effort, and a 21.3 percent increase in time to exhaustion at maximum aerobic speed (participants could run for longer at maximum aerobic speed). The control group showed no improvements in any metric that was measured.<sup>3</sup>

A third study examined the effectiveness of high intensity cardio versus steady state cardio in 40 individuals divided across four groups. Group 1 performed long, slow distance running (45 minutes at 70 percent max heart rate)—a common Marine Corps PT session. Group 2 performed lactate threshold training, running for 24.25 minutes at 85 percent max heart rate. Group 3 performed 47 running intervals of 15 seconds at 90 to 95 percent max heart rate and 15 seconds of active recovery jogging at 70 percent max heart rate. Group 4 performed four intervals lasting four minutes at 90 to 95 percent max heart rate with a 3-minute active recovery (70 percent effort) time between intervals. The results showed a significant difference between Groups 1 and 2 (the steady state, lower intensity groups) and 3 and 4 (high intensity group) in improving VO<sub>2</sub> max. VO<sub>2</sub> (maximal oxygen uptake) is considered one of the best scientific predictors of aerobic endurance, but typical Marine Corps PT sessions lack the intensity required to improve this metric. If there is one thing to take from this study it is that intensity is key—more is not better.<sup>4</sup>

Endurance training should not be dismissed, however. It tests aerobic capacity, efficiency, and, perhaps most importantly, mental toughness. Yet, there are better more efficient ways to train. From there, we can use a high level of physical fitness to test mental toughness and improve combat readiness.

### Combat Readiness

Science demonstrates why Sgt Squat was able to out-perform Cpl Curl, and their situation is both common and universally applicable. Marines who squat

frequently can exert more force on the ground and move faster when sprinting for cover. Marines who deadlift properly will use the same technique when lifting sandbags, water jugs, and carrying ammo cans. Marines who clean and press will have no problem lifting main packs from the ground and loading them onto the bed of an MTRV, all with less risk of injury and greater efficiency. These examples, and many more, demonstrate the potential improvements to combat effectiveness.

If these concepts were understood and applied, the overall physical performance of Marines in garrison and combat would increase dramatically. Marines would cover more ground faster, be less reliant on vehicles, fatigue slower, and would be more durable. Casualty evacuation would be faster and those remaining would have the endurance to continue fighting. Confidence would be higher. Our continued lethality as a warfighting organization necessitates a reassessment of our fitness programs, and it begins with our fitness tests. If we change the test, we change the way Marines prepare for the test, and that is the ultimate goal.

### Functional Strength and Power Tests (FSPTs)

Our fitness tests must validate the capacity and efficiency of our energy systems. The smallest Marine must be able to evacuate the largest casualty; therefore, the test must require a high level of strength. The test must be easy to conduct, measure, and repeat by Marines in any location. Finally, and most importantly, the test would change the way Marines prepare for combat.

The PFT and CFT are one dimensional. They reward thin, aerobically-superior Marines and do not demand a significant level of strength in any par-

ticular modality. Currently, Marines can lack functional strength and appear fit, but this comes with reduced capability on the battlefield. Below are options as part of the functional strength and power test (FSPT), a test that addresses these concerns. Some events appear similar to current metrics with an added dimension while other elements are new. These are not meant to be definitive but to start a conversation about potential options. These events require that Marines become proficient in fundamental barbell strength and power exercises and require a high degree of conditioning, translating into a greater capacity to move large loads, long distances, quickly. (See Figure 4.)

### Potential for Injury

A common concern with compound strength training is the potential for injury. Injury rates among elite and recreational trainees from both strength and endurance backgrounds have been widely researched. In multiple studies analyzed by StrengthandConditioningResearch.com,<sup>6</sup> runners and endurance athletes experience between 2.5–12.1 injuries per 1,000 hours of training, whereas strength sports such as powerlifting and Olympic weightlifting only experience between 0.24 and 5.1 injuries per 1,000 hours of training.

In an interview the 1st Bn, 1st Marines Battalion Surgeon, LT Justin Beck, indicated that knee and lower back pain account for the preponderance of chronic injuries among Marines.<sup>7</sup> Knee pain is usually expressed as patellar tendonitis and is the result of excessive running and hiking (overuse injury) as well as a lack of lower body development. Lower back pain is typically reported as the result of hiking or lifting weights. LT Beck stated that when a Marine reports an injury due to lifting weights, it is

FSPT 1	FSPT 2	FSPT 3	FSPT 4	FSPT 5
Back Squat 1 repetition max Maximum Score = 2x bodyweight	Kettlebell Test Maximum repetition kettlebell swings in 10 minutes Maximum Score = 300 repetitions	Overhead Press 1 repetition max Maximum Score = 1x bodyweight	Pull Ups Max reps with FLAK and front/back plates Maximum Score = 15 repetitions	See Figure 5 Maximum points: under 3:00

Figure 4. FSPTs. FSPTs 4 and 5 are conducted in boots and utilities.<sup>5</sup>



the result of poor form and a lack of proper technique. When questioned on the consistency of their physical training (specifically weight lifting), Marines typically reveal they either do not follow a structured strength plan, tried to lift more than they should have, or both.

In addition to warming up properly, LT Beck agreed that the best method for combating these injuries is the use of a structured, supervised strength plan. Strengthening the hips and posterior chain (lower back, glutes, and hamstrings) helps prevent common knee and lower back injuries by creating a balanced, stable base of support. This training also teaches Marines to use their musculature correctly when carrying heavy loads. Success in the FSPTs requires these recommendations are adhered to and requires unit leader's investment in preparing their Marines properly.

### Fiscal Feasibility

The fiscal benefit to this approach is an additional benefit. For example, a common piece of gym equipment<sup>8</sup> within the Marine Corps, such as the Nautilus Nitro-Nove Leg Extension/Curl machine, costs \$3,799.99. For less, the Marine Corps could purchase three new barbell stands, each with a 365-pound barbell/plate combination. The same dollar amount could purchase forty 70-pound kettlebells, sixty 53-pound kettlebells, or seventy-nine 35-pound kettlebells. The Nautilus services one person and trains one muscle group. Common functional strength and fitness equipment costs considerably less and trains entire units—all requiring far less maintenance and producing superior results. To create functionally fit, confident, combat-ready Marines, the Marine Corps must reconsider this as a viable equipment investment strategy.

The Marine Corps has made efforts to address the abovementioned shortfalls. Next year promises changes in Marine Corps fitness: Marines must run faster and force fitness instructors will provide guidance and structure to commanders. However, compelling scientific evidence shows that the effort falls short of our true potential. Adding three pull-ups to the maximum

PFT score and cutting a few seconds off the maximum movement to contact score fails to address the core deficiencies. Although many HITT modules include barbell strength training, the programs are unstructured and adhered to by only a small fraction of Marines. Further, the recommended PFT preparation program does not include any strength training. More drastic changes are needed.

### Commander's Intent

In the Commandant's most recent white letter,<sup>9</sup> Gen Neller addresses the need to optimize physical performance and "make all Marines more lethal, resilient, and more capable on the battlefield." Force fitness instructors are expected to be at the forefront of this mission, and I believe that implementing the FSPT best achieves the commander's intent.

Fitness must be one of the Corps' highest priorities. Gen Neller routinely emphasizes the importance of physical fitness, mandating the creation of a new MOS to meet his vision. We have the tools, we have the science, we have the information, and we have the intent. With the FSPT, we now have the method. I am proposing the Marine Corps revamp its physical fitness program *again*; only this time, it will be comprehensive and driven by modern science. Implement the FSPT—a well-rounded test that demands a high, but achievable, level of strength, power, and aerobic capacity. It is a test that will change the way physical training is conducted, shifting from archaic endurance-based training to a scientifically supported strength, power, and high-intensity regimen. Let's achieve the Commandant's intent and make all Marines more lethal, resilient, and more capable on the battlefield.

### Notes

1. Jeremy DuVall, MS, CPT, *Energy System Training for Athletes*, (Colorado Springs, CO: National Strength and Conditioning Association, 2013), accessed at <https://www.nasca.com>.
2. Leena Paavolainen, Keijo Häkkinen, Ismo Hämmäläinen, Ari Nummela, Heikki Rusko,

"Explosive-strength Training Improves 5-km Running Time by Improving Running Economy and Muscle Power," *Journal of Applied Physiology*, (Bethesda, MD: American Physiology Society, May 1999), 1527–1533. Citation includes the first of the three studies in the "Functional Strength Applied" paragraph as well as Figure 3.

3. Oyvind Stoen, Jan Helgerud, Eva Maria Stoa, and Jan Hoff, "Maximal Strength Training Improves Running Economy in Distance Runners," *Medicine and Science in Sports and Exercise*, (Indianapolis, IN: 2008), 1087.

4. Jan Helgerud, Kjetill Hoydal, Eivind Wang, Trine Karlsen, Pål Berg, Marius Bjerkaas, Thomas Simonsen, et al., "Aerobic High-Intensity Intervals Improve  $\dot{V}O_{2\text{Max}}$  More Than Moderate Training," *Medicine and Science in Sports and Exercise*, (Indianapolis, IN: 2007), 665.

5. Functional Strength and Power Test 2: Men use a 32kg or 70-pound kettlebell, women use a 24kg or 55-pound kettlebell swung to eye level. Specific standards for all FSPTs will be established and introduced with enough time for Marines to learn and practice those standards prior to implementation.

6. Strength and Conditioning Research, "Which Strength Sport is Most Likely to Cause an Injury?" (8 July 2014), accessed at <https://www.strengthandconditioningresearch.com>.

7. LT Justin L. Beck, USN, Battalion Surgeon, 1st Bn, 1st Marines, interview by author, (26 September 2016). This interview was conducted by the author with LT Beck. In order to ensure unbiased responses, LT Beck had not read nor was he aware of the contents of this article prior to the interview.

8. Pricing for the Nautilus Nitro-Nove Leg Extension/Curl machine is from Amazon.com. Pricing for the stand, bar/plate, and kettlebells are from Rogue Fitness and are as follows: Rogue ES-1 Squat Stand, Alpha Bar and Bumper Set, and Rogue Kettlebells.

9. Commandant of the Marine Corps, "White Letter 2-16, Marine Corps Physical Fitness Program," (Washington, DC: 1 September 2016).





# Operational-Level Supply

Networked logistics

by 1stLt Gregory J. Carnazza

To continue to be the crisis response force of choice, the Marine Corps has to think about our logistics differently and break our traditional mindsets and doctrine, especially in regard to a sustained special purpose MAGTF (SPMAGTF). We need to have an efficient and effective logistics network that affords us the opportunity to exercise our procurement platforms that plug into that network. By doing this, the Marine Corps can better capitalize on these networks faster and more efficiently, outpace our sister Services, control the environment of deployment, and concentrate our efforts on becoming America's true crisis response force.

The days of bringing 10,000 National Stock Numbers (NSNs) to support one exercise is over—it becomes too cumbersome to pack and ship all of the parts that may or may not be used in a foreign country to support an exercise lasting only 10 to 20 days. The average time it takes to ship a standard letter or piece of small gear from the continental United States (CONUS) to Europe is about 5 to 17 days at the fastest; most of these exercises would be over before the parts ever hit the distribution hub in Germany or Sicily. A CO should not expect the answer “it is in the supply system” or “we don’t know when it is getting shipped out;” the CO should expect the answer “it is getting shipped out tomorrow morning.” Aged mindsets dictate to take out a deployed support inventory (DSI) or a Class IX block (repair parts) to support operations. While both have their advantages and disadvantages, the process behind creating this deployable inventory is archaic, outdated, and not suitable for the rapid

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deployable SPMAGTFs. Because of the cyclic turnover rate, any knowledge or experience gained is lost during RIP/TOA (relief in place/transfer of authority), thus recreating a process resulting in the same issues time and time again. While there are many methods to prevent this, the approach that creates the least amount of information loss is to have a permanent unit in place that controls the area of operations. A permanent structure provides the interface to the supply chain infrastructure, efficiency of processes, and preservation of

knowledge as a strategy for effectiveness and competency.

Recent and pressing conflicts in Europe and Africa have spurred increases in theater activity. The size and frequency of large-scale multinational exercises, such as SABER STRIKE, COLD RESPONSE, AFRICAN LION, and the PLATINUM series, which require a robust spectrum of Marine Corps equipment, balanced on the shoulders of Marine Forces Europe/Africa's (MARFOREUR/AF's) inundated support system. Logistics to support these exercises must adapt and evolve to continue operations and dominate our areas of responsibility. Imagine a capability that houses a supply management unit in a deployed environment that has a smaller and lighter footprint and can support all forces in both the European



**U.S. Marines move gear onto the Bulgarian rail system, 23 August 2016. The gear movement from Novo Selo Training Area, Bulgaria, to AGILE SPIRIT 16 in Tbilisi, Georgia, demonstrated the Marines' ability to pack, load, and transport gear quickly to support operations anywhere in the Black Sea region. (Photo by Sgt Michelle Reif.)**



and African theaters utilizing distribution hubs and world-wide inventories instead of a traditional on-site warehouse approach. This unit would be able to reduce the wait time from 5 to 17 days to 4 to 7 days, giving the commander flexibility for the employment of their equipment and forces. The supply management unit (forward) would act much like the ones back in CONUS except be a fraction of the size, focusing quality over quantity. Crisis response units around the globe would regain the ability for sustainable operations—and with a shorter deployment time—because they would be able to rely on the replenishment capabilities of the supply management unit (forward).

The foundational idea of this capability resides with the intermediate supply account (ISA) located with the SPMAGTF-CR-AF. The ISA is centrally located at Naval Air Station Sigonella, Sicily (NASSIG), with detachments strategically placed in three countries: Moron, Spain; Mihail Kogalniceanu, Romania; and Novo Selo Training Area, Bulgaria. The logic behind this aligns to two facts—they are staffed and managed by the LCE, and the ISA is reliant on the facilities that the Defense Logistics Agency (DLA) already has established. The ISA utilizes the carrier network that DLA created in conjunction with the DOD account activity codes for shipping and receiving equipment within the theater. There are actually two DLA hubs in Europe; Sigonella with 9,000 NSNs on the shelf, and Germersheim with 27,000 NSNs. The ISA is reliant on the infrastructure that is provided at a theater level and should be located where it can move about the area of operations, whether that is NASSIG, Camp Lejeune, or MARFOREUR/AF. The concept of reorganizing the ISA to create a responsive support network to match operational demand, saving costs across the Marine Corps, and increase readiness of the theater is being tested right now at the account in NASSIG (MX3002). Historically, the MX3002 account has had 2,100 to 2,500 NSNs available for order but only 1,150 of them have been requisitioned over the past 3 years, the remaining parts were collecting dust

on the shelves. The staff has decided to reduce the foot print to match what the units in theater actually order, mainly SPMAGTF-CR-AF and Marine Rotational Force-Europe (formerly Black Sea Rotational Force); additionally, it has identified 250 new items that have previously not been stocked on the ac-

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***In order to maintain that prestige, we must adapt our concepts of employment, infrastructure, and capabilities to ensure our longevity.***

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count to further support maintenance readiness. These changes to the ISA will result in a Class IX block consisting of 1,250 NSNs, one of the smallest and most responsive of its kind, supporting all operations in the surrounding areas.

Visualize a capability that can be flexed at a MARFOR level in a deployed environment, where countless commanders will have sustainable supply support for their missions. Picture this

resource at a level that does not have to worry about the red tape of crossing combatant commands, moving assets from one theater to the next, and one that has the ability to continuously be updated to match operational demand at any point in time. During Exercise SABER STRIKE, the exercise force moved from CONUS to Norway, Latvia, Estonia, Lithuania, and back to Norway, all in a matter of six weeks. The organic supply from Combat Logistics Regiment 2 (CLR 2) did not have the time nor capacity to conduct the extensive research to identify when the parts would come in and where they should get shipped to; if they ordered to a location they were located for only four days, the part would have been lost, resulting in wasted money. The need for near-perfect estimates on shipping times was a mandatory requirement; however, with air cards, the organic supply section could not support it. The ISA in NASSIG supported with NSN research on every item ordered (68 total orders) prior to entering the requisition process through Global Combat Support System-Marine Corps (GCSS-MC). This enabled CLR 2 to have the necessary parts prestaged in their next location so proper maintenance could be done, reducing money loss, improving



***U.S. Marine Corps Cpl Andrew Bastian, a heavy equipment advisor with SPMAGTF-CR-AF, leads a bulldozer driven by a soldier with the Ugandan People's Defense Force, Camp Singo, Uganda. (Photo by Cpl Alexander Mitchell.)***



maintenance readiness, and increasing the precision of logistics.

Even though the ISA has implications that are far beyond the tactical level, the fact still remains that it is a supply account, and just like every other supply account, it can only belong to one commander. We like to think that at the battalion level, all sections or commodities report straight to the regimental staff. Supply does not follow that train of thought. Supply is all about accountability, or “bean-counting;” one unit’s ability or inability to manage equipment cannot be tied to another. Furthermore, every unit has a set budget that is independent from every other unit—even a regiment will have a separate budget from the battalions that remain under its supervision. This leaves the concept of support up to the commander who owns it and whether or not they want to extend their hand outside their mission set. The ISA’s current location is with the SPMAGTF, which poses a threat to any future support it may or may not provide. Once the LCE rotates, the next commander will have the choice to sustain the same support that the current regime offers or if the ISA will focus all support and funding internally to the MAGTF. This capability cannot remain at the tactical level because of the expertise and knowledge of the support it can provide to any forces in the area of operations. It only makes sense to relocate the ISA to a position that can influence operational or even strategic planning efforts for the plethora of forces that operate in theater.

GCSS-MC is the keystone program for enabling the ISA. This program, however, consumes massive amounts of communications bandwidth that exercises, such as SABER STRIKE, cannot fully provide. Precision logistics comes at a cost. Managing theater supply chain networks requires near full time computer assets, personnel, and connectivity to support consecutive contingency, crisis response, and/or exercises. Distributed logistics support operations require a network that can provide bandwidth-dominant systems with a steady Internet connection to follow the parts and supplies from cradle to grave. Using GCSS-MC and other



**Sgt Angie Novoa, a warehouse chief with SPMAGTF-CR-AF, organizes a shelf in her warehouse on NAS Sigonella, Italy. (Photo by Cpl Alexander Mitchell.)**

essential websites creates an unseen cost on communication assets by consuming massive amounts of bandwidth and stealing processing power from operations, which is a finite resource on deployment. One way to eliminate the high communication’s costs for exercises and operations is to segregate out the operational supply capability and entrench that capability onto a stable infrastructure, thereby reducing the risk of logistics failure.

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### ***GCSS-MC is the keystone program for enabling the ISA.***

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Permanent structure and infrastructure already exists in Europe and is owned by MARFOREUR/AF. At the MARFOR, exercises, crisis response, and contingency operations are the focus of planning and operations. Likewise the MARFOR level possesses immediate and direct access to HQMC entities, DLA services, and inter-Service relationships not authorized at the tactical level. Coupled with direct budgeting control and access, the ISA could provide the MARFOR with flexibility, control, precision, and, more importantly, assurance.

The Marine Corps is advertised as the Nation’s crisis response force. In order to maintain that prestige, we must adapt our concepts of employment, infrastructure, and capabilities to ensure our longevity. The ISA concepts proposed in this article and proven in real world events offer a dramatic opportunity for the Marine Corps to outpace our competitors in supply chain management. Moving the intermediate supply asset to the location where it can balance both operational and administrative control while supporting logistics to the area of operations is just one small way the Marine Corps can accomplish our mission without sacrificing money or capability. This will provide commanders and their forces the ability to concentrate on the mission of making Marines and winning battles while we capitalize on the networks and infrastructures that already exist.

*>This article was written before I&L’s October 2016 COLS article was published, but embraces our Commandant’s idea of change and I&L’s future concept of logistics at the heart of the piece.*





# Every Clime and Place?

A call to action for all logisticians<sup>1</sup>

by Maj Mark Wlaschin & Cpts Gaetano Bettinelli & Jon Thomas

In January 2016, Gen Robert B. Neller stated,

Americans expect their Marine Corps to be most ready when the Nation is least ready. Readiness is not defined by just our equipment, supply, and maintenance. Readiness also accounts for the quality and challenging nature of our training.<sup>2</sup>

Over the last 15 years, Marines in combat service support (CSS) MOSs<sup>3</sup> have supported combat operations spanning multiple geographic combatant commands. Their ability to sustain MAGTF operations has been a crucial component of the Marine Corps' role in the global war on terror. Despite these years of experience, there is nonetheless a geographic area and climate zone that would likely prove as tumultuous for CSS Marines now as it was 60 years ago: that region defined by snowcapped mountains and consistently low temperatures.<sup>4</sup> This lack of capability is critically dangerous and must be addressed by the entire CSS community across the spectrum of doctrine, organization, training, materiel, leadership, personnel, and facilities (DOTMLPF).

More than a decade and a half of war has tempered logisticians across the MAGTF. Never before in Marine Corps history have its logistics officers, motor transport operators, water support technicians, food service specialists, warehouse clerks, and all other CSS personnel been as experienced at "planning and executing the movement and support of forces" (see *Joint Publication 4-0, Joint Logistics*, [Washington, DC: Joint Staff, October 2013]). However, the majority of those collective experiences have been in the lower elevations

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**>>>Capt Thomas is currently serving as the MT Officer, MCMWTC, and OIC, Animal Packing Course. His operational experience includes one OEF deployment with CLB-2.**



**Marines from 2d Bn, 2d Marines conduct a ski movement between training events near Silver Creek Meadow during MOUNTAIN EXERCISE 1-17 (MTX 1-17). (Photo by Maj Mark Wlaschin.)**

of Iraq and Afghanistan.<sup>5</sup> The focus on this singular combatant commander's area of responsibility (AOR) has resulted in undesirable effects on Marine forces. It has stripped away the understanding of the complexities inherent to CSS operations in mountainous terrain, while also allowing an attrition of the understanding and appreciation of cold

weather effects. As a result, many valuable, hard-earned lessons from history have melted away. Worse, the ebbing of institutional knowledge concerning cold weather operations comes at a time when headlines are full of potential threats to national security in mountainous and cold weather regions around the world.





**The LCE leadership for MTX 1-17. Sourced from across 2d MLG, the 80 LCE participants during MTX 1-17 came from 10 different units to make up the LCE detachment, built around 2d Supply Battalion(-)(REIN). (Photo by 2ndLt Justin Wilkison.)**

In the past few years, while U.S. attention has been split between the Middle East and shifting power in the Pacific, Russia has made significant changes in their operational posture in the Arctic.<sup>6</sup> The intent of these changes in operational posture appears to be the defense of Russia's national interests to the north, an area rich with increasingly exposed natural resources.<sup>7</sup> As Russia rebuilds its post-Cold War cold weather capacity with an increased number of permanently-stationed units above the Arctic Circle, other European nations are being pressured to do the same.<sup>8</sup> The North Atlantic Treaty Organization (NATO) has taken steps to increase its presence in the region by re-invigorating Exercise COLD RESPONSE, which, in 2016, saw the largest force involved in the exercise since 1995. This cold weather repositioning of forces<sup>9</sup> will continue to put pressure on United States and allied forces to ensure an appropriate level of readiness is maintained in the event of a resource related conflict in the Arctic.

The Korean Peninsula is another region of continuing concern for Marine forces. Since the 1950s, the U.S. military has maintained a presence on the Korean Peninsula to assist in ensuring stability in the region. With Kim Jong Un's rise to power in 2012, the routine,

militaristic rhetoric released by North Korean news agencies increased and is now often backed by troop movements and aggressive demonstrations.<sup>10</sup> While the synopsis of the Marine Corps' history on the Korean Peninsula is well-known, its institutional memory has failed to capture and apply many of the hard lessons learned that would prove essential if North Korea reacted against sanctions with military power.

If either of these locations were to become a military hotspot that required a MAGTF to deploy rapidly, one might think that doctrine or historical publications would help make up for the gap in operational experience by providing a starting point from which to generate tactics, techniques, and procedures. Unfortunately, there are only five Marine Corps doctrinal publications<sup>11</sup> related to winter or mountain operations, and within those five publications, there is little CSS-related information.<sup>12</sup> This dearth of information on tactical or operational level CSS operations, combined with a lack of mountain or cold weather operational experience or training emphasis over the past 15 years, has created a severe deficit in Marine Corps logisticians' ability to support combat operations in "any clime and place." Thankfully, a location where these deficiencies can be addressed already exists.

The Marine Corps Mountain Warfare Training Center (MCMWTC) was established in early 1951, becoming the United States Marine Corps' first and only cold weather training center for units that would soon engage the enemy on the Korean Peninsula. Its history began with the establishment of the Cold Weather Training Battalion, Provisional Staging Regiment, Training



**Marines from 2d Bn, 2d Mar conduct a ski-borne BZO (battle sight zero) range during MTX 1-17. (Photo by Maj Mark Wlaschin.)**





**A battalion aid station in a snow-covered environment using connected 15-man tents during MTX 1-17. (Photo by Maj Mark Wlaschin.)**

and Replacement Command, Camp Pendleton, CA. Two weeks later, the USMC re-designated the training camp as the Cold Weather Battalion, Staging Regiment, Training and Replacement Command, and relocated it to Pickel Meadows, CA. That November, the first units were trained at the MCMWTC.

The MCMWTC occupies roughly 64,000 acres of the Humboldt-Toiyabe National Forest. A letter of agreement between the Forest Service and the Marine Corps permits the use of the area to train Marines in mountain and cold weather operations. Elevations in the training areas range from 6,800 feet to nearly 11,400 feet above sea level. Winters are harsh and long, typically providing six to eight feet of snow pack for trainees to experience. During winter, temperatures range from highs around 30 degrees Fahrenheit to lows around 20 degrees Fahrenheit, with the occasional night getting down to -15 degrees Fahrenheit. Summers are moderate and breezy, though temperatures frequently reach 90 degrees Fahrenheit. In short, it is an ideal location in which to train for combat in the mountains or cold weather environments.

Throughout its first few years, the MCMWTC was a small and scarcely known command that provided four weeks of training to Marine units and a Mountain Leadership Course<sup>13</sup> to

train advanced skills, but as the operational requirements increased in size and scope, so did the base. During the 1980s, the MCMWTC became critically important because of the increased role of the Marine Corps in cold weather operations as well as research and development of equipment, clothing, and doctrine. The defense of NATO's northern flank, the continued threat on the Korean Peninsula, and the resulting annual exercises in Norway required Marine Corps units who were trained for cold weather operations and proficient in the use of cold weather and mountain equipment.

As such, the 1980s and 1990s saw the evolution of the basic training syllabus and establishment of additional formal schools to support mountain and cold weather training.<sup>14</sup> Units, almost exclusively infantry battalions, began rotating through MCMWTC in five- or six-week training packages. Additionally, a training section focused on individual skills was created, based loosely on the Royal Marine model, and renamed the Mountain Leader Course (MLC). Other courses, such as the Mountain Scout Sniper Course, Mountain Medicine, Assault Climbers Course, Animal Packing Course, and Mountain Communications, were established to provide unique training to the Operating Forces to increase proficiency in specialized skill sets.

Following the terrorist attacks on 9/11 though, the Marine Corps' focus of training shifted to counterinsurgency training in preparation for the wars in Iraq and Afghanistan. This shift led to an atrophy of familiarization with operations in these environments. The CSS community, which was never the focus of effort, suffered an acute deficiency at this point.

In 2008, MOUNTAIN EXERCISE (MTX) was established as a Service-level training exercise (SLTE), and currently, the MCMWTC conducts one Reserve and five Active Component MTXs each year. Two of these active duty MTXs are conducted in the winter season and typically involve training in an over-the-snow environment. The exercise force for each MTX consists of an infantry battalion,<sup>15</sup> various special operations forces elements, a rotary-wing detachment, and LCE detachment from the respective Marine Logistics Groups (MLG).<sup>16</sup> Prior to the establishment of MTX as an SLTE, the infantry battalion would often times be reinforced by limited CSS capabilities and be self-supporting, eliminating the need for MLG participation. In order to simulate doctrinal command relationships and tasking, all MTX exercise forces now fall under a simulated regimental combat team. During the approximately 30-day exercise, the infantry battalion undergoes pre-environmental training, consisting of cold weather<sup>17</sup> and mountain familiarization; basic mobility, consisting of field practical application of cold weather skills in the winter and mountaineering skill during the summer; and a cumulative, four day force-on-force field exercise. Throughout the exercise, logistics support requirements are identified and routed from the GCE to the LCE via the regimental combat team staff.

During MTX, the LCE conducts CSS training by actually providing CSS to the GCE, under the extreme constraints and restraints within this unique environment. Many Marine Corps aircraft have significantly reduced lift capabilities at higher altitudes, which increases the requirement for ground transportation. In the mountains, however, road networks are



typically limited, making the increased ground transportation easy to disrupt. If there is significant snowfall, an additional level of complexity is added as road networks shut down, wheeled assets become even more limited, and the lack of a Marine Corps over-the-snow tactical capability becomes apparent.<sup>18</sup> Yet despite all of these limitations, the operational requirements of the GCE remain and must be supported.

Keeping this principle in mind and understanding the exercise design of MTX, MCMWTC provides logisticians an excellent venue to become more proficient at providing real world CSS in an unusual environment. The mountains and snow force CSS operations officers and planners to address and account for atypical factors such as utilization of snow chains, providing warming tents for personnel and equipment, and using pack animals for ground re-supply. Additionally, this environment benefits junior CSS Marines by forcing them to perform their MOS in adverse conditions. Skills that are easily mastered in flat, temperate locations like Camp Lejeune or Camp Pendleton become significantly more difficult at the MCMWTC. Establishing a field feeding site in multiple feet of snow, operating a medium tactical vehicle replacement (MTVR) on snow and ice or up a 35 percent grade with hair-pin turns, and maintaining generators in -10 degrees Fahrenheit all have an increased degree of difficulty. And, while many CSS Marines are aware of the “operations under unusual conditions” section of technical manuals, few have ever opened to the “operation in extreme cold” pages and applied the information contained therein. Training during MTX forces them to read those pages. Moreover, it does so in an environment where the requirement is real, but there are safety and training backstops to prevent injury or mission failure. Some might argue that there are individual Marines or even some units with experience in places such as Norway or South Korea, and that these Marines or units are capable of providing CSS in mountain and cold weather environments. Individually, this may be true, but it is not an institutional answer to the question of how the Ser-



**Lift support, staged and ready for tasking during MOUNTAIN EXERCISE 2-16. (Photo by Maj Wlaschin.)**

vice will provide CSS to the GCE in cold weather or mountain operations. That question requires a Service-level answer, part of which will require training at the MCMWTC.

With its unique training opportunities, one might think that units would

be eager to attend MTX. This has not been the case.<sup>19</sup> In fiscal year 2012 (FY12), of the five MTXs conducted, only one had an MLG unit fill the role of the LCE while the other four relied on augments to the GCE.<sup>20</sup> In FY13, of the six MTXs conducted, four had



**The result of inexperience and training gaps during an overseas exercise. The driver attempted to take his HMMWV through three feet of snow while pulling a trailer in order to create a motor pool track plan and was immediately stuck, requiring recovery from a host-nation wrecker. Shortly afterward the same task was attempted again, this time successfully, using an MTVR. (Photo by Maj Mark Wlaschin.)**





**Marines receive hot chow during MOUNTAIN EXERCISE 2-16 near the MCMWTC ski lift. MTX is a unique opportunity for food service specialists to conduct satellite feeding in a snow-covered environment. (Photo by Maj Mark Wlaschin.)**

MLG units participate with a total of 265 Marines and Sailors providing support across all four exercises.<sup>21</sup> In FY14, the total number of MLG participants grew to 507 Marines and Sailors, and in FY15, it grew again to 650.<sup>22</sup> While these increases may appear significant, they do not compare to the numbers of other Marines trained from the infantry divisions; 4,513 in FY14 and 4,767 in FY15. At this point, one might assess that leaders and logisticians throughout the CSS community are simply not interested in training in mountains or cold weather. Therefore, it is imperative to remember that fiscal constraints, competing priorities, and a lack of an advocate at the MCMWTC have historically made the successful conduct of worthwhile, CSS MOS-specific training at Pickel Meadows difficult, if not impossible. The venue has changed though, and now the MCMWTC is more amenable to the conduct of training beyond that of infantry battalions alone.

In 2015, the S-4 (logistics) at the MCMWTC was tasked with advocating for and providing support to all CSS training in conjunction with MTX. As the CSS lead, the MCMWTC S-4 shop now facilitates training by coordinating with local agencies, base personnel, and MLG exercise force to ensure the safe

and successful integration of MLG units into MTX. This integration is conducted with a focus on readiness, ensuring that the MLG exercise force training is tied to Marine Corps tasks (MCTs) and conducted in a doctrinally and tactically sound manner. Once planned and coordinated, the MCMWTC S-4 shop supervises and mentors the unit through the many challenges they face during MTX, providing suggestions and advice that ensures learning occurs across the organization. Additionally, the S-4 now acts as lead for all CSS research, development, testing, and evaluation (RDT&E) during both winter and summer exercises. These changes have created a setting where CSS units are able to safely train to the distinctive nuances of mountain and cold weather operations in support of an infantry battalion for 30 days. Since the change, CSS units have come to MTX with a multitude of training goals and task organizations. One brought a large command post and tested its ability to command and control using high frequency communications while conducting resupply operations. During the resupply combat logistics patrols, which included MTRVs and HMMWVs, those supplies were brought from the base camp up to the snow-line in rolling stock and then transferred into over-the-

snow vehicles. The opportunities MTX provides the CSS community are wide ranging, but these are just the first small steps in the right direction.

In the fall of 1950, U.S. forces flooded the Korean peninsula in response to the North Korean invasion. Lacking proper training or equipment, these forces struggled to survive against the North Korean and Chinese, onslaught. That winter, their lack of cold weather training became so apparent that small teams of cold weather experts were sent to teach Soldiers and Marines how to wear and care for cold weather clothing while they were actively engaged in combat.<sup>23</sup> This effort was not effective and made the benefits of training in a cold weather environment all the more obvious.

Most of the troops we are sending into arctic and wet-cold areas have been trained in the South. We visited the units that had trained in cold-climate areas. In the Marine units that had trained in Greenland ... not one man became a cold-weather casualty! Think that over. You cannot make clothing and equipment foolproof under all conditions, so we must train our troops. That does not mean a two-hour instruction period. It means living under actual wet-cold conditions. And living under those conditions is an acquired skill you can get only through training.<sup>24</sup>

Therefore, with respect to mountain and cold weather operations, logisticians must critically look for deficiencies across the spectrum of DOTMLPF. Shortfalls<sup>25</sup> must be identified to the Deputy Commandant, Installations and Logistics, and other appropriate advocates for decision or action. The status quo must be changed. Creative and critical analysis, especially of our mountain and cold weather logistics doctrine, must be conducted across all six functions of logistics. Opportunities, when found, must be exploited and training conducted when and where possible, recognizing that increasing fiscal limitations may soon force even more creative solutions to this problem. Marine Corps logisticians should not wait until they hear the sounds of the guns echoing off foreign snow banks



and mountain ridgelines to figure out how to operate in that environment. Marine Corps leadership, and CSS Marines of all ranks and MOSs, must face and answer this question before mission accomplishment and lives are at stake.

## Notes

1. "Logisticians" as used in this article refers to all personnel in non-combat arms MOSs, both officer and enlisted, including non-aviator MAW personnel.

2. See CMC, *FRAGO 01/2016*, (Washington, DC: HQMC, 2016).

3. While the majority of Marine Corps combat service support (CSS) capabilities are contained within the Marine Logistics Group (MLG), this article refers to all Marine Corps CSS capabilities. Particularly of note, Marine wing support squadrons (MWSSs) are resident in the MAW, and there are varying amounts of CSS in the infantry regiments and divisions. This article is addressed to all CSS personnel and is referring to all CSS units across the MAGTF and not the MLG alone.

4. For military purposes, cold regions are defined as any region where cold temperatures, unique terrain, and snowfall significantly affect military operations for one month or more each year. About one quarter of the earth's land mass may be termed severely cold. See *MCRP 12-10A.4, Cold Region Operations*, (January 2011), for additional details on mountain and cold weather environments.

5. Al Asad Air Base: elevation 188m AMSL; Al Taqaddum Air Base: elevation 84m AMSL; Al Fallujah: elevation 45m ASL; Camp Dwyer: elevation 735m AMSL; Lashkar Gah: elevation 773m ASL.

6. Lydia Tomkiw, "Russia Military Increases Arctic Permanent Presence Amid Regional Tension," *International Business Times*, (29 January 2016), article available at <http://www.ibtimes.com>. See also <http://nationalinterest.org>; <http://theweek.com>; <http://warontherocks.com>; and <http://www.foreignaffairs.com>.

7. The Arctic holds an estimated 13 percent (90 billion barrels) of the world's undiscovered conventional oil resources and 30 percent of its undiscovered conventional natural gas resources, according to an assessment conducted by the U.S. Geological Survey (USGS). See <http://www.eia.gov>.

8. Article available at <http://www.reuters.com>.

9. Article available at <http://www.military.com>.

10. Article available at <http://www.upi.com>. See also <http://www.chicagotribune.com> and <http://www.usatoday.com>.

11. Headquarters Marine Corps, *Fleet Marine Force Reference Publication 12-5 (FMFRP 12-5), Combat Support In Korea*, (Washington, DC: reprinted 1970), written in 1952, based on interviews with veterans of that conflict; *FMFRP 12-7, Infantry Operations in Korea*, (Washington, DC: 1951); *FMFRP 12-48, On Winter Warfare*, (Washington, DC: 1982); *FMFRP 12-78, The White Death*, (Washington, DC: 1971).

12. Reference *MCTP 12-10A, Mountain Warfare Operations*, (February 2014); *MCRP 12-10A.1, Small Unit Leaders Guide to Mountain Operations*, (May 2013); *MCRP 12-10A.2, Mountain Leaders Guide to Winter Operations*, (July 2013); and *MCRP 12-10A.4 Cold Region Operations*, (January 2011).

13. Mountain Leaders Course (MLC) started in 1957 with 16 classes a year (each class was only 3 weeks). Its early influence was the 10th Mountain Division (U.S. Army), though the British exchange started in late 1950s. The Norwegian and British influence came on strong in the early 1980s after Vietnam with the North flank mission (all three countries operated together annually in Norway and had standing multiple exchanges with each other). MLC transitioned from the Army basic and advanced model for both summer and winter to the single six week models for summer and winter in the late 1980s due to lack of return students for advanced half.

14. The Mountain Communications Course was established in 2003.

15. The GCE for MTX is typically an infantry battalion, as that is what the MTX program of instruction is established to train. As such, there are never artillery or tank battalions employed as the GCE, and combat engineer battalions often times get a reduced training package that is tailored to their Marine Corps tasks (MCTs).

16. The LCE detachment has come from a direct support (DS) combat logistics battalion (CLB), a MEU CLB, an engineer support battalion (ESB), and a supply battalion. The minimum manning and equipment density list are included in *MCO 3500.11F, MAGTF Training Program*, (Washington, DC: April 2015).

17. During MTX 1-XX and MTX 2-XX only.

18. The lack of a Marine Corps over-the-snow tactical capability has been identified by MARFOREURAF via the deliberate urgent needs process. At the MCMWTC, this capability is currently filled by a fleet of BV-206s, an outdated, non-program of record vehicle of Swedish design. As there is no maintenance tail associated with these vehicles, they are "dying on the vine" and are being replaced by a fleet of commercial, off-the-shelf, non-tactical vehicles owned, operated, and maintained by South West Region Fleet Transportation (SWRFT).

19. However, 8th Engineer Support Battalion, under the command of LtCol Lauren Edwards, sent detachments to participate in both MTX 3-16 and 5-16 with less than two months in between exercises.

20. In FY12, there were seven planned MTXs. MTX 2-12 and 6-12 were canceled. Only MTX 5-12 had an LCE—CLB-13—which brought 200 personnel. Of note though, during MTX 4-12, V34 (3d Bn, 4th Marines) brought seven 3531 motor transport operators.

21. In FY13, the following comprised the LCE for each exercise: 2d CEB provided the LCE for MTX 1-13 with 39 personnel. An unknown CLB provided the LCE for MTX 2-13 with 100 personnel. 2d MLG provided the LCE for MTX 5-13 with 99 personnel. CLB-5 provided the LCE for MTX 6-13 with 27 personnel.

22. In FY14, the following comprised the LCE for each exercise: CLC-453 brought 75 personnel to MTX 4-15, CLB-15 brought 175 Marines to MTX 5-14. CLB-6 brought 247 to MTX 6-14 along with 3 additional personnel from elsewhere in 2d MLG and 7 personnel from CLR-25. In FY15, the following comprised the LCE for each exercise: CLB-26 brought 214 personnel to MTX 1-15. 1st Maintenance Bn brought 30 and CLB-3 brought 7 personnel to MTX 2-15. 7th ESB brought 131 personnel to MTX 3-15. CLB-2 brought 34 personnel and 2d CEB brought 38 personnel to MTX 5-15. CLB-11 brought 196 personnel to MTX 6-15.

23. See *FMFRP 12-5, Combat Support in Korea*, 171-175.

24. Ibid.

25. Reference the lack of a tactical over-the-snow family of tracked vehicles as identified by a deliberate urgent needs statement published by MARFOREURAF in June 2015; the lack of training on how to operate materials handling equipment on chains.





# Trauma Time to Care Goal

In a stable battlefield avoid using Role 2s

by CDR Richard Childers, USN

The North Atlantic Treaty Organization (NATO) categorizes combat casualty care facilities according to their capabilities. Role 1 (R1) is the most basic and delivers primary care and basic resuscitation. A Role 2 (R2) facility has basic resuscitative *and* emergency surgical capability. Role 3 (R3) is generally the most comprehensive theater medical asset with the most robust resources.

The USMC has only R1 and R2 capabilities. USMC R2s are generally composed of a shock trauma platoon (STP) and a forward resuscitative surgical system (FRSS). The STP can be considered the emergency department where casualties are initially received, while the FRSS is the operating room where surgery is performed.

R2s are ideal on a dynamic battlefield. They can be set up and taken down within an hour and are highly mobile on the modern maneuver battlefield, covering up to 50 to 100 kilometers in a day.<sup>1</sup> They provide timely surgical capability where there otherwise would be none. Many R2 assets were embedded with combat units during the attack phase of Operation IRAQI FREEDOM (OIF). They are also useful when the risk of casualties is low, number of troops small, or presence is transient, as to make establishing an R3 resource prohibitive.

Once the battlefield stabilizes, R3s are established. However, R2s often stay in place, surrounding R3s, to ensure compliance with the American operational planning principle of the "Golden Hour of Trauma (GHT)." This GHT concept holds that if a severely injured patient can receive resuscitative surgery within an hour, his chances of survival



An FRSS-STP conducts training in casualty care. (Photo by 2ndLt Eric Abrams.)

are improved. The United States has embraced this concept, and, in general, almost all U.S. forces now operate within an hour of a surgical capability.

By using forward R2s, time to treatment—as defined by early access to surgery—is decreased. However, this policy emphasizes early access to surgery over advanced treatment at a well-resourced, high-volume center, such as an R3.

Using R2s to satisfy the GHT time to treatment goal, after R3s and en

route care assets have been established, is misguided. Care at R3s should be emphasized as the weight of the published medical evidence shows that treatment at a well-resourced, high-volume center is more important than time to treatment. Furthermore, time to treatment goals can be achieved with more robust casualty evacuation (casevac) resources and important acute treatments can be done en route to R3 facilities with new, advanced casevac platforms. While R2s play a critical role in certain operational settings, when the battlefield stabilizes, care at an R3 should be prioritized.

## Care at R3s Generally Superior to Care at R2s

While R2s provide superb care, a review of the existing literature reveals

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**Shock trauma platoon is one R2 capability the Marine Corps has.** (Photo by Sgt Kassie McDole.)

that care at R3s will generally be superior to care at R2s. There have been two studies comparing mortality between R2s and R3s. The first study found no difference in mortality between patients initially seen at R2s compared to patients initially seen at R3s.<sup>2</sup> In contrast, the second study, which was five times as large, found the mortality rate was 6.6 percent lower for critically injured casualties initially treated at an R3.<sup>3</sup>

R3s are likely to provide better care because of their robust resources and the high volume of care they provide. The benefit of robust resources was established with the introduction of civilian trauma systems. Trauma systems coordinate pre-hospital, acute care, and rehabilitation assets to ensure timely access to appropriate care. In these systems, seriously injured trauma patients are directed to trauma centers where resources, interventions, and specialized staff are concentrated. Studies have found that the introduction of trauma systems has saved lives.<sup>4</sup>

Militarily, R3s have more resources than R2s. R2s usually have one or two general and orthopedic surgeons, anesthesiologists, nursing support, and basic blood bank support. In addition to these resources, R3s have specialists, CAT scans, intensive care units, and robust blood transfusion, pharmaceuti-

cal, and operating room assets. These assets are important in the operational setting as the modern care of improvised explosive device injured patients often involves five to eight surgeons and three anesthesiologists working simultaneously.<sup>5</sup>

In addition to having robust resources, data from civilian trauma centers reveals a benefit from seeing a high-volume of critically injured trauma patients. That is, with repetition, hospitals improve. This relationship—improved quality of care with increased patient volume—is well established in health care and trauma care specifically.<sup>6</sup> Because severely injured patients have better outcomes at high-volume centers, the American College of Surgeons requires advanced trauma centers to admit at least 1,200 trauma patients yearly, 240 of which must be severely injured.<sup>7</sup>

It is an argument that should have face value with line officers. To maintain basic carrier currency while deployed, U.S. Navy and Marine pilots must make at least one day carrier landing (day trap) every month. To maintain night carrier landing certification, they must perform a night landing (night trap) every seven days.<sup>8</sup> It is no different for physicians, nurses, and corpsmen. If a gunshot wound to the leg or arm is seen as the day trap of battlefield medicine, then

***R3s are likely to provide better care because of their robust resources and the high volume of care they provide.***



**R2s—seen here during training—usually surround R3s as part of the GHT principle.** (Photo by Sgt Kassie McDole.)



Setting	Months of Data	Median Trauma Patients/Mo	Median Trauma Operative Cases/Mo §
Role 2 Unpublished*	65	2.6	
Role 2 Unpublished*	53		0.6
Role 2 Published <sup>26</sup>	52.5	54.4	23.4
Role 3 Published <sup>27</sup>	15	173.3	
¶ Role 3 Published <sup>28</sup>	48		157.9

\*C Alvarado, G Demers, A Elliot, J Liang J. Moore, P Woodson. Personnel Communication 2013–2014 all from U.S. Navy units serving in Helmand Province, Afghanistan 2010–2014. We were able to obtain 65 months of data for trauma cases, and 53 months for operative cases, from two Role 2 units.  
 ¶ Role 3 operative cases included specialty fields including neurosurgery, OMFS, and ophthalmology  
 § Operative cases may, especially at Role 3 facilities, include multiple operative procedures  
 Trauma patient definition varied according to publication; some met joint theater trauma registry inclusion criteria, others were defined loosely as trauma resuscitations tracked in individual databases. In general, all patients regardless of acuity were included.

Table 1.<sup>9</sup>

the successful resuscitation of an improvised explosive device-related thigh amputation or sucking chest wound is surely the counterpart night trap.

In a stable battlefield, R2s do not see many patients. Our data from Marine Corps units in Afghanistan reveal that our R2s performed 1 surgical case every 2 months; compare that to 158 surgical cases per month at R3s. (See Table 1.<sup>9</sup>) Some R2s saw only one injured patient every two weeks—good enough maybe for day trips but not for night work.

### Time to Care in Trauma Patients Should Not Be Overemphasized

Many would agree that care at R3s might be better but argue that the decreased time to treatment makes up for it. However, the civilian trauma literature to support this supposition is weak.<sup>10</sup> Occasional studies will show a benefit—but most do not. When trying to distinguish causation versus association, consistency is required; it is absent on this subject.

In 2009, Secretary of Defense Robert M. Gates mandated pre-hospital helicopter transport of critically injured combat casualties in 60 minutes or less. In 2015, Kotwal published an important study examining the effect of this golden hour policy on combat casualty mortality.<sup>11</sup>

The investigators found that after the mandate, transport time decreased and mortality rate improved. While this is an

encouraging finding, it does not necessarily follow that the decreased transport time caused the decreased mortality. Combat casualty care has continually improved over the course of the last 15 years. Increased tourniquet use,<sup>12</sup> the introduction of specialized dressings that decrease bleeding,<sup>13</sup> innovations keeping patients warm,<sup>14</sup> advances in prehospital care,<sup>15</sup> implementation of blood transfusion protocols,<sup>16</sup> the introduction of an organized military trauma system,<sup>17</sup> more robust combat trauma research,<sup>18</sup> improved training,<sup>19</sup> the use of new medicines,<sup>20</sup> and improved diagnostic capabilities<sup>21</sup> are just some of the

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***The recent conflicts in Iraq and Afghanistan saw advances in pre-hospital care that can mitigate longer transport time. One example of improved casevac was the British Medical Emergency Response Team (MERT).***

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advances in combat casualty care made in the last conflict. These improvements, as well as unseen factors, confound our ability to make causal inferences from Kotwal's observational data.

While the evidence to support an association between pre-hospital time and mortality is weak, we are not arguing against a short transport time per se.

Rather, we are against using forward surgical assets to accomplish transport time goals because it minimizes the greater importance of being seen at a well-resourced, high-volume center and because there are better ways to shorten pre-hospital time.

### Robust Casualty Evacuation Resources: the Best Way to Shorten Time to Treatment

The best way to decrease time to treatment is by increasing evacuation assets, not by placing forward R2 surgical assets. In 2009, after then-Secretary Gates mandated the GHT, air assets were increased to meet this mandate.<sup>22</sup> The result was decreased time to treatment, simultaneously decreasing the percent of patients seen at R2s. The percent of casualties initially seen at R3s increased from 42.4 percent to 48 percent with a corresponding decrease in the percent of patients initially seen first at R2s.<sup>23</sup>

The recent conflicts in Iraq and Afghanistan saw advances in pre-hospital care that can mitigate longer transport time. One example of improved casevac was the British Medical Emergency Response Team (MERT). In the MERT system, a team consisting of a physician, nurse, and two paramedics operating within a large CH-47 Chinook helicopter were able to administer advanced care typically not available

in conventional en route care. Some of these important interventions that can be completed en route to higher care include airway control, giving blood, and keeping patients warm.<sup>24</sup> There is evidence that, in some casualties, advanced casevac platforms lower mortality compared to conventional casevac.<sup>25</sup>



## Summary

As we have noted earlier, we strongly believe that R2s are an essential tool available for operational commanders to provide care to casualties. They are important in dynamic battlefields and are also useful when the risk of casualties is low, number of troops small, or presence transient.

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**The best way to shorten transport time is through robust casevac resources. The sickest casualties should be transported on advanced platforms that provide important medical interventions en route to R3s.**

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However, once R3s and robust casevac are established, care at R3s should be emphasized as care there increases the likelihood of casualty survival. While the evidence for the GHT is weak and time to treatment should not be over emphasized, short transport time is still worth pursuing. The best way to shorten transport time is through robust casevac resources. The sickest casualties should be transported on advanced platforms that provide important medical interventions en-route to R3s.

## Notes

1. P.J. Parker, S.A. Adams, D. Williams, and A. Shepherd, "Forward Surgery on Operation Telic—Iraq 2003," *J.R. Army Medical Corps*, (September 2005), 151, 186–191.
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## MajGen Harold W. Chase Prize Essay Contest Boldness earns rewards...

The annual MajGen Harold W. Chase Prize Essay Contest invites articles that challenge conventional wisdom by proposing change to a current Marine Corps directive, policy, custom, or practice. To qualify, entries must propose and argue for a new and better way of "doing business" in the Marine Corps. Authors must have strength in their convictions and be prepared for criticism from those who would defend the status quo. That is why the prizes are called Boldness and Daring Awards.

Prizes include \$3,000 and an engraved plaque for first place, \$1,500 and an engraved plaque for second place, and \$500 for honorable mention. All entries are eligible for publication.

### \* Instructions \*

The contest is open to all Marines on active duty and to members of the Marine Corps Reserve. Electronically submitted entries are preferred. Attach the entry as a file and send to [gazette@mca-marines.org](mailto:gazette@mca-marines.org). A cover page should be included, identifying the manuscript as a Chase Prize Essay Contest entry and include the title of the essay and the author's name. Repeat title on the first page, but author's name should not appear anywhere but on the cover page. Manuscripts are accepted, but please include a disk in Microsoft Word format with the manuscript. The *Gazette* Editorial Advisory Panel will judge the contest in June and notify all entrants as to the outcome shortly thereafter. Multiple entries are allowed; however, only one entry will receive an award.

## Be bold and daring!

**Deadline: 30 April**

Send to: [gazette@mca-marines.org](mailto:gazette@mca-marines.org)  
Mail entries to: *Marine Corps Gazette*, Box 1775, Quantico, VA 22134

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# Rocks in the Pack

How universal requirements degrade proficiency and culture

by 1stLt Lee S. Brett

**“S**peed is a weapon.”<sup>1</sup> *MCDP 1, Warfighting’s*, assertion is clear—“rapidity of action,” and its application over time, are necessary for maneuver. By staying light, flexible, and decentralized, the Marine Corps has succeeded time and time again as the Nation’s premier warfighting organization. Well-meaning but deleterious universal requirements, however, threaten to ensnare our institutional culture. These “rocks in the pack” from HQMC have so burdened the Operating Forces that we are in danger of degrading our warfighting capability and our expeditionary mindset.

For a casual observer, the things required to make successful Marines seem quite simple: shoot, move, and communicate. Today, however, the list of mandatory training necessary for every Marine is staggering. According to *Marine Corps Bulletin (MCBul) 1500*, (Washington, DC: HQMC, 2016), a Marine is not considered fully trained unless he or she has completed his Unit Marine Awareness and Prevention Integrated Training (UMAPIT), sexual assault prevention training, violence awareness prevention training, operational security training, tobacco cessation training, anti-terrorism force protection training, and the list goes on. The *MCBul* alone lists 15 categories that are required every year, along with three other categories that are required on a recurring basis. The collective amount of time and effort required to satisfy these requirements is absurd. Annual training is not the only universal requirement set—predeployment training, for example, includes things like law of war briefs, operational culture briefs, and a host of other mandated events.

Taken in isolation, no single training requirement is illogical or unfairly

**>1stLt Brett is an Artillery Officer, 1st Bn, 11th Marines. He wrote this article while deployed as Fire Direction Officer, Battery B, Battalion Landing Team 2/1, 13th MEU.**

burdensome. Marines do need to know about the Marine Corps policies on hazing, drug use, and records management. They should indeed learn about other cultures and rules of engagement before deploying to foreign shores. But in the well-intentioned drive to standardize training, the Corps has set an impossible standard that cannot be matched while accomplishing the commander’s intent. There are now so many training

classes that cannot be faked are rushed to the maximum extent possible. On MarineNet, the Marine Corps’ online training library, it is possible to complete many annual training requirements by “clicking through” as fast as possible.

Few Marines will be surprised by what I have said. Cheating is the norm when it comes to annual training. This is wrong—as Marines, we pride ourselves on our integrity. But we are placed in an impossible situation, a Catch-22, in which everything is a priority, meaning nothing is a priority. Given finite time, we must make decisions, and by and large Marine leaders are making the right ones. They are “faking the funk,” racing through to comply with

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**... we pride ourselves on our integrity. But we are placed in an impossible situation, a Catch-22, in which everything is a priority, meaning nothing is a priority.**

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requirements that the requisite effort and attention cannot be allocated without coming at cost to other training or operational requirements. Time spent in a classroom learning about tobacco cessation is time not spent on developing and sustaining individual and collective training and readiness standards. The end result is that units are forced to cheat to “be 100 percent” in order to preserve some time to prepare for combat. “Sign the roster,” the sergeant says, and in the Marine Corps Training Information Management System, a platoon of Marines suddenly become “trained” in the Marine Corps’ eyes. But no one truly obtains any significant value. It is a tremendous and inexcusable waste of everyone’s precious time. Even

the letter of the law if not the spirit. They are preserving as much time as possible to teach their Marines things like patrolling, combat lifesaving, and military operations on urbanized terrain—things that will actually make a difference in combat and save lives. No one will ever write a letter home to a slain Marine’s mother, thinking in the back of his mind, “This might not have happened, had he only clicked through records management more slowly on MarineNet.”

In the wake of any incident, the Marine Corps has a tendency to clamp down hard with universal requirements. I suspect this is the genesis of many of our current woes: pressure from Congress about sexual assault gives rise to



sexual assault prevention and response (SAPR) training, mass shootings lead to violence prevention awareness training, and so on. These measures serve more to shield our top officials than anything else: the Marine Corps gets to say “we instituted a comprehensive violence prevention program,” but nothing changes on the ground because active shooter training doesn’t prevent active shooters. There’s an element of “cover your ass” present in this institutional logic: a perverse inquisition follows every tragedy. When I was a platoon commander, one of my Marines attempted suicide by drinking bleach. When my unit reported this, the battalion staff asked, “When did he last receive suicide prevention training?”

The simple fact is that risk is inherent in our organization. Any organization primarily comprised of 19 to 23 year olds will find itself beset by the attendant woes of alcohol, sex, and fighting. As Rudyard Kipling wrote, “Single men in barracks [sic] don’t grow into plaster saints.”<sup>2</sup> We also embrace necessary risks when we implement decentralized decision making, understanding that increased responsibility for more junior personnel sometimes produces negative results. We adhere to our philosophy of warfighting anyway because decentralization also leaves room for creativity and flexibility that thrives in the chaos of combat.

Universal requirements suffocate decentralized leadership. They reduce the already scarce time leaders have with their Marines and send a signal to small unit leaders that they cannot be trusted with the simplest of tasks. Stephen Covey, author of *The Speed of Trust*, argues that trust within an organization produces accelerated action.<sup>3</sup> When organizations trust their people enough to give them responsibility and relative autonomy, employees feel valued. They are more likely to invest themselves in their work, producing creative solutions that deviate from the norm and extending the same trust to their peers. Distrust, by contrast, slows institutions down. Every step must be validated, every decision second-guessed. The employees of distrusting organizations become bitter and resentful, as their views are

constantly discounted or ignored. They either adopt the “party line” in silence or go somewhere else.

By its myriad universal requirements, the Marine Corps is attacking the very roots of its success. *MCWP 6-11, Leading Marines*, quotes Col Merritt Edson on the importance of decentralization: “It is my opinion that the reason we won [Tarawa] was the ability of the junior officer and noncoms to take command.”<sup>4</sup> On Tarawa, as on battlefields across the world, small unit leaders were trusted to make life and death decisions. But today’s universal requirements prescribe the conduct of many training events. SAPR and UMAPIT

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***We have stripped the “strategic corporal” of his responsibilities and chained him instead to a keyboard in the learning resource center.***

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both require certified instructors. Other requirements, like information assurance, can only be satisfied by a single pre-packaged MarineNet course. Leaders feel un-invested in the training and snubbed by the requirement, “I can’t be trusted to talk to my Marines about sexual assault?” As the culture of distrust festers, the Marines grow more and more distanced from their ethos of decentralized decision making. We have stripped the “strategic corporal” of his responsibilities and chained him instead to a keyboard in the learning resource center.

The way that we apply universal training requirements flies in the face of our institutional culture and threatens in the end to overwhelm it. *MCDP 1* is unequivocal:

Commanders at each echelon must allot subordinates sufficient time and freedom to conduct the training necessary to achieve proficiency at their levels. They must ensure that higher-level demands do not deny sub-

ordinates adequate opportunities for autonomous unit training. In order to develop initiative among junior leaders, the conduct of training—like combat—should be decentralized.<sup>5</sup>

In short, the more universal requirements are, the less time there is to train for proficiency in combat. By prescribing universal requirements, we are undermining the initiative and authority of small unit leaders. It is a wicked problem that feeds into itself: as junior leaders are deprived of their authority, they become less effective. Discipline and mission accomplishment suffer, leading in the end to more universal requirements.

### Conclusion

To reverse the insidious trend of universal requirements, we must exhaustively examine our existing orders and directives. Preserve universal requirements only for the most mission-critical items that require expert training and evaluation: marksmanship, swim qualification, physical standards, and so on. All other items should be scrutinized.

I suspect that no one wants to be the one to axe SAPR training or alcohol awareness training. But until the Marine Corps has the courage to trust its small unit leaders, we will continue to be crushed by the collective weight of the rocks in our pack.

### Notes

1. Headquarters Marine Corps, *MCDP 1, Warfighting*, (Washington, DC: 1997), 40.
2. Rudyard Kipling, “Tommy,” *Barrack Room Ballads*, (London: Methuen, 1892). The poem was originally written in 1890.
3. Stephen M.R. Covey, *The Speed of Trust: The One Thing That Changes Everything*, (New York: Free Press, 2008), 13.
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5. *MCDP 1*, 59–60.





# Training Philosophy for I&I Duty

“The Rule of 6”

by Col J.P. Dunne

-----Original Message-----

From: Instructor LtCol Inspector N  
Sent: Friday, 13 July 2012 10:18  
To: Chief MSgt Operation S  
Cc: Discipline, SgtMaj Order N  
Subject: Re: Training Guidance

MSgt,  
SgtMaj Discipline and I are both pleased to hear that your welcome aboard package has arrived; more so—great question regarding the battalion’s training plan and training guidance!

I have attached the battalion commander’s training philosophy.

In addition, I have inserted below my I&I training philosophy, “*The Rule of 6.*” *My principle argument: I&I Marines and their Reserve Component counterparts must be six-times-as-efficient and effective in a unified effort to achieve Service standards and directives.* It is a tremendous operational and training challenge—one I trust you as the battalion’s incoming operations chief you will be ready for ...

Good luck with your PCS preparation and enjoy your leave; we look forward to your arrival. It is an exciting time to be in the Battalion.

Semper Fidelis,  
I&I  
Inspector N. Instructor  
LtCol USMC  
Battalion Inspector-Instructor

**>Col Dunne has completed two Inspector-Instructor (I&I) tours. The first was in Spokane, WA, with Battery P, 5th Bn, 14th Marines, from 2001–04. More recently, Col Dunne served with 2d Bn, 14th Marines, from 2012–14. The author remains thankful to the Marines and Sailors of Battery P and also 2d Bn for their enduring commitment to the “Rule of 6.”**

## START: RULE OF 6 ORIENTATION

### Orientation

The “Rule of 6” is a mathematical method that demonstrates that I&I Marines, in partnership with the Battalion’s Reserve Component Marines, must be 6Xs as efficient and effective in our training efforts.

This is a 3-part math process.

- The first step is specific to our ACDU Marines (specifically, I&I Marines)
- The second step is specific to our SMCR (Select Marine Corps Reserve) Marines.
- The third compares the two and helps explain what we must achieve out here on I&I duty.

### Step 1: For Marines in the ACTIVE COMPONENT (i.e., I&I Marines)

- There are 52 weeks in every year.
- This upcoming year, based on our operational tempo, you can expect to take about 3 weeks of leave, so plan on working 49 weeks this year. (Note: 52 minus 3 equals 49.)
- On I&I duty, you will work some weekends, and, in exchange, I will occasionally offer you some “comp-time.” There will be some surge periods during the year, and certainly mission requirements come first, but generally speaking, just as in the Op-

erating Forces, your “base work week” will be a standard Monday–Friday (5 days) schedule.

- You do the math: 49 work weeks X 5 days/week equals 245 workdays.
- I have good news! Not only will I offer the 3 weeks of leave I discussed above, but you will receive an additional 11 days off for holidays: New Years Day, Martin Luther King Jr., Day, Presidents’ Day, Easter/Spring Break, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving, and Christmas.
- Again, do the Math: 245 workdays minus another 11 holidays equals 234 days.
- Summation: While we are Marines 24/7/365, “mathematically,” Marines in the Active Component work about 234 days a year.

Don’t lose this number!

### Step 2: For Marines in the RESERVE COMPONENT (our Battalion Marines)

- A drilling reservist is required to complete 48 drills to earn a “sat year”
- The *MCCRAMM* (Marine Corps Order 1001R.1K, Marine Corps Reserve Administrative Management Manual, [Washington, DC: HQMC, March 2009]) states that a Reserve Component Marines can earn up to 2 drill





**Reserve Component Marines must be six times as efficient and effective in order to meet Service standards.** (Photo by Sgt Kirstin Merrimarahajara.)

periods per day; as such, 48 drills divided by 2-per-day equals 24 days of training.

- Further, a Marine is required to complete annual training (AT), which is 14 days in length, plus a travel day—a total of 15 days.
- Another math problem: 24 days associated with drill weekends plus 15 days of AT equals 39 total training days each year.

Summation: While you will notice that the bulk of our battalion (SMCR) Marines will be very engaged between weekend drills and annual training, Marines in the Reserve Component are required to commit 39 days a year to serve as Marines.

## Step 3: Comparing the Two

- If you recall from the 1st Step, Active Component Marines will work about 234 days per year.
- As outlined above in the 2nd Step, a Reserve Component Marines is committed to serving 39 days per year.
- Divide 39 days into 234 ... What do you get? Six! Exactly six!

## Significance: What Does This Mean?

The Reserve Component Marines are part of the Total Force.

They aren't "Reservists;" they are Marines!

There is one T&R Manual (Training and Requirements Manual) we follow, and it applies to the Total Force.

There is one PFT standard, one CFT standard, one set of standards for the BCP (body composition program).

The rifle range and pistol range requirements are identical.

The responsibilities for supply readiness and maintenance readiness are identical.

More so, we have the same adversaries, and, when called upon, we are expected to deploy and fight as part of a Total Force MAGTF to win our Nation's battles.

The list goes on ...

And yet, in the Reserve Component, Marines have to achieve these standards with only one-sixth of the training days available, and, as I&I Marines, we have to be six-times more prepared to train, six-times more effective as instructors, and six-times more effective inspiring the Marines to learn. If, in a unified manner, the Marines of the battalion, to include the supporting I&I staff, do not commit ourselves to training efficiency and effectiveness, we will not be ready to deploy and fight when our Nation calls ...

MSgt—Are you ready to work?

\*\*\*\*\*END OF TEXT\*\*\*\*\*

-----Original Message-----

From: Chief MSgt Operation S.  
Sent: Monday, 9 July 2012 11:23  
To: Instructor LtCol Inspector N  
Cc: Discipline, SgtMaj Order N  
Subject: Training Guidance

Sir,

I have received the command's welcome aboard package and found it very useful. Thank you and your staff for your assistance as I prepare for my upcoming PCS.

SgtMaj Discipline (cc'd) recommended I contact you directly as I understand that the I&I staff does not have a "traditional" OPSO (a major), and, as a result, I will be filling the role on a day-to-day basis, directly under your charge.

Sir, as I prepare for this next assignment, is there anything that the staff can forward to me in the way of commander's training guidance for the battalion? I am sure we'll discuss it in detail once I check in, but anything I can get my hands on now to orient me to the battalion and its training efforts would be useful.

I look forward to working with you, Sir, and serving with the Marines in the battalion.

Very Respectfully,  
MSgt Operation S. Chief, USMC  
Operations Chief  
X Battalion, Y Regiment  
DSN 555-1212

*"Let no Marine's ghost say he died because you failed to train him or his leader."*





# Empowering Leaders with Annual Training

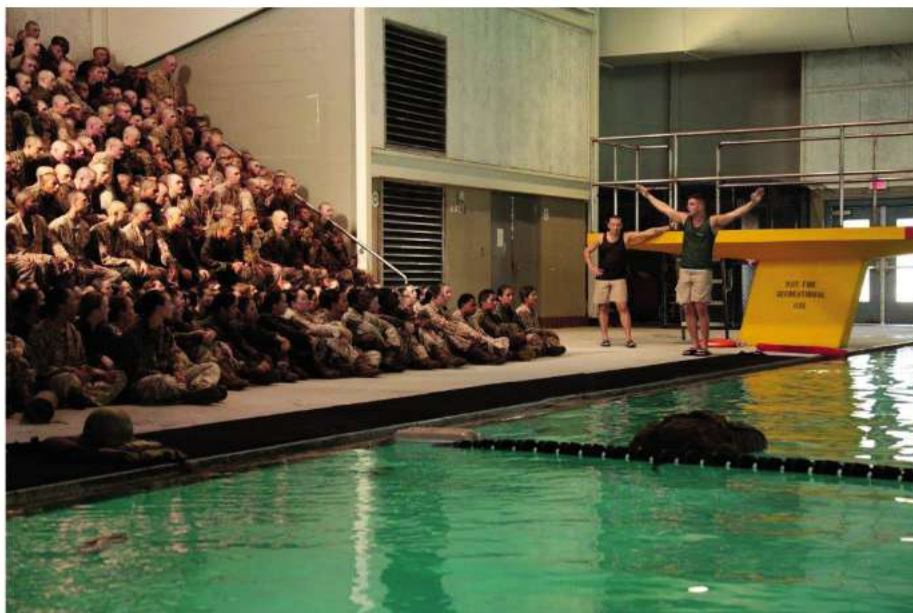
Avoiding the check-in-the-box mentality

by Maj Garrett Exner

The Marine Corps prides itself on empowering NCOs and junior officers with leadership responsibilities and the special trust and confidence necessary to drive the fight. At more than 10 to 1, the Marine Corps maintains a larger enlisted-to-officer ratio than all other Services, one that more than doubles the Air Force ratio. We claim our junior leaders are more motivated and more capable, and that they can be trusted to carry out demanding duties and responsibilities because we hold Marines to a higher standard. "Trust but verify," a moniker of this mindset, is a common phrase uttered to junior officers at The Basic School. However, in regards to annual training, the Marine Corps has started to trust our junior leaders less and less while seeking to verify more with quantifiable data points and online certificates. The current trend strays from tradition of empowered leadership and leans more heavily on so-called "check-in-the-box" classes and standardized predeployment training to cover down on an ever-growing list of annual training requirements. Rather than adhering to annual requirements with online training courses and mass briefings, a better way to empower leaders, improve readiness, and ensure adequate training is to use annual training requirements as a way to increase the personal interaction between junior leaders and their Marines while furthering functional knowledge of the backbone of the Corps.

Currently, according to *Marine Corps Bulletin 1500 for Annual Training and Education Requirements*, (Washington, DC: HQMC, July 2015), there are 18 requirements every Marine must com-

**>Maj Exner is a 0370 (Special Operations Officer) currently working in the Office of the Secretary of Defense for Policy within Special Operations and Combating Terrorism (SOCT). He has deployed five times with both SOF and conventional units to Africa and the Middle East.**



**Recruits preparing for swim qualification. Practical application, with NCOs instruction, is more effective than online classes. (Photo by LCpl Mackenzie Carter.)**

plete regardless of rank or billet with few exceptions and waivers. Some of these requirements are paramount to our identity as Marines. The rifle range separates us as the only Service to qualify from the 500-yard line. The physical fitness test sets our individual standard higher than all other Services and is the only fitness test in the DOD to include pull-ups. However, the vast majority of annual training requirements are brushed off with a 30-minute online class designed for the low-

est common denominator. Even worse, Marines are ushered into a daylong brief en masse to view a series of PowerPoint presentations consecutively. Completion statistics have become markers for a commander's effectiveness on yearly Commanding General Readiness Inspections instead of a way to impart knowledge and readiness to young Marines. As a result, readiness is roughly equated to how many slides a Marine has viewed either on a computer screen or in the base theater. The opportunities





**The Marine Corps certifies trainers and coaches for rifle and pistol requalification and completion in arms. (Photo by LCpl Jordan Talley.)**

to truly increase readiness are wasted if we continue to rely on technology over leadership. A better way to train exists, and the Marine Corps already exercises it in a small portion of these yearly training requirements.

For our most important annual requirements, units across the Marine Corps create certified trainers to assist in spreading knowledge. The rifle range, pistol range, and water survival training each incorporate trainers, coaches, and instructors of various skill levels to enhance the unit's ability to train Marines. Sending Marines to coaches courses for a training qualification or assisting them in earning Primary Marksmanship Instructor MOS not only enhances their individual skills but also increases their ability to train the unit they came from. The same system works for the Marine Combat Instructor of Water Survival. The unit identifies a Marine with the potential to succeed and sends them to the requisite course enabling future training and leadership opportunities. Furthermore, the Marine Corps is currently researching ways to incorporate this model into physical fitness by creating a Fitness Instructor MOS to improve and standardize unit physical training plans across the Marine Corps. However, we are failing to apply the known solution to the entire problem

set. Left out from this train-the-trainer construct are each of the seven online classes and the five yearly briefs each Marine must attend or complete. Altogether, 13 of 18 annual requirements have some form of a check-in-the-box solution that should be remedied.

If we gave each annual training requirement the attention we give to making our Marines more physically fit, better riflemen, or qualified swimmers, then we'd actually see decreases in

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***If we gave each annual training requirement the attention we give to making our Marines more physically fit, better riflemen, or qualified swimmers, then we'd actually see decreases in the hot button issues of sexual assault, tobacco cessation, and cybersecurity.***

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the hot button issues of sexual assault, tobacco cessation, and cybersecurity. Additionally, more personalized and individualized training in anti-terrorism and records management would actually improve the capabilities and effectiveness of our Marines and the systems they use. For example, Marines attending Sergeants Course and Staff Academy receive classes on records

management, the Marine Corps Mentorship Program, and the promotion process. If we're spending the time and money to train our future leaders in these classes, we should then trust them to pass on the information they've learned to their subordinates. One needs to look no further than *MarAdmin 593/12, Mandatory Annual Records Management Training*, (Washington, DC: HQMC, 15 October 2012), to see that of the four options available for units and individuals, all four are some form of online or web-based training. The new requirement should state that sections, platoons, and companies train their Marines using the duty experts within each unit and verify that training to their respective higher headquarters. A known fact is that individuals retain more of what they teach than what they're taught. So by empowering our leaders to teach the classes they receive at resident professional military education (PME) schools, we're ensuring their understanding of the knowledge. The plan should call for various resident PME schools (Corporals Course, Sergeants Course, Staff Academy, Advanced Course, Expeditionary Warfare School, and The Basic School) to provide detailed instruction on hazing, sexual assault prevention, operational security, operational risk management, sexual harassment, anti-terrorism, cyber

awareness, tobacco cessation, records management, and combat trafficking in persons. This would flood the Marine Corps with trained leaders to instruct their sections, platoons, and companies in these classes in a more personal and functional way. It would also empower leaders to take responsibility for their Marines actions instead of pushing responsibility to an online curriculum.





**Face-to-face instruction gives more time for leaders to actually lead Marines.** (Photo by LCpl Gabriela Garcia-Herrera.)

The transition away from online courses isn't an easy one, and many will say it requires more time, already a scarce resource in a training continuum of predeployment training plans and deployments. However, if we begin incorporating a train-the-trainer mindset for all annual training the Marine Corps will reap the benefits and so will commanders. Face-to-face instruction gives more time for leaders to actually lead Marines and provides a unit the flexibility to input training when and where they have time. Down time on a range can be used to discuss hazing vignettes. Waiting on an end of the day formation allows a platoon commander to task a school-trained NCO to go over the Official Military Personnel File for his junior Marines. The reduction in online training or mass briefings personalizes the instruction to the units and individuals. So long as the unit properly tracks and annotates the classes and briefs, the command can still maintain readiness statistics. No longer does a platoon have to send their Marines to the base education center for a day to complete online training. Also gone would be the mass briefings in the base theater that steal an entire training day from the unit.

One outlier is anti-terrorism and force protection, which straddles the

train-the-trainer complex as well as the online curriculum. The Level 1 Anti-Terrorism Awareness Course is an annual requirement; however, some units are also required to have additional individuals trained to a Level II. The information and vignettes used in the online training program are valid, relevant, and useful insights into force protection for Marines traveling abroad. This training is only enhanced when taught by a Marine from the deploying unit with insight into the future movements of the Marines they are training. For example, in a company deploying as a part of Special Purpose MAGTF-Crisis Response to Spain can educate platoon sergeants or platoon commanders allowing them to instruct anti-terrorism measures to the Marines personally. Additionally, they can retain that knowledge throughout the deployment within the unit to answer questions as they arise and tailor vignettes to their deployment location. Compare that to a onetime, 30 minute, generalized, online training session where Marines have the ability to click past information at will.

The last and worst example of good intentions for the health and wellbeing of Marines gone awry is tobacco cessation training. The current online class is mandatory for all ranks regardless of

any history of tobacco use. Included in the class is a 15-minute "Peer to Peer" discussion with a computer graphic lance corporal about the health risks and drawbacks of tobacco use. Under this current training directive, a colonel with over 20 years in the Marine Corps, who may have never used any form of tobacco, is forced to have a 15-minute online conversation with an animated lance corporal sitting on the hood of a Mustang. Included in the discussion are several talking points about women not liking a guy who uses tobacco. It would be comical if it weren't the reality of our current view toward annual training. To the credit of the Marine Corps, tobacco cessation train-the-trainer classes are offered at Semper Fit centers per *Marine Corps Order 1700.29, Semper Fit Fitness and Health Promotion Policy* (Washington, DC: HQMC, January 2013). However, units take the path of least resistance in using the online course. If the Marine Corps desires a reduction in tobacco use, then push these classes to unit aid stations and incorporate them into small unit training vice holding the knowledge external and offering the easy, and less effective, web-based instruction.

The Marine Corps is an institution founded on, and driven by, NCO leadership. Gen James F. Amos famously called for NCOs to begin what he called, "invasive leadership" in his "NCO Awakening" brief in 2013. Yet, we rely on technology and computer-based training for our most basic requirements. If the institution believes in the training enough to make it a yearly requirement then we should—as leaders—take it seriously enough to avoid the check-in-the-box mentality. Trust our junior leaders to learn the information and train their subordinates. Verify through measures of effectiveness as numbers of incidents, mishaps, and tobacco use actually begin to decrease. The Marine Corps executes this construct in many aspects while preparing for combat, it's time we start using the same method for accomplishing the training requirements set forth by our higher headquarters.





# Ambrosia

## Chapter 9

by Maj Victor Ruble

1stLt Rosado popped open his troop commander's (TC's) hatch and stood as his ACV became fully submerged and began to propel itself forward with its organic propulsion system, better known as "water jets." Even though Aidan didn't really suffer from sea sickness, the influx of the cool ocean air on his face and into his hatch was always welcome, and he definitely didn't mind that they were going to be in displacement mode for the entirety of this maneuver. The distance between Jazireh ye Qeshm and mainland Iran was too close to necessitate a high water speed (HWS) movement, which would have required that everyone stayed "buttoned up" due to the speed of the sleds. Being that they wouldn't exceed 10 knots for this movement, however Aidan wanted to take full advantage of the opportunity to get some fresh air.

Standing waist high in his TC compartment—a technique that he knew was a doctrinal "no-no"—he quickly scanned his vehicle's "six" to see how the rest of his platoon was fairing. The plan was for each of Capt Prophet's platoons to splash at different intervals so that, should they hit stiff resistance at the beach, all of Company A wouldn't be in the drink at the same time. Aidan's platoon had the distinct honor—or misfortune, depending on how you looked at it—of being the first in the water. As the vanguard, it was his job to not only recon the landing site but to find a lane through any obstacles that might have been erected and to fix in place any enemy forces opposing their landing in order to allow the rest of the company to go "feet dry," or land on the beach.

Jazireh ye Qeshm, or Qeshm Island, sat a mere mile from its closest point to the mainland. But from where they debarked to where they were going—the vicinity of Bandar Abbas—the distance

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was about 14 miles in total, so Aidan had a little over an hour to mull over the scheme of maneuver. With the short distance between the island and Iran proper, combined with the interval between "sticks"—the platoons' various displacement times—Aidan's platoon could very well run into the teeth of the enemy's defenses before Company A's final platoon even got "feet wet."

Which was sort of the point.

No sense in throwing the main effort of the GCE into a meat grinder when there was plenty of safe beach right there in the "green zone." Now granted—despite what doctrine would say about weighing the main effort—Razorback 6 gave Aidan plenty to bring to the fight, including priority on the

MLRS (multiple launch rocket system) back at the FOB; on-call fixed-wing and rotary CAS; and the Box (being towed on a static, high water speed sled by the heavy guns section's track). If they had to mix it up, the enemy was going to earn their pay as it were, but it was still a bit unsettling that they could be in the middle of a dog fight before a good portion of their company had even finished their PCCs (pre-combat checks) and PCIs (pre-combat inspections).

About half way through their movement, Aidan heard 2ndLt Englehart, the 2nd Platoon commander, come over the company net.

"Razorback 6, this is White 6. Feet wet. I say again, feet wet."

There were a few reasons why this transmission came over the company TAC. First and foremost, Capt Prophet was the company commander. If you wanted to talk to him, you use his net. Egos aside, however, all phase lines and triggers could be received by the entire company, and in maneuver warfare—



**Rotary-wing CAS was available during Aidan's movement toward the objective. (Photo by LCpl Brooke Deiters.)**



especially in this era of advanced technology proliferation—having everyone on the same sheet of music was a good thing. In effect, what 2d Platoon was conveying was that the lead element of the company's main body was in the water and beginning their movement. They weren't necessarily "over the Rubicon," but it was now essential that the vanguard relay any and all information updates regarding enemy location, movements, or obstacles—natural or man-made—that could impede the company's landing. This also reassured Aidan that the company was sticking to the plan as briefed – for now.

And should they hit a well defended beach, someone had his back.

Enshallah.

White 6's transmission officially ended the tax-free boating tour through the Clarence Strait. Aidan dropped down into his TC hatch and turned on his heads up display (HUD). The holographic imagery from each of his three sections' vehicle cameras illuminated his hatch. Aidan reached up and, with two swipes of his hand, shrunk the video feeds down and brought the Box's operating system into the forefront. With a few pokes of the finger, he ran through the Box's PCCs and PCIs—essential diagnostics and start up procedures for the fire support robot. Being that his platoon's role was so fluid—based on the enemy situation—no mission parameters were pre-programmed, so it took some time for Aidan to load the mission set: BREACH. But once he had what constituted its ROE (rules of engagement) locked in, a large "confirm" icon appeared in front of him. For whatever reason, Aidan just had a strange feeling. His mom regularly said that he was very intuitive, but he had considered it "mom talk" and never really put much validity in it. Now he thought there might be some credence in his mom's words, because for some reason, he just wasn't comfortable giving this armored automaton free reign to seek and destroy at will on a beach that could very well have as many civilians as it would hostiles.

Grabbing hold of the holographic icon, he dropped it into his PDA and popped his head out of the hatch to get

a different perspective, one that wasn't digitally enhanced. On the horizon, the silhouette of the Iranian mainland was clearly visible. The skyline of the Bandar Abbas metropolis sat at Aidan's two o'clock, erected on the Iranian southern coastline like a monument to the gods. In the distance, Iran's most populous southern city and main port seemed to still be fairly unharmed by the recent string of natural disasters. Aidan knew

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***And then, as if it were lifted right off of the pages of Aidan's show script, air burst munitions started exploding around them.***

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that a closer view would reveal that the seemingly never ending migration of displaced persons and battles for ownership of a southern port had left this once thriving metropolitan area nothing more than a dilapidated and war-torn haven for gangs, warlords, and violent extremists.

"Staff Sergeant, can you give me a distance to the LZ?" Aidan asked his vehicle commander, SSgt Washington.

"Roger, sir. Stand by." She replied. The ACV had state of the art laser and satellite distance acquisition systems, all of which were readily accessible to Aidan as the troop commander, but he felt using his override capability sort of undermined her authority as vehicle commander.

"Five clicks." She confirmed.

"Tango." Aidan replied.

Five kilometers, or 2.6 nautical miles (essentially 3 miles). Swimming at 10 knots, they had about 15 minutes before they hit the beach. Well within an enemy's area denial weapons systems threat ring, Aidan was still wrestling with his intuition. At this range, if there were an enemy ready to deny them the beach, they would have been in a hail storm by now. At the same time, just because you couldn't see an enemy didn't mean that they weren't out there. Every cliché he ever heard raced through his mind.

"Plan for the worst, hope for the best."

"Fortune favors the bold."

"Come big or don't come at all."

Violence of action, speed, and decisiveness were what won battles, especially when assaulting a contested shore. His attack on the AST compound was evidence of that. But where was the "contested" part of their LZ? He couldn't shake the feeling that with their LZ (landing zone) being so close to a massive urban area, that it didn't seem right giving a heavy weapons robot a

"license to kill." And there was an eerie quality to the fact that their approach to the mainland had gone unnoticed this long. Bringing up the Box's operating system on his PDA, he switched the operating parameter to SUPPRESS.

And then, as if it were lifted right off of the pages of Aidan's show script, air burst munitions started exploding around them.

Beating him to the punch this time, SSgt Washington blared, "Battle Speed! Battle Speed! Battle Speed!" over the platoon TAC. As he reached up to close his hatch, he took a quick glimpse to his left and right to ensure that all of the other vehicles had received his vehicle commander's order and were executing their platoon SOPs. In those few moments, Aidan was able to see that the effects of the enemy fire were random and erratic. At this range, A2/AD (anti-access, area denial) weapons systems were so precise and accurate that he should have lost a quarter of his platoon in the first volley. Leaving his hatch open, he dropped back down into his hatch. Activating his HUD again, he quickly scrolled to the Little Bird's prompt and hit "Deploy."

"Sir, what are you doing?! We're in the assault!", SSgt barked into the intercom as the small, unmanned drone took flight from its compartment and hovered into the sky.

"I need you to belay that last order."

"Come again, sir?"



"We need to stop the assault. This isn't our beach. Or at least, this isn't our enemy."

"Did anyone pass them that memo?" she said, somewhat belligerent by her confusion.

"This is a diversion. It's too easy. We should be in the teeth of their defense right now, instead of being treated to a firework show. Someone is trying to set us up for the 'okey-doke.'"

SSgt Washington stood to look through the vision blocks of her vehicle commander's station. Seeing air bursts ineptly explode in a manner that could barely be described as harassing fire, she had to agree that the lieutenant may have a point. Finally seeing an uncharged round splash into the water, she conceded.

"Ok, sir. What do we do? We can't very well turn around."

"Just throttle the platoon back and don't worry about the beach. I've got that covered." Aidan hurriedly replied as he punched away at his holographic screen. "But I need more eyes in the air. Get the other Little Birds up. I'm taking mine for a ride."

"Roger sir. Stand by."

"Oh, and staff sergeant, I'm going to be a little busy, so feed all imagery to you. You've got the 'com.'" Having essentially given the ACV section leader control of the maneuver—a technique rarely seen in the long and illustrious grunt-amtracker marriage—explained the silence that filled the ACV's caverns. Chuckling at the awkwardness of it all, Aidan finally heard the standard acknowledgment of "Roger" come from his vehicle commander.

Having split his screen, Aidan turned his attention to the dual feeds coming from his UAV and the Box. The ordnance from the shore's A2/AD defenses steadily increased in volume as they continued to make their way toward the beach. Still wildly inaccurate, Aidan assessed that they were still well away from seeing the real threat, but even a blind archer can hit the target once, so he knew they're luck would run out eventually. And so did his VC (vehicle commander).

"Anytime you're ready sir! It's getting kind of gnarly!"



**The Black Hornet UAS was a predecessor to Little Bird being used by Aidan to scout the beach for possible enemy forces. (Photo by LCpl Julien Rodarte.)**

After a few moments of furiously typing away at the Box's operating system, an icon that read "CONFIRM" hovered in front of Aidan. Tapping it, it was then replaced by a text box that stated, "NONLETHAL BREACH CONFIRMED." Almost immediately, a prompt appeared stating "NONLETHAL BREACH OPERATIONS FALL OUTSIDE THE NORMAL OPERATING PARAMETERS. DO YOU WISH TO PROCEED?"

Aidan tapped "YES" and thought, "What's next?! A terms of agreement?!" half-joking to himself. At that moment, a statement of understanding illuminated the screen in front of him waiving the manufacturer of any responsibility should the Box not function in accordance with the mission set or should it malfunction in the execution of a mission that was outside of the manufacturer's recommending settings.

"YES!" Aidan screamed at the HUD. "Just do the thing that I told you to do!" The water jets that propelled the HWS sled came online and began to churn in the water. Once under its own power, the cable that connected the Box's HWS sled to its ACV came loose, and the Box and its chariot raced toward the shoreline. Aidan then turned to the Little Bird, and with a gradual pull on the control stick, launched the UAV

toward a completely separate location just to the west of the landing zone.

As the Little Bird raced toward the shore, Aidan looked back to the Box's video feed. Being in breach-mode, the HWS continued to push through the surf zone at full throttle, oftentimes launching itself and its cargo into the air like some sort of robotic X-Games athlete. Continuing at its high rate of speed, it shot past the high water mark and skidded onto the beach, eventually stopping well inland as it mired itself in the coarse sand. Not missing a beat, the Box detached itself from its mooring cleats and, using the momentum from the sled, hurled itself into the beach's defensive front. Aidan could tell by the shaky video feed that the automaton was taking a fair amount of direct hits from the enemy's small arms munitions. Even with as poorly trained as these "soldiers" were, a few did have the ability to hit the broad side of barn, so the Box was taking "it in the running lights," but its armor was more than adequate against this small arms barrage to keep the fire support robot in the fight for quite some time. As Aidan anticipated, the sheer speed and audacity of the Box's assault took most of the enemy's combatants by surprise, sending a good portion of them fleeing from their fighting holes back to the sanctuary of Bandar Abbas.



But those who stayed were treated to the Box's special brand of non-lethal menu items.

Large panels that ran along the sides of the robot opened and began to emit a tremendously high pitched, high frequency sound, deafening all who were unfortunate to be within its extensive audio range. Aidan could see disoriented enemy combatants struggle and stumble to flee the auditory onslaught, only to see those now visual exposed become further victims to the Box's non-lethal direct fire munitions, namely bean bag and rubber bullets, being fired at sub-sonic speeds with uncanny accuracy from its medium and heavy machine guns. Those remaining enemy personnel who were either too steadfast or too disoriented to attempt to flee soon became victims of the Box's tear gas barrage, which it distributed with its 120mm mortars. Within moments, the landing zone was blanketed with compound 2-chlorobenzalmalononitrile, or CS, sending those who remained scurrying in all directions, tears and mucus flowing from nearly every orifice.

With the Box having effectively and efficiently suppressed the landing zone, Aidan turned his focus back to the Little Bird. In the time that the Box took to neutralize the enemy defense, the small quad-copter made its way to the airspace above the shore. Using the UAV's camera to scan the beach, Aidan was having trouble finding what he was looking for in the time he was hoping it would take. Acre after acre of unoccupied beach and mangrove forest filled his screen, and he began to think maybe his intuition had led him astray.

"Staff Sergeant, you getting anything from the rest of the platoon's 'eyes'?"

"Well sir, if I knew what I was looking for I could probably answer that question better. But given that the Box literally covered the beach in CS, I've got nothing."

"You know staff sergeant," Aidan began to reply, sensing his vehicle commander's frustration at the brevity of his intent, "I like to treat amtrackers like mushrooms. Feed them s.... and keep 'em in the dark."

"Yes sir, I've seen *The Departed* too." Aidan could sense her eyes rolling at his

jibe. "But really, what are we trying to find, other than the snort rockets coming from these guys' faces?"

"Wait for it," Aidan replied, still hoping his suspicions were correct.

And then ... there they were.

An entire company of dismounted infantry staged just about a kilometer to the west of the landing zone in a perfectly concealed position from a ground-level vantage point. Especially when coming from the sea. Luckily, Aidan thought to get a bird's eye view.

"Got you!" Aidan yelled. "Staff Sergeant, this is our new LZ! Get us there now before they realize that we've got eyes on!"

Aidan crushed the holographic screen with his right hand and flung it in the direction of the vehicle commander's station as if SSgt Washington were sitting next to him.

"Got it sir." She said, confirming that she successfully uploaded his video feed.

"Wait one. I've got to radio back to Razorback 6 and let him know the LZ has changed."

Not wasting a moment, Aidan felt his ACV make a hard pivot in the water and begin to move in a westerly direction. Based on their movement, he knew SSgt Washington had control of the assault, so Aidan had little time to direct the main body onto center beach. With a few taps of his HUD, Aidan began to transmit over the company TAC.

"Razorback 6, this is Hollywood."

"Send it," Capt Prophet responded.

"We've made contact with the enemy and we're making a few changes to the plan."

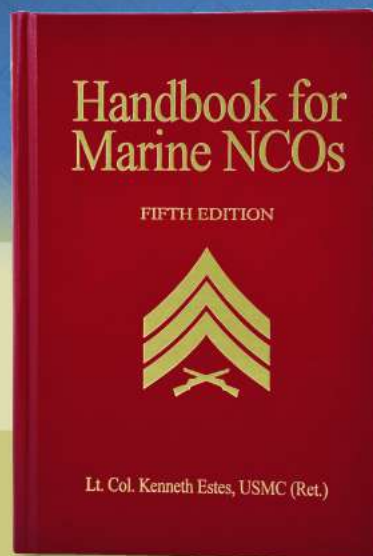
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# 21st Century Fires

The King is dead, long live the King

by The Ellis Group

**T**his article series has continually highlighted the proliferation of high-end fire support weapons systems, precision-guided munitions, and the ubiquity of surveillance on the modern battlefield through both satellite imagery and unmanned aircraft systems (UAS). Technological evolutions in firepower—from the crossbow and the English longbow to the gunpowder revolution to breech-loaded indirect fire artillery to close air support—have always triggered evolutions in warfare. It should come as no surprise, then, that the aspect of warfare changing the most, and the fastest, is fires.

Fires, as a warfighting function, are the application of all available supporting arms—the firepower—of a military force to achieve a mission. Fires are a central component of combat power, defined as “the total means of destructive and/or disruptive force which a unit can apply against the enemy at a given time.”<sup>1</sup> It is also a major component of the *Marine Corps Operating Concept*, which seeks to achieve “a combined arms approach that embraces information warfare” as well as cyber and electronic warfare.<sup>2</sup> The function of fire support provided to other combat elements does not change regardless of whether that support is delivered by catapult, trebuchet, cannon, howitzer, or missile. The systems involved in delivering that support, however, have driven changes in tactics based on their particular capabilities throughout history.

The modern changes in fires capabilities—increasing lethality, precision, and range—are driving a convergence of conventional and irregular tactics (see “21st Century Maneuver,” *MCG*, February 2017). Conventional militaries are increasingly adopting the methods of guerrillas to operate on the modern

battlefield just as guerrillas are increasingly as well-armed and effective as their more professional counterparts. Nowhere is this convergence more obvious than in the three urban battles occurring as this article is being written: Aleppo in Syria, Mosul in Iraq, and Donetsk in Ukraine.

The sea change in firepower, however, is not just in the greater lethality, precision, and range of weapons systems that shoot and explode. The most important change is the integration of those more capable fire support systems with information warfare and persistent ISR (intelligence, surveillance, and reconnaissance) platforms as currently in use by both state and non-state adversaries. The Marine Corps mastered the integration of artillery and aviation with maneuver as early as the interwar period. Now, however, emergent capabilities need to be mastered as well. Our conceptual idea of fires must be modernized. Electronic warfare has been a

presence on the battlefield since World War II, but it is becoming more and more relevant as digital communications systems become the norm. Information warfare has always played a part in war but is now more potent given today’s global digital media environment. Lastly, cyber warfare may be the newest form of fire support, but its use is rapidly proliferating. On top of these three major developments, unmanned systems are increasingly the means by which fire support is delivered. The firepower evolution driving change on the 21st century battlefield, then, is not a singular weapons system but rather the ability to integrate the myriad forms of fire support and bring them to bear on the enemy.

## Task Analysis

A quick task analysis of these forms of fire support reveals their inherent possibilities and demonstrates how much they overlap when it comes to effects achieved. (See chart on next page.)



Fire support systems are a central component of combat power. (Photo by Cpl Timothy Valero.)



There is a great deal of overlap in effects between the more kinetic forms of fire support (artillery and aviation) and the more non-kinetic emergent capabilities of information, cyber, and electronic warfare. The problem is that none of

task force in Iraq. He found that insurgent and terrorist leaders repeatedly evaded capture because their flat hierarchy facilitated rapid decisions and actions. He replicated that success by restructuring the JSOC task force along similar

The process of selecting and prioritizing targets and matching the appropriate response to them,

and suggests that,

The primary purpose of joint targeting is to integrate and synchronize all weapon systems and capabilities.<sup>4</sup>

Essentially, the targeting process is focused on choosing a *strategically* appropriate target and affecting it with a *tactically* appropriate system or capability. It seeks precision—striking the accurate target effectively.<sup>5</sup> Whereas, FSCCs at lower levels coordinate fires to ensure they are safe and accurate, the targeting process keeps an eye on the strategic context of the operation.

The time where fire support coordinators could ignore the demands of strategy and focus solely on tactics has long passed. The occurrence of mistaken target prosecution in Iraq and Afghanistan is ample evidence of that. Rather than employing the targeting methodology at lower levels, however, commanders responded to the need to integrate fires with strategy by reserving authority at ever higher levels, thus degrading the responsiveness and timeliness of every type of fire support.

Responsive, timely, tactically accurate, and strategically precise fires can only be achieved on the modern battlefield by adopting a modernized methodology that marries and employs the combination at every level. Additionally, the FSCC is the sensible link between maneuver units and the information warfare coordination center (IWCC) IWCC at the MAGTF command element. The relationship between the two will necessarily be a two-way relationship; information warfare cannot be effectively planned by the IWCC without the real time ground truth available to the FSCC and the FSCC will not have the organic capabilities to execute information warfare. This will require a training investment, especially when it comes to fire support personnel, but also the trust of commanders to empower their fire support coordinators with more authority.

*Decentralized authority.* Marine commanders are already comfortable with delegating authority in accordance with

these emergent capabilities are in any way as integrated as artillery and aviation fires are with maneuver. In order to effectively employ them, the Marine Corps needs to both develop processes for their employment and modernize the employment of kinetic fires to integrate newer capabilities.

### Modernization

There are three conceptual prerequisites to modernizing fires across the MAGTF, integrating new forms of fire support, and maintaining a fast enough tempo to compete on the modern battlefield: 1) Adopt a flattened coordination organization, 2) Adopt a modern coordination methodology, and 3) Decentralize authority.

*Flattened coordination organization.* In 2004, then MG Stanley McChrystal, USA, took command of the forward Joint Special Operations Command (JSOC)

lines, eliminating divisions between staff functions and long process chains. He labeled the concept “Team of Teams” (as depicted in the book of the same name).<sup>3</sup> The conceptual change in the command organization allowed JSOC to outpace their targets.

This idea is not as new as portrayed in the book—the same concept is already at play in fire support coordination centers (FSCCs) that bring together representatives from maneuver, artillery, and aviation units. For the FSCC to modernize, it must now be expanded to add information, cyber, and electronic warfare subject matter experts at every level and must use a modern coordination methodology.

*Modern coordination methodology.* Fortunately, the Marine Corps already uses a modern coordination methodology: targeting. It just does so only at higher levels of command. Joint doctrine describes targeting as



*MCDP 1, Warfighting*, when it comes to many operations, but not when it comes to the authority to approve fire support. Today, fires cannot be employed fast enough unless fire support coordination is ignored (which is not an option) or it is performed on the spot at the lowest level possible. Adversary forces now routinely process fire missions 10 to 15 minutes after observation via unmanned system.<sup>6</sup> We cannot maintain a high operational tempo in relation to enemies who do not bother with fire support coordination. Still, the commander is responsible for the employment of fires and needs some assurance that fires will be employed in accordance with the rules of engagement and his intent.

The key to decentralizing but ensuring supervision is to empower all officers with the authority and training to act as fire support coordinators on the spot. Marine officers are already equipped to act as provisional platoon commanders, but future battlefields require that every Marine officer must also be a fire support coordinator. This can be achieved by increasing the fire support coordination training at TBS and increasing billets for field artillery officers in more non-artillery units to act as subject matter experts. Achieving rapid and precise targeting can only be done in a distributed manner, and empowering officers to perform those duties is the only safe way to distribute it.

Once these three conceptual prerequisites are met, there will be follow-on effects caused by this profound change in fire support across the DOTMLPF (doctrine, organization, training, material, leadership, personnel, and facilities) spectrum. Integrating information, cyber, and electronic warfare at targeting centers at every level of command is one piece of modernization; modernizing artillery and aviation employment is the other. To do this, some major organizational changes are required.

- Fire support organizations
  - The Marine Corps already employs a dedicated fire support structure in the form of Air-Naval Gun Fire Liaison Companies (ANGLICO) across the Operating Forces but only at the MEF level. The concept should be expanded into the artil-

lery regiments themselves, creating teams of fire supporters with the level of training available to ANGLICO units. The only way to do this in a budget-constrained environment by consolidating ANGLICO units and the fire supporters resident in the artillery regiments at each MEF into a

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***Due to the increased threat of enemy supporting arms on the battlefield, the way in which fire support systems themselves are employed must change as well ...***

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fire support battalion under the artillery regiment (to include information, cyber, and electronic warfare personnel). These battalions would then be responsible for deploying fire support teams and supporting arms liaison teams wherever they are needed.

- Fires delivery organizations
  - Due to the increased threat of enemy supporting arms on the battlefield, the way in which fire support systems themselves are employed must change as well, especially in the artillery community. Emplacing six howitzers in the same field is now only possible in low-intensity conflicts in permissive environments. This will require the adoption of “distributed delivery, converged effects” employment mindset and more expeditionary-ready fire support systems. Sections of two systems with rapid emplacement/displacement capabilities will have to become routine rather than exceptional. The pace and distributed nature of 21st century warfare will also necessitate a greater reliance on guided missile artillery vice conventional shell artillery, although the need for the latter will by no means disappear. Where rocket artillery systems are in use on today’s battlefield, they cause roughly 85 percent of opposing force casualties.<sup>7</sup>
- Artillery career tracks
  - The need for more numerous and more capable fire supporters at every level in addition to the increasing complexity of fire delivery due to airspace coordination requirements and more distributed employment

methods requires a diverged career track for artillery officers: fire support officers and field artillery officers, one to be an expert in the employment and coordination of fire support and the other to be an expert in the logistics, placement, and functioning of the delivery system

itself. Both disciplines are now far more complicated than they were even 16 years ago. Officers assigned the field artillery MOS should still go through the same course of education at Fort Sill, OK, but based on their performance, there should be assigned to one track or the other.

- Advanced integration of sensors with firing and C<sup>2</sup> systems
  - There are no unobserved fires. UAS provide a key ability to observe fires, and their effects. But, UAS are more than just a camera in the sky; depending on the asset, they have the ability to be forward observers. In many cases, there is software that can eliminate the need to bracket, shortening the time from request to effects on target. There is the potential for actual fires given the right UAS Group 4/5 system (like the MQ-9 Reaper). Regardless, the persistent supervision and potential situational awareness is crucial for fires. The loiter time distinguishes UAS from other aviation assets and lends itself to supporting all types of fires. This would empower all levels (EW/C/IO/art) to observe their effects. Smaller UAS Group 1 or 2 (Puma/Raven), which are located organic to battalions, should have the capacity to spot indirect fires at a minimum. UAS operators inside fire direction centers and FSCCs, under the tactical control of fire direction officers and fire support coordination officers, would vastly increase the tempo of fire support.





**Manned aircraft may be constrained in future conflicts.** (Photo by Cpl Donato Maffin.)

■ The conventional “kill chain,” from visual target identification and location through transmission of a call for fire to approval and delivery of fires, is not responsive enough to compete with an advanced adversary in the contested battlespace of the 21st century. To the greatest extent technology will allow, processes such as target location and handoff to firing agencies must be

automated. New systems will be required that integrate advanced sensors (manned and unmanned) with firing platforms and C<sup>2</sup> systems to allow rapid cueing and prosecution of targets across a dispersed, contested battlespace. This must be done in conjunction with fire support systems that provide the necessary balance of range, mobility, precision, responsiveness, and



**Our more capable fire support systems must be more fully integrated with ISR platforms.** (Photo by Sgt Michelle Reiff)

concentration to regain an overmatch of fires capability against a peer adversary.

■ Integration of advanced sensors and surveillance capabilities means that fire support will not only perform a fires function but also an intelligence function. More importantly, intelligence gained by fire support sensors must be disseminated throughout the MAGTF rather used solely to assist in fire support. Reconnaissance/counterreconnaissance units especially will gain a great deal of intelligence data through their fire support planning and prosecution. (See “21st Century Reconnaissance,” *MCG*, January 2017.) This will increase the need for intelligence analysts and other personnel in fire support units and in FSCCs.

• Ground fire support systems

■ Current ground fire support systems (to include weapons and munitions) lack the range, mobility, and firepower to compete on the modern battlefield with the counterpart systems of a peer adversary. The vehicular lift alone required to displace and sustain towed artillery systems requires a large footprint ashore and presents a major ship-to-shore sustainment challenge in a contested environment where large built-up stockpiles ashore are vulnerable to enemy fires. The Marine Corps will require fires capable of supporting widely dispersed units over long ranges, delivered and sustained from the sea. We must be able to concentrate effects over long ranges, while dispersing assets for survivability. The requirement for responsive fires at the small unit level will drive the need for lightweight, mobile, sustainable systems capable of delivering precision fires in support of companies, platoons, and squads in operating environments where deployment and/or sustainment of large batteries ashore is precluded by the threat of enemy fires and observation. At the same time, the ability to achieve local fires overmatch in an objective area will require that Marine forces ashore can reach back to long-range sources of



fires, whether from ships, aviation platforms, or expeditionary advance bases, with access to sufficient mass of fires to defeat enemy fire support systems and gain and maintain a local fires advantage for the duration of their mission.

- Manned aviation
  - Manned aviation, among its other functions, will continue to be a key component of fires and a combined arms approach. However, close air support will not always be the go to tactic in future conflicts. The air supremacy that has characterized the last 15 years of conflict will not last forever. Manned aircraft may be constrained in both time-on-station and in where it can safely be employed due to proliferation of air defense systems. Additionally, Marine Corps aviation will be called upon to

support of both amphibious operations and a variety of other missions carried out by the naval Services. Integrating such systems with existing destroyers armed with 5-inch guns, the Zumwalt-class which will be armed with 155mm Excalibur rounds, and Tomahawk Land Attack Missiles will be an additional fire support coordination challenge.

### Fires/Maneuver Relationship

These drastic but necessary changes in fires must be implemented while maintaining a strong relationship between fires and maneuver. As mentioned in “21st Century Maneuver,” maneuver forces will increasingly be called upon to maneuver in order to facilitate fires. However, the traditional need to employ fires to facilitate maneuver will not decrease. In fact, it will

facilitate aviation fires but myriad other friendly actions as well.

### Conclusion

The application of firepower in support of infantry forces is as old as war itself—rarely has any grunt entered battle without someone ready to fire in support. Although the centrality of firepower ebbs and flows with changes in both fire power systems and warfare itself, its importance and presence never does. The Marine Corps has always been at the forefront of innovation in terms of firepower and—with some modifications to methodology and structure—it can continue that tradition despite the rapid change of technology on the modern battlefield.

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***Manned aviation, among its other functions, will continue to be a key component of fires and a combined arms approach.***

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conduct combat air patrol missions which will degrade the availability of aircraft for close air support. Marine aviation will continue to be one of the most flexible and responsive assets available to the MAGTF but that very flexibility and responsiveness means that adversaries will increasingly seek to mitigate it.

- Naval surface fire support
  - The paltry number of naval fire support vessels available for naval and amphibious operations has been a long-lasting problem for both naval Services. The decline of the Zumwalt-class destroyer purchase order to only two hulls will only exacerbate it. Due to the risks of modern ASCMs (anti-ship cruise missiles), reversing the declining numbers of destroyers is not a prudent option. Instead, both the Navy and the Marine Corps have a vested interest in small, survivable, swift, and stealthy naval platforms that can deliver precision fires in

surely increase. Modernizing fire support coordination in the manner described above will go a long way toward ensuring the fire support community upholds its part of the relationship. Traditional missions, such as fixing enemy maneuver forces and eliminating high payoff targets and threats, will be as important as ever, but integrating information, cyber, and electronic warfare capabilities into Marine Corps fire support will offer more options to accomplish them. Rarely, however, will fires be able to completely overmatch enemy assets in such a way as to grant complete freedom of maneuver for friendly forces. Rather, special attention will need to be paid to creating bubbles or pockets within enemy ISR and fires threat envelopes to facilitate maneuver at decisive places and times. Increasingly, the concepts at work in suppression of enemy air defense missions will need to be applied with large and fire supporters not just needed to

### Notes

1. Headquarters Marine Corps, *Marine Corps Warfighting Publication 3-16, Fire Support Coordination in the Ground Combat Element*, (Washington, DC: 2001), 1-1.
2. Headquarters Marine Corps *Marine Corps Operating Concept*, (Washington, DC: December 2016), 8.
3. Stanley McChrystal and Tatum Collins, *Team of Teams: New Rules of Engagement for a Complex World*, (New York: Portfolio/Penguin, 2015).
4. Joint Chiefs of Staff, *Joint Publication 3-60, Joint Targeting*, (Washington, DC: 2013), 1-1.
5. Olivia Garard, “Targeting Clausewitzian Judgment: Fusing Precision and Accuracy to Strategy and Tactics,” *The Strategy Bridge*, (online: 20 September 2016), accessed at <http://thestrategybridge.org>.
6. Mary Ellen Connell and Ryan Evans, “Russia’s Ambiguous Warfare and Implications for the U.S. Marine Corps,” *Marine Corps University Journal*, (Quantico, VA: Spring 2016), 38.
7. *Ibid.*, 38.





# ARG-MEU Employment Methods

**Aggregated, disaggregated, distributed**

by LtCol Paul Brickley

The Navy and Marine Corps' most capable forward deployed, globally responsive force is the three-ship ARG with an embarked MEU.<sup>1</sup> The ARG-MEU program is a deployed global presence existing since the 1960s, and it is in persistent high-demand among combatant commands (CCDRs) today. This demand ensures continuous ARG-MEU employment, both during the Iraq and Afghanistan campaigns that dominated our military focus in the early 21st century and today as planned or crisis demands among geographic combatant commands (GCCs) and SOCOM (Special Operations Com-

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mand) outweigh the available amphibious shipping.<sup>2</sup> During the ARG-MEUs' 40-plus years of existence, two general terms developed to characterize ARG-MEU employment methods in support of GCCs: aggregated, when in support of one GCC; and disaggregated, when supporting multiple GCCs. A third term, distributed, recently developed as an additional employment method

to support multiple GCCs.<sup>3</sup> The three terms are similar in that they evolved from existing naval Services' strategies, concepts, and policies.<sup>4</sup> They differ, however, in their specific operational- and tactical-level command and control constructs, their provisions for the conduct of mission essential tasks (METs), and their impacts on ARG-MEU readiness. This article examines the employment method distinctions and discusses aspects of the current Joint and operational climate that influence employment.

The Marine Corps and Navy provide deployable ARG-MEUs through the Global Force Management (GFM) process for Secretary of Defense (SECDEF) allocation to CCDRs for exercises and/or operations.<sup>5</sup> The most common employment of ARG-MEUs is allocated aggregated to a single GCC and theater. Within the aggregated construct, the GCC exercises operational-level combatant command (COCOM) authorities of the ARG-MEU. The GCC typically delegates OPCON of the ARG-MEU to its Navy Component (NAVFOR), which exercises TACON of the ARG-MEU.<sup>6</sup> At the tactical level, the amphibious squadron (PHIBRON) commander and the MEU commander retain command and control of their forces throughout the theater, creating a unity of command that enables them to direct, train, maintain, and sustain those forces. Within aggregated employment, an ARG-MEU could be split, with individual ships and embarked Marine elements operating beyond the



**11th MEU elements conduct amphibious operations for Exercise ALLIGATOR DAGGER in Djibouti, 2017. (Photo by LCpl Devan Gowans.)**



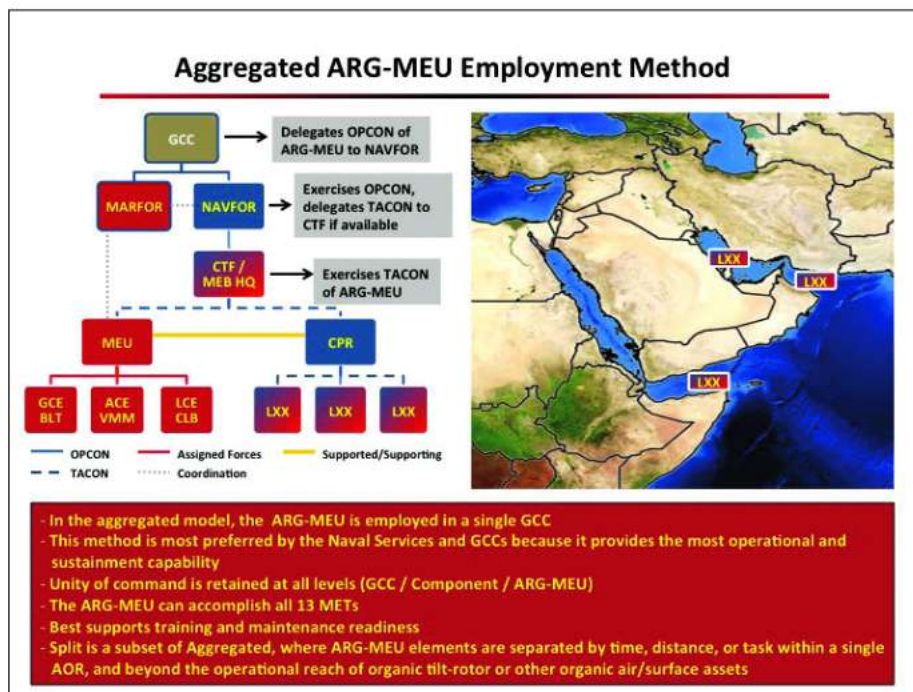


Figure 1.

operational reach of tilt-rotor aircraft or other organic air and surface assets. Split elements are separated by time, distance, or task within the theater, but the ARG-MEU commands and controls operations and sustainment, leveraging the NAVFOR and global communications and logistics networks. Time is a consideration for repositioning split ARG-MEU elements together, depending upon the distance between ARG-MEU elements and the theater's size. Importantly, the ARG-MEU remains in the same OPCON/TACON chain of the GCC when split.

The preferred method of ARG-MEU employment is aggregated. This is the most efficient and responsive employment, based on its command and control structure, inherent ability to accomplish METs, and also maintain readiness. The aggregated command and control lines are straightforward and clear (see Figure 1), and unity of command exists from the operational through tactical levels. This facilitates the ARG-MEU's ability to conduct the 13 METs for which it was organized, equipped, trained, and certified (see Note 1), thus providing the GCC with response options across the full

range of military operations (ROMO).<sup>7</sup> Aggregated employment also supports the highest levels of deployed training and equipment readiness. The ARG-MEU can conduct unilateral, bilateral, or multi-national training that retains MET proficiency of all MAGTF elements while building partner nation capabilities. Likewise, airframe and equipment readiness benefits from the streamlined flow of parts and equipment, through theater hubs and across ARG ships. Overall, ARG-MEU aggregated employment provides tremendous operational capability to the GCC and a given region. By itself, however, aggregated does not support emergent requirements that manifest in multiple GCC regions. To support multiple GCCs, ARG-MEUs are either disaggregated or distributed.

Before discussing disaggregated and distributed employment, we will look at two underlying reasons that an ARG-MEU should expect to support multiple GCCs. The first is amphibious shipping inventory and availability. The naval Services' ability to generate ARG-MEU presence depends upon available amphibious lift and deployable forces.<sup>8</sup> Presence is reflected by the number of

ARG-MEUs deployed throughout the year to GCCs. Currently, enough available lift exists to support a presence of two deployed ARG-MEUs, of the seven stationed in CONUS and Okinawa.<sup>9</sup> Previously, GCCs relied on an allocated, rotational ARG-MEU presence to meet their requirements. Now, an imbalance between available amphibious lift and GCC requirements precludes a consistent ARG-MEU presence across all GCCs. GCC demand remain high, but not all GCC ARG-MEU requirements are met.<sup>10</sup> This imbalance drives Joint Staff recommendations and SECDEF decisions on whether a deployed ARG-MEU is aggregated, disaggregated, or distributed.

***"We need to ensure that in the context of TMM, we have the right command and control constructs in place to integrate joint capabilities and support rapid decision-making"***

***—CJCS, January 2016***

The second reason that an ARG-MEU would support multiple GCCs stems from an environmental shift within the DOD. This shift frames force management within the current threat paradigm, defined as a Trans-Regional, Multi-Domain, Multi-Function (TMM) conflict spectrum.<sup>11</sup> It modifies the existing command and control constructs for application in a complex environment, where requirements outweigh available fiscal, structural, and operational resources. Significantly, this leads to informing allocation decisions not through a demand-driven lens, but through the lens of national strategy. Recent Chairman, Joint Chiefs of Staff (CJCS) guidance, the *2016 National Military Strategy*, and CMC and CNO



## Disaggregated ARG-MEU Employment Method

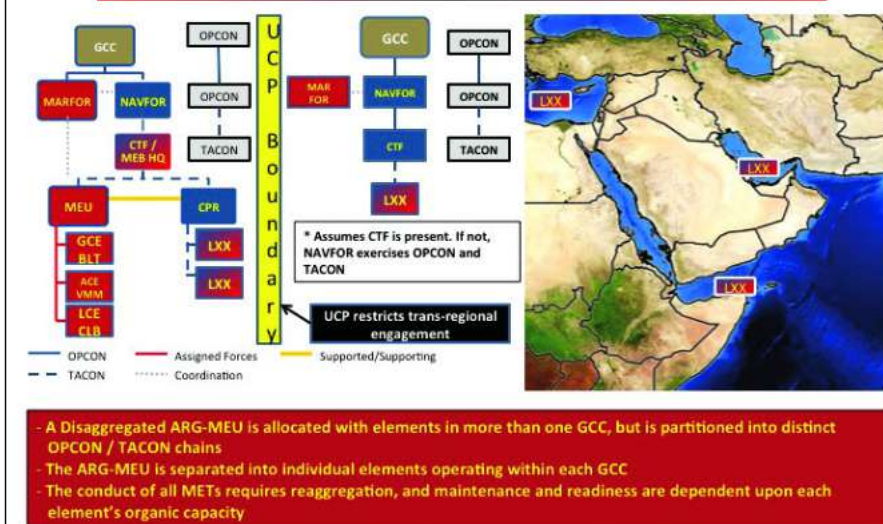


Figure 2.

direction point to the need for flexible, responsive means to meet multiple GCC requirements within TMM and across the ROMO. This requires forces that can act globally, regionally, and jointly. The ARG-MEU, already a premiere force capable of global response, supports this need when distributed and to a lesser extent when disaggregated. ARG-MEU employment within this paradigm does not require new processes or creations, and is achieved within existing Title 10 and GFM authorities.

Until recently, an ARG-MEU already allocated and deployed to one GCC was commonly disaggregated to support emergent requirements in another GCC.<sup>12</sup> Disaggregation results from SECDEF Title 10 authorities to allocate and reallocate forces and Joint Staff GFM processes that divide the ARG-MEU between multiple GCCs, with specific ARG-MEU capabilities and elements aligned to each GCC's requirements. These capabilities and elements, such as a particular ship(s) with embarked Marines, are partitioned via GFM reallocation to the gaining GCC and NAVFOR. The operational-level command and control construct is that the gaining GCC and NAVFOR are granted OPCON and TACON of

the ARG-MEU elements for the duration of the emergent requirement. Functionally, the ARG-MEU is bifurcated, with elements employed in two distinct GCC command and control chains, and separated by the *Unified Command Plan (UCP)* boundary (see Figure 2). On the tactical level, disaggregation restricts ARG-MEU commanders in their command and control and their unity of command of those elements within another GCC and NAVFOR.<sup>13</sup> In practical terms, the ARG-MEU is separated into independent elements within different GCCs and NAVFORs, thereby eroding unity of command.

The ARG-MEU's partitioning between GCCs reduces overall training and equipment readiness, and the ability to conduct the METs for which the ARG-MEU is certified. Disaggregation provides GCCs parts of the whole, in that segmented ARG-MEU elements are capable of a minimum number of METs, defined by the combination of what the ship(s) and embarked Marines provide. The individual ARG-MEU elements lack the operational capabilities that the overall force brings. No GCC has access to all 13 MET capabilities that the naval Services train, certify, and deploy the ARG-MEU to deliver, until

it is re-aggregated by the SECDEF and GFM process. Each GCC employs, at most, a mini-MAGTF to a minimum effect.

The constraints on conducting all METs extend to sustaining ARG-MEU readiness. When disaggregated, ARG-MEU training and maintenance readiness degrades over time. The UCP boundary and GFM processes prevent a timely and responsive ability to move planners, maintainers, equipment, and capabilities throughout the ARG-MEU to sustain and support the disaggregated forces (see Note 13). Each independent element relies on its organic capabilities and the operational, training, and logistical support provided in theater.<sup>14</sup> Training and maintenance are limited in scope to the equipment and capabilities resident within each element. If specific personnel or parts are not available within the ARG-MEU element or within the theater, GFM processes are necessary to get them. Given its division of the ARG-MEU into separate elements, disaggregation creates a potential need for additional personnel and equipment to support each element's independent operations. Disaggregation is a valid but limited method of ARG-MEU support to multiple GCCs, appropriate in those cases where either the scope of requirements or the range of geography between ARG-MEU elements surpasses the ARG-MEU commanders' span of

***"Ensure the capabilities of the ARG/MEU and its ability and authority to operate as a cohesive unit are retained when operating in a distributed manner across CDR boundaries."***

***—Marine Corps Operating Concept 2016***



control.<sup>15</sup> Overall, its main distinction is that the ARG-MEU becomes a sourcing solution for requirements in multiple GCCs, and is divided to meet them with a minimum capability that represents less than an ARG-MEU.

The Marine Corps and Navy, in coordination with the Joint Staff, recently codified a second method of ARG-MEU support to multiple GCCs: the distributed ARG-MEU. Distributed employment optimizes that support to multiple GCCs by enabling ARG-MEU effectiveness across UCP lines (see Figure 3.) In the distributed employment method, OPCON of the ARG-MEU is maintained by the original GCC, and TACON of specific ARG-MEU elements is granted to the gaining GCC for the duration of the emergent requirement and assigned mission. This enables the ARG-MEU commanders to retain command and control and unity of command across the UCP boundaries and in support of the assigned missions. The ship(s) and embarked Marines that are distributed TACON to a GCC remain an extension of the ARG-MEU. They are employed via coordination with and among the TACON-holding GCC and NAVFOR, the ARG-MEU commanders and staffs, and the ship(s) with embarked Marines. The ARG-MEU staffs communicate and coordinate with both NAVFORs and across the UCP to accomplish the missions assigned within the GCCs. This results in a substantial increase in communication requirements, managed through the ARG-MEU staffs' significant depth and capacity to support a broad scope of coordinative efforts.<sup>16</sup> They also leverage the global command, control, communications, computers, and intelligence (C<sup>4</sup>I) telecommunications architecture to support coordination. In effect, distributed employment designates the whole ARG-MEU to conduct missions in two different GCCs and NAVFORs, vice dividing it into separate individual parts.

At the operational level, the distributed command and control construct enables GCCs and components to re-source the larger planning, coordination, and maintenance sustainment capacities of the entire ARG-MEU. This

produces trans-regional effects, within the ARG-MEU's operational capabilities, that benefit simultaneous sourcing and accomplishment of planned or emergent requirements. 22d MEU/COMPHIBRON-6's recent 2016 deployment exemplifies the benefits of distributed employment. The SECDEF and Joint Staff distributed the ARG-MEU, via GFM processes, from its original allocation in one GCC to meeting existing and emergent requirements in multiple GCCs. While distributed, the ARG-MEU planned, coordinated, and conducted aviation strike operations and stand-by TRAP and quick reaction alert forces in one theater. Simultaneously, they planned and coordinated requirements for stand-by TRAP and quick reaction alert forces, theater security cooperation (TSC), combined training ashore, and port visits in another. They also briefly supported TSC in a third theater.<sup>17</sup> In all cases, the ARG-MEU communicated, planned, and coordinated with NAVFORs in both theaters to support assigned missions. The ARG-MEU commanders were not the final approval authority for all missions but were a functional part of the approval process for all ongoing or planned missions regardless of theater.

One key element of distributed employment is that the UCP and GFM processes are less restrictive for cross-UCP actions that support and sustain the assigned missions. Cross-UCP movements associated with distributed employment occur within the parameters of the assigned missions and stop short of changing the capabilities allocated by the SECDEF and Joint Staff. Planners, maintainers, and equipment are moved where and when needed among the theaters to coordinate, conduct, and sustain the assigned missions. Those cross-UCP movements are enabled by increased component (MARFOR/NAVFOR) communications and coordination within and across UCP boundaries, and among GCCs and the Joint Staff. This communication creates a transparency necessary for situational awareness at all levels. ARG-MEU commanders, in coordination with the naval components, can tailor the force and weight personnel and equipment to where the greater point of friction lies, short of changing allocated capabilities.

An important and related aspect is that requests for forces (RFFs) normally associated with cross-UCP movements are reduced. The transparent and continuous coordination within and across the UCP by the ARG-MEU

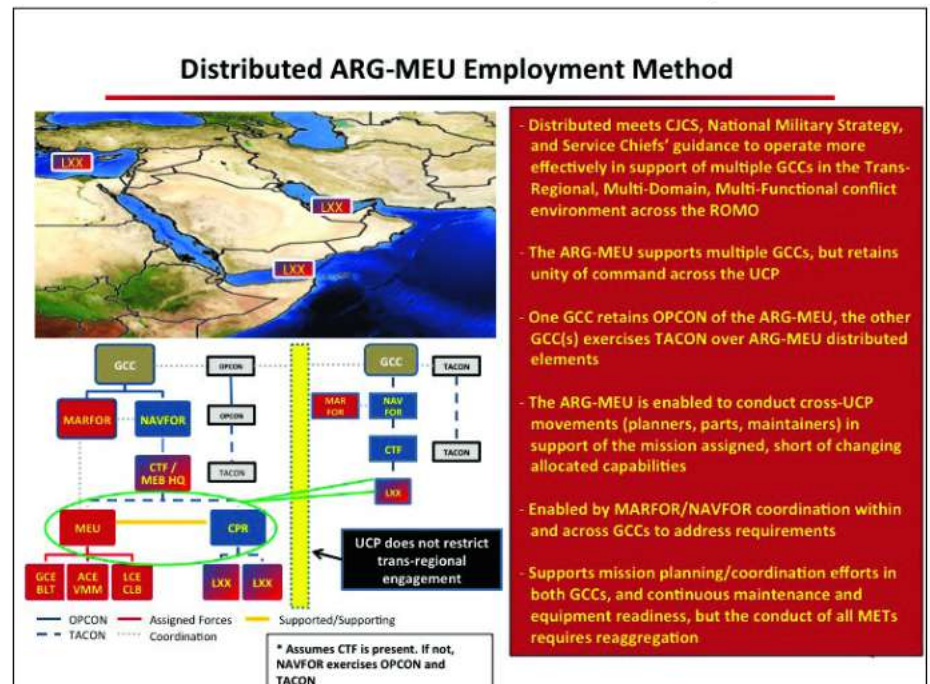


Figure 3.



commanders and staff, NAVFORs and MARFORs, and GCCs and Joint Staff ensures shared situational awareness at all levels. This is not to say that distributed employment obviates RFFs. The SECDEF and Joint Staff retain Title 10 responsibilities to adjudicate force allocations between GCCs and can require RFF for proposed movements at any time. The key is distributed employment eliminates the default need for RFFs because practically, it extends the ARG-MEU's unity of command across UCP lines to conduct and sustain missions in multiple GCCs. ARG-MEU support is maximized for crisis/contingency planning or operations, special operations forces (SOF) integration, joint and combined training, and TSC.<sup>18</sup>

An example, beyond 22d MEU/COMPHIBRON-6's recent deployment, is an ARG-MEU in the Eastern Mediterranean, planning and conducting operations that support EUCOM-AFRICOM-CENTCOM (the TRICOM area). The distributed ARG-MEU could conduct TSC and fixed-wing strike in one GCC, while also supporting stand-by alert force missions in another GCC via allocation of an LPD with embarked Marines and tilt-rotor aircraft. If that GCC's requirements change to rotary-wing strike, with a corresponding switch of the allocated tilt-rotor capabilities, then it triggers an RFF and the related SECDEF/Joint Staff adjudication and GFM process. Below that threshold, the ARG-MEU supports those missions via cross-UCP movements as needed, through continuous transparent coordination at all levels. Distributed employment does not provide ARG-MEU commanders with unilateral authorities to adjust force compositions across UCP lines and change allocated capabilities. That authority is resident at the SECDEF level. However, distributed does enable ARG-MEU commanders to conduct movements in support of the assigned mission and sustainment of the allocated capabilities. This accelerates operational and tactical tempo, ARG-MEU flexibility and responsiveness, and trans-regional effects, and it precludes the need for additive personnel or equipment.

Distributed employment has varying impacts in terms of MET capabilities and ARG-MEU readiness. The distributed ARG-MEU's available time and capacity to conduct all METs are restrained by the support it provides simultaneously to multiple theaters. Similar to being disaggregated, the ARG-MEU cannot train to or fulfill all 13 METs without being re-aggregated across UCP lines through SECDEF decision and the GFM process. The METs that are conducted are associated with the missions that led to the ARG-MEU's being distributed or disaggregated. In effect, both distributed and disaggregated employment limit MET-related operational capability, training, and training readiness. However, distributed employment allows the potential for higher mission and equipment readiness. The distributed ARG-MEU supports all elements regardless of location with planning, coordination, and maintenance capabilities, so distributed elements are not limited to maintenance capabilities resident within them. The ARG-MEU, through transparent component/GCC coordination in both theaters, supports maintenance sustainment across UCP lines. This establishes a consistent ability to sustain acceptable levels of equipment and aircraft readiness, using the capacity of the entire ARG-MEU.

The considerations related to distributed employment do not require new processes, but they do require evolving and operating differently within existing processes. One example concerns the OPLAN-holder's responsibility to fund operations. A reasonable view is that the GCC which retains OPLAN of a distributed ARG-MEU may not bear responsibility for funding ARG-MEU missions conducted by elements TACON to another GCC. Those funding requirements could be shifted via Global Force Management Allocation Plan (GFMALP) administrative notes, or via the Joint Staff execute order (EXORD) that initiates distributed employment. Likewise, global logistics routing via the Naval Logistics Integration (NLI) system has to account for specific unit locations, to ensure efficient parts flow through regional hubs that sup-

port globally distributed ARG-MEU elements. This increases maintenance tempo and reduces delays by precluding ARG-MEU elements in one GCC from receiving and funneling parts to elements in another.

Also, early identification of distributed employment allows ARG-MEU, component, GCC, and Joint Staff planners to identify and schedule joint enabler capabilities to facilitate the assigned missions. These could include intelligence, surveillance, and reconnaissance in addition to theater medevac platforms, surface ship combatants, and fixed-wing strike assets. Finally, conditions should be defined to specify when the ARG-MEU re-aggregates. The retention of OPLAN by one GCC ensures at a minimum that discussion occurs about when elements distributed TACON are re-aggregated. Whether that is upon completion of the distributed mission or upon activation of an operational plan or contingency plan, the GCCs, components, and the ARG-MEU should be aware what time or events trigger re-aggregation.

***“Conduct ... power projection in a more distributed fashion ... employing expeditionary forces in order to provide scalable options”***

***—A Cooperative Strategy for the 21st Century***

As we look across the ARG-MEU aggregated, disaggregated, and distributed employment methods, we see a few similarities:

- Each stems from SECDEF authorities related to Title 10 and the GFM process. These define SECDEF authority to “allocate forces between CCDRs ... The Secretary will specify the command relationship the gaining



commander exercise[s] and the losing commander relinquish[es].”<sup>19</sup>

- The methods reflect existing naval Services’ concepts and strategies, condense enduring discussion on ARG-MEU employment,<sup>20</sup> and are evolved to apply within the current TMM spectrum and *National Military Strategy*.

We also see distinctions in their operational-level command and control constructs:

- A three-ship aggregated ARG-MEU is employed by a single GCC, who exercises OPCON through the NAVFOR and TACON through a task force commander. Unity of command is retained at all levels, and the ARG-MEU can accomplish all 13 METs, given time considerations to relocate if split. Split employment is a subset of aggregated and remains within the GCC. Aggregated is the preferred employment method.
- A disaggregated ARG-MEU supports multiple GCCs through its employment as individual parts within distinct OPCON/TACON chains. The ARG-MEU is divided at the cost of unity of command and a minimal operational capacity relative to the whole ARG-MEU. GCCs are limited to the capabilities resident within each part. Disaggregated employment meets minimum requirements and is the least effective method overall.
- A distributed ARG-MEU supports multiple GCCs with elements allocated in both GCCs, but the ARG-MEU retains command and control and unity of command across the UCP in support of assigned missions. OPCON is retained by one GCC. The other GCC is granted TACON over the ARG-MEU elements conducting the missions that lead to distribution. The ARG-MEU coordinates within and across UCP boundaries to conduct and sustain operations, leveraging C<sup>4</sup>I systems and its full planning, coordination, and support capabilities. Transparent coordination and communications among ARG-MEU staffs, naval components (MARFOR/NAVFOR) within and across UCP lines, and between GCCs and the Joint Staff, is critical to the success-

ful conduct of distributed employment and reduction of RFFs. Distributed ARG-MEU employment is the preferred method of supporting multiple GCCs.

Finally, the Navy and Marine Corps are aligned and in agreement with the aggregated, disaggregated, and distributed employment methods, per the Naval Board held in September 2016, and prefer distributed employment as the method to support emergent requirements that require ARG-MEU support to multiple GCCs. Likewise, the employment terms are aligned with the Joint Staff. This is clear in the recent 2016 distributed employment of 22d MEU/COMPHIBRON-6 and the 2017 employment of 11th MEU/COMPHI-

### ***Split employment is a subset of aggregated and remains within the GCC.***

BRON-5, where, for a time, the MEU was distributed among two GCCs and the ARG was split within one GCC. While distributed and disaggregated employment have pros and cons, distributed employment is more effective. Rather than dividing the ARG-MEU, it enables unity of command across UCP lines. This supports risk management at tactical and operational levels, enabling ARG-MEU commanders to remain in the planning, coordination, and execution process of assigned missions. Moreover, it advances discussion about ARG-MEU employment from beyond the optic of a given ship in a given body of water (an LPD in the Arabian Gulf or an LHD in the Mediterranean Sea). The discussion instead focuses on meeting requirements with the capabilities produced from the combination of a ship(s) with embarked Marines and equipment, leveraged through the ARG-MEU commanders and staffs. Regardless of its employment method, the ARG-MEU remains in high demand for its versatility, flexibility, and responsive-

ness. While no substitution exists for an aggregated ARG-MEU available to each GCC, optimized employment of available ARG-MEUs supports CJCS guidance and *National Military Strategy* objectives to meet global requirements across the ROMO in the trans-regional, multi-domain, multi-functional conflict environment.

*>Author’s Note: This article reflects innumerable discussions with personnel in Marine Corps and Navy Headquarters Staffs, Components, and Operating Forces, and in the Joint community. It represents the thoughts of many, articulated today and over the years, and is a representation that “many hands make light work.”*

#### **Notes**

1. The standard ARG consists of a commander, amphibious squadron staff and three ships, each with a well-deck and flight-deck or landing spots: the LHD, LPD, and LSD. The MEU consists of ~2,600 Marines and Sailors, formed around a CE of 320, battalion landing team of ~1,500, aviation composite squadron of ~500, and combat logistics battalion of ~280. The ARG-MEU is structured, equipped, trained, and certified to conduct 13 METs across the range of military operations: amphibious assault; amphibious raid; noncombatant evacuation operations; foreign humanitarian assistance; tactical recovery of aircraft and personnel (TRAP); aviation operations from expeditionary sites; theater security cooperation (TSC), airfield/port seizure, integration with Joint/inter-agency/intergovernmental/multinational and SOF forces; embassy reinforcement; enabling operations; visit, board, search, and seizure (VBSS); and expeditionary strike.
2. Enduring Joint and GCC planning factors for amphibious shipping levels point to requirements for over 50 amphibs. The CNO and CMC agree to 38 as the minimum for forcible entry, with a capacity to embark 2 MEBs. Current projections show 34 available by 2022. See FY16 30-Year Shipbuilding Plan, FY16 Navy Force Structure Assessment, and FY16 CNO and CMC Congressional Testimony.
3. At the Sep 2016 Naval Board, the CMC and CNO, along with Commander, Fleet Forces, were briefed on aggregated, disaggregated, and distributed ARG-MEU employment methods. The CMC and CNO acknowledged their viability, recognized their command and control distinctions, and registered a naval Services’



preference for distributed employment when supporting multiple GCCs.

4. Aggregated/disaggregated/distributed are referenced specifically or in general in *A Cooperative Strategy for the 21st Century*, (Washington, DC: March 2015), *Marine Corps Operating Concept 2016*, (Washington, DC: August 2016), Expeditionary Force 21, (Washington, DC: March 2014), *HQMC CD&I-Fleet Forces Command's Disaggregated ARG/MEU Concept of Employment*, (Washington, DC: 22 August 2014), and *MCO 3120.13, Policy for MEUs*, (Washington, DC: October 2015). Interestingly, no Joint or naval Services' doctrine exists to describe ARG-MEU employment and operations. JP 3-32, *Command and Control of Joint Maritime Operations*, currently in a first draft revision stage, will incorporate the terms as described in this article.

5. The Joint GFM process allocates, assigns, or apportions forces to GCCs for validated requirements. Assigned forces are enduring within the theater. Allocated forces supplement assigned forces and execute tasks through rotational deployments (MEU, SPMAGTF-CR, UDP). Apportioned forces are designated for planning purposes. See *Joint Pub 5-0, Joint Operations Planning*.

6. OPCON: organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. TACON: limited to detailed direction and control of movements or maneuvers within the operational area necessary to accomplish missions or tasks assigned. Unity of command: forces operate under a single commander with the requisite authority to direct all forces employed in pursuit of a common purpose. See *Joint Pub 1, Joint Doctrine*; *Joint Pub 1-02, Joint Dictionary*; *Joint Pub 3-0, Joint Operations*.

7. The ROMO is a broad spectrum from non-kinetic security cooperation and training on one end, to a mid-point of crisis response for humanitarian assistance or disaster relief, to kinetic combat operations and strikes on the other end. See *MCDP 1, Marine Corps Operations*.

8. Inventory refers to the total number of amphibious ships in the Fleets. Availability refers to amphibs not in a maintenance cycle. Deployable forces are those that are trained, equipped, certified, and ready for employment. See Congressional Budget Office, "Analysis of the Navy Amphibious Warfare Ships for Deploying Marines Overseas," (Washington, DC: November 2011).

9. This equates to a maximum 6 of 30 inventory ships deployed, although the unique cycle of the 31st MEU enables brief periods where three ARG-MEUs and 9 ships could be deployed. See RAND Study, "Assessment of Surface Ship Maintenance Requirements," (Arlington, VA: 2015) and Congressional Budget Office, "Analysis of the Navy Amphibious Warfare Ships for Deploying Marines Overseas," (Washington, DC: November 2011).

10. See Valerie Insinna, "Marine Forces Japan Commander Raises Concerns on Amphibious Ship Numbers, Readiness," *National Defense*, (Washington, DC: 11 April 2014) and Valerie Insinna, "Low Inventory, Low Readiness Plague Amphibious Ship Fleet," *National Defense*, (Washington, DC: August 2014) as cited in "Unbreakable Amphib Ship Readiness," 5 January 2015, accessed at <http://cimsec.org>.

11. Trans-regional means actions that impact multiple countries and GCCs. Multi-domain refers to air, land, sea, space, and cyber domains. Multi-functional means, at the strategic/operational levels, theater ballistic missile defense, maritime security. At the tactical level, it refers to functions and actions along the ROMO. For more, see Jim Garamone, "Dunford: Command, Control Must 'Keep Pace' in 21st Century," *DOD News*, (Washington, DC: 4 January 2016), accessed at <https://www.defense.gov>; and "Gen. Dunford's Remarks and Q&A at the Center for Strategic and International Studies," (Washington, DC: 29 March 2016), accessed at <http://www.jcs.mil>.

12. Emergent requirements technically develop after publication of the GFM, but in practice the term refers to crisis or other unplanned requirements levied by GCCs once the ARG-MEU is deployed, that cannot be met by that GCC's currently assigned or allocated forces. Rotational requirements support GCC plans, exercises, and operations, and are met through planned force allocations (MEU, SPMAGTF, UDP deployments), and published in the GFM. See *JP 5-0, Joint Operations Planning*.

13. Once the SECDEF reallocates ARG-MEU elements disaggregated, movements within the ARG-MEU and across UCP boundaries require SECDEF authorization. Time is consumed by coordination between the ARG-MEU, NAVFORs, and GCCs to release a RFF to the Joint Staff requesting movement approvals. Likewise, the RFF approval process can take multiple weeks, less in extreme situations. See *Joint Pub 5-0, Annex H*, for extended discussion of Title 10 and SECDEF GFM authorities related to allocating and reallocating forces.

14. This support is coordinated both by the NAVFOR and the MARFOR, as the advocate within the GCC for the appropriate employment of all assigned or allocated Marine Corps forces. MARFOR-NAVFOR and MARFOR-GCC coordination is important to disaggregated operations, and crucial to distributed operations.

15. Such cases that theoretically are outside an ARG-MEU's span of control and lend themselves to disaggregation might be geographic, involving simultaneous requirements across significant distance, such as in the Gulf of Guinea and in the Arabian Gulf. Or, they might be operational, involving sustained kinetic operations in two GCCs; either case lends itself to formal integration of ARG-MEU elements, via disaggregation, into regional Joint task forces.

16. ARG-MEU CE average ~315 Marines. This consists of the core staff, planner augments, and support detachments (from MEF headquarters group and subordinate intelligence, radio, communications, law enforcement battalions; division reconnaissance battalions; and ANGLICO). Each detachment serves a specific enabling function, but also supports the MAGTFs planning and coordination efforts. PHIBRON staffs are much smaller, averaging ~23 Sailors, but the supported-supporting Blue/Green relationship ensures an integrated effort. See note 11 for cases where the CE's capacity may theoretically be reached.

17. Theater security cooperation includes military-to-military training as well as humanitarian projects. Combined training involves partner or allied nation forces.

18. SOF integration, interoperability, and interdependence (SOF I3) is a USMC-SOCOM priority for establishing mutually beneficial training, equipment, and employment mechanisms. Theater security cooperation includes military-to-military training as well as humanitarian projects. Combined training involves partner or allied nation forces.

19. Quote is from *JP 5-0, Appendix H*. For extended background and detail on allocation and reallocation authorities, see *JP 5-0*; *JP 3-0*; classified *FY16-FY17 Global Force Management and Implementation Guidance (GFMIG)*, Section III and Annex C; and classified *FY17 GFM*.

20. A cursory search through online *Marine Corps Gazette* archives shows 59 articles associated with the search terms "ARG-MEU employment," and 32 articles associated with the search terms "ARG-MEU distributed."





# An Officer and a Historian

Military history and why it matters in today's Marine Corps

by Capt Rand L. Brown II, USMCR

I would like to begin this piece with a scenario in the style of one of those notional exercises that I know we all so fondly remember from The Basic School:

*After the rapid collapse of a vital partner regime in the Eastern Mediterranean to an aggressive invasion by a hostile native coalition, a joint task force (JTF) comprised of forces from multiple Western powers sails to the region to restore order and rescue the few remaining allied forces still resisting. The JTF commander takes a decidedly maritime and expeditionary approach to the overall campaign, establishing resupply bases all throughout the Mediterranean to facilitate better logistical capabilities eastward, even before arriving in the area of operations. Once landed, the allied JTF commander sets about on a campaign to simultaneously establish maritime dominance and liberate the vital port cities down the long coastline of the region. Utilizing his tactical superiority in both armor and mobility, he drives his forces down the coast in a movement-to-contact that also directly incorporates the naval element in the form of a support fleet that moves down the coast alongside the ground element—providing constant resupply and reinforcement when needed as well as maritime mobility. The allied forces successfully goad their opponents into several close-in engagements where their tactical superiority and tighter cohesion overcome the far greater numbers of the hostile coalition. Soon, the entire coastline is back under allied control along with most of the port cities, denying the enemy any access to the sea.*

*The capital city of the region, however, still remains in enemy hands. This city is located much farther inland and in more difficult terrain that naturally favors the defenders. Although the allied command-*

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**Then-Gen James N. Mattis once commented: "The basic principles of war will change when the basic chemical composition of water changes." (Photo by SSgt Amanda Dick.)**

*er faces immense pressure from political camps within his coalition to immediately press for this objective, he recognizes that the numerical inferiority of his own forces, the difficult distance and terrain of the capitol, and the defensive posture of the enemy would spell utter disaster for the overall allied campaign. He then shifts his strategy to one of strengthening his hold on the territory already won, blocking any attempt at recapture by the enemy, selectively applying intense pressure on the enemy's supply lines, and offering negotiated political settlements. To aid him in this endeavor, the allied commander sets*

*up advisory teams made up of military professionals native to the region who keep him informed on the best courses of action. Eventually, this strategy pays off and a political settlement is reached between the allied powers and the enemy coalition, granting them the territories won as well as unimpeded access to the capitol city.*

To many military professionals, this scenario probably serves as a great example of a successfully executed expeditionary joint operation in which the allied commander directed the three levels of war (strategic, operational, and tactical) so as to support each other and



produce a positive outcome, even if it hadn't been the outcome initially desired at the beginning. However, the real surprise is that this scenario actually took place in real history and at a time before the U.S. Marine Corps—and modern warfare—ever existed. The conflict is known today as the Third Crusade, and it took place between the years of 1189 and 1192. The allied army were the Western crusader forces raised in Europe to rescue the floundering Frankish Kingdom of Jerusalem after its disastrous defeats at the hands of the Ayyubid coalition under Salah ad-Din, and the allied commander was none other than the legendary crusader King Richard I, *Cœur de Leon* of England.

Richard's campaigns in Palestine are perhaps some of the most brilliant military operations in Western military history and are almost completely unknown outside of tiny but fiercely loud circles of military historians. Richard—who premier medieval military historian Dr. John France labeled “the greatest commander within this period”—is gradually in the midst of a historical rediscovery of sorts among a newer generation of medieval historians who now recognize the man's incredible military talent. France writes,

Richard took risks as a matter of policy and it was this that endeared him to his own generation. He too sought advice, but in the end he had the personality to impose himself on others and the skill to recognize military opportunities ... During the Third Crusade he managed to control a very disparate army and to adapt to conditions in the East.<sup>1</sup>

The qualities praised in Richard as a military leader are almost identical to those we extol as an organization in our MCDPs and across the ranks in their various career schools.

Sadly, however, military history is not the strong suit of the current military establishment today—possibly reflecting the overall lack of historical appreciation found within contemporary American society as a whole. While most doctrinal publications make the attempt to draw historical examples to highlight intellectual military concepts, there is very little attention directed toward the



**The Near East during the time of the Third Crusade.** (Photo by Imagery MapMaster: Own work, GFDL, <https://commons.wikimedia.org/>.)

past. When I was at TBS, albeit nearly six-years ago, we received a single hour-and-a-half class on military history in what I want to say was our final month there. Virtually none of the hundreds of sand table exercises, tactical scenarios, or previous hundreds of hours of classroom instruction ever drew from the vast annals of available military history to highlight their relevance. Even in the course work for Expeditionary Warfare School, the historical focus seems muted at best. While the Com-

mandant's Reading List is an excellent tool for personal PME development, many of the selections exhibit a slight (if understandable) bias toward stories of a contemporary nature. While the lessons to be gleaned from Donovan Campbell and LtCol David Grossman are without a doubt important, imagine how much more those lessons would be enhanced alongside the more timeless lessons of Thucydides, Caesar, and Vegetius.

As someone with a professional academic background in military history, I



find this current historical environment at odds with the esteemed Douglas Freeman's exhortation in his 1949 lecture to the Naval War College to

... know your stuff ... Know the yesterdays ... Don't ignore the yesterdays of war in your study of today and tomorrow.<sup>2</sup>

As officers, we find ourselves in perhaps one of the last vestigial remnants of a social order that goes back long before the rise of modernity—that of the professional warrior. Military history is so much more than just rote tales of army movements and monolithic leaders completely devoid of relevance. It is the story of our profession—the profession of arms—and you will be hard pressed to find a scenario from today's combat operations in Iraq, Afghanistan, or anywhere else that doesn't bear a remarkable, if even uncanny resemblance to a scenario faced by one of our professional forebears from long ago. How much better prepared will junior officers be if

we send them to the Operating Forces full of knowledge from “the yesterdays” of our profession and able to speak intelligently on how Alexander, Richard, Edward “the Black Prince,” or Thomas “Stonewall” Jackson overcame the immutable friction of war and succeeded?

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**... military history is not the strong suit of the current military establishment today ...**

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Our current Secretary of Defense, James N. Mattis, once remarked that, “The basic principles of war will change when the basic chemical composition of water changes.” Marines have always understood (perhaps slightly better than our sister Services) that one of the fundamental characteristics of war

as a human phenomenon is its immutability despite the constant evolution of its circumstances and actors. Marines also inherently value the past far more than the other Services do, as is evident in our ferocious devotion to tradition and lineage within the Corps.

Who is better poised to take the lead in bringing back a strong intellectual tradition in the long and storied past of human warfare so as to better prepare ourselves for the wars of today and tomorrow? As younger generations—already displaying a ravenous interest for historical subjects that they are so often deprived of in the public education systems—join our ranks, the potential for positive reception of military history will only increase. Institutions like the Marine Corps University in Quantico are ideally situated to help spearhead this effort—I even know a few individuals over there who are attempting to do just that. The French historian Marc Bloch once wrestled with the timeless question of what use history even is to men of the present. Although he never finished the work that sought to provide his answer (he was killed in the Second World War while fighting in the French Resistance), he did jot down this gem,

This unquestionable fascination of history requires us to pause and reflect—its role, both as the germ and, later, as the spur to action, has been and remains paramount.<sup>3</sup>

I firmly believe that the officer corps and the Marine Corps as a whole can and will benefit from the historical discipline in just such a manner.

### Notes

1. John France, *Western Warfare in the Age of the Crusades, 1000–1300*, (Ithaca NY: Cornell University Press, 1999), 142–143.

2. Douglas Freeman, “Leadership,” *Naval War College Review*, (Newport, RI: March–April, 1979), 430.

3. Marc Bloch, *The Historian's Craft*, trans. Peter Putnam, (New York, NY: Vintage Books, 1953), 7.



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# The Emergence of Modern Warfare

reviewed by LtCol F.G. Hoffman, USMC(Ret)

**T**his sterling-new book is set within the timeless framework of the Athenian historian Thucydides. The two authors of this history acquired this useful lens at the same source—as students of Donald Kagan at Yale. That epic contest between Sparta and the democratic Athens bears some resemblance to the American Civil War. The U.S. Civil War was a clash between two different social systems, one a dynamic industrial society, the other a largely agricultural system. While the Confederate states had a martial culture to some degree, they did not send off their sons to a rigorous training school, the *agoge*, as Sparta did, though they did have their own Helots in bonded servitude. The long war in Greece pitted distinctive political, economic, and military forces against one another, with both sides forced to adapt to gain advantage or compensate for shortcomings or chance. As Thucydides found, this interplay of contingency and the dynamic dimensions of war is an enduring reality of war, so too the role of politics and personality, highlighted with great lucidity by the authors as they recount America's most divisive period.

In *A Savage War*, Murray and Hsieh offer keen insights on the crossroads of social, political, and technological drivers that produced what the authors call the first modern war. The war's scale, duration, and lethality were the products

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of a socio-military revolution, which merged the nationalism of the French Revolution with the technology of the Industrial Revolution, leading to the war's unique strategic framework. Political mobilization and technological transformation (railroad, rifled muskets, armored ships, the telegraph, etc.) generated the capacity for sustained campaigns across America. The authors claim the emergence of an American way of war which emphasized "the logistical and operational projection of military power over continental distances along with a ruthless desire to bring the consequences of secession home to

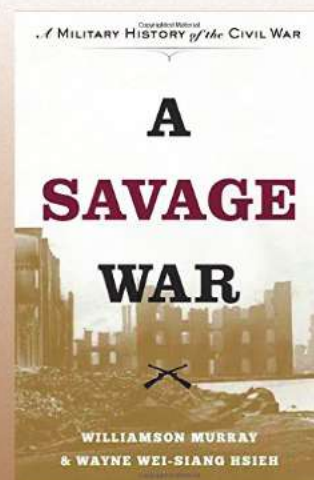
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***The authors claim the emergence of an American way of war ...***

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every hamlet in the Confederacy." The authors consider the scale of these trans-continental campaigns, their distance, and the exploitation of the railroad to be an extraordinary evolution.

Leadership and command are central to this enlightening study—



**A SAVAGE WAR: A Military History of the Civil War.** By Williamson Murray and Wayne Wei-Siang Hsieh. Princeton, NJ: Princeton University Press, 2016.

ISBN: 978-0691169408, 616 pp.  
\$35.00 (Member \$22.87)

Available at <http://amzn.to/2i6ghFn>.

vice technology or economics. The mini-portraits of Abraham Lincoln, Ulysses S. Grant, Robert E. Lee, and William T. Sherman sprinkled throughout that narrative are superb, and the critiques of Jeff Davis and the hapless Henry Halleck are devastating. In *A Savage War*, it is the enduring vice changing character of military command that is underscored. Marines will find this consistent with our maneuver warfare and command philosophies.

A central theme of *A Savage War* involves the significant influence of command and organizational culture on the fighting effectiveness of each side. The North allowed politics and intrigue to influence appointments to higher command, and this carried over into acrimonious relationships in the councils of war in most Union armies for a long time. Additionally, the Old Regular Army cherished order and dates of rank over competence and creative solutions. From the



war's earliest days, Union Gen George McClellan helped establish "a culture which abjured initiative and emphasized top down control of virtually everything." The dominance of the "by the book" Old Army struggled to adapt to a large-scale conscript or volunteer army of citizen soldiers. This will sound familiar to critics of today's personnel system and a risk averse military, like retired Army Maj Don Vandergriff, who will certainly agree with Murray and Hsieh's insights on "the difficulties involved in altering a dysfunctional command climate" during a war.

Conversely, the South started with competent senior officers and a cadre of younger officers, especially in the Eastern Theater and the Army of Northern Virginia. Lee set an example for and rewarded commanders (like Thomas "Stonewall" Jackson) who were aggressive at exploiting opportunity and who were not paralyzed by potential risk. Lee's more decentralized and less directive style of command promoted a culture of initiative that served the South well but only to a point. While out in the Western Theater, Grant also promoted initiative as he imbued his commands with a quiet sense of trust, loyalty, and apolitical competence.

The authors do not explore the downside of the decentralized mission command style Lee established. Jeb Stuart's infamous jaunt around George Meade's Army during the approach to Gettysburg is the most obvious example, as it blinded Lee at a critical juncture and limited his ability to shape the meeting engagements on the first day. Gen Henry Heth's cautious approach and Gen Richard Ewell's stupor later on that first day of the same campaign are exceptions to the distinctive culture among Lee's commanders.

Another key theme is the impact of the Industrial Revolution and the corresponding need to mobilize the enormous scales of manpower, finances, and resources needed. Mark Grimsley of Ohio State University first identified this development in the *Dynamics of Military Revolution*,

co-edited by Dr. Murray. "Although mass political participation tapped the manpower reservoirs of both North and South," Grimsley observed, "the North alone discovered how to mobilize its material resources without ruinous political and economic consequences." Yet it was not the sheer material advantage that counted as much as the integrated financing and political skill with which Lincoln and Treasury Secretary Salmon Chase mobilized those resources.

Moreover, a materiel advantage is of little use if it cannot be converted into combat power. The authors correctly point to Lincoln's deft management of politics to sustain the North's efforts. But, the Union victory at the strategic level also benefited from a professional bureaucracy led by the likes of Montgomery Meigs, the Quartermaster General, who Princeton University's James McPherson called the "unsung hero" of the war. His role and the other major institutional actors in the North are barely mentioned. Because the North managed to stimulate the entrepreneurial spirit and combine Yankee ingenuity with banking and mass production techniques with government's power and finances, it deployed an advantage that the Confederacy simply could not match.

But the clear thrust of this lively history is that harnessing the North's material advantage took a long time and was not the principal or decisive element of the war. The Union's victory was not pre-ordained by its abundance of resources.

I have only a couple of issues with this excellent military history. First, the authors make numerous linkages between Sherman's "march to the sea" and World War II's combined bombing offensive (CBO) against Germany. The analogy does not hold up well as Sherman's Army voraciously maneuvered through contested territory and devoured or destroyed its materiel resources. The CBO, on the other hand, was more indirect but resulted in massive casualties in a vain attempt to destroy Hitler's productive capacity. The distinction in civilian

casualties appears relevant, and the only element that both campaigns share was the psychological impact felt by the populaces of both target countries. The book's implication that Sherman's march was somehow decisive needs more work.

Second, the authors slight the irregular aspects of the war, a bias they share with many, if not most, historians. John Mosby is entirely absent in the book, as is recent scholarship by Daniel Sutherland in *American Civil War Guerrillas* (Praeger, 2013). As Victor Davis Hanson, another student of Ancient Greece, has noted in his *A War Like No Other* (Random House, 2006), the Athens-Sparta contest was rife with unconventional warfare. So too was our own Civil War.

All in all, this is a stimulating contribution to the field that will captivate readers. It belongs on the shelf of students of war, right next to their worn copy of McPherson's classic, *Battle Cry of Freedom* (Oxford University Press, 2003). It is extremely difficult to capture the strategic framework, major decision points, and operational details of such a large, bloody, and divisive war in 500 pages. That this team of scholars did so and adroitly identified key aspects of politics, technology, and military strategy demonstrates their mastery of the art of historical narrative.

Even advanced students of the Civil War will find new insights and interpretations on how this savage conflict was fought and won in this book. "War is a stern teacher," Thucydides noted. A close reading of *A Savage War* will help student of war learn that studying the past is a less costly way to understand this timeless lesson.





# A Savage War

reviewed by Maj Skip Crawley, USMCR(Ret)

As someone who has read U.S. military history since the third grade and who has had a special interest in the Civil War, reading Bruce Catton as a kid and Stephen Sears as an adult, I thoroughly enjoyed *A Savage War: A Military History of the Civil War*, the new book by Williamson Murray and Wayne Wei-Siang Hsieh. *A Savage War* is the best single-volume history of the Civil War I have ever read. Murray and Hsieh have written a book that is profitable reading for both the person with a limited knowledge of the war who desires a good overview of the conflict and the serious student of the Civil War seeking a new perspective. For the former, *A Savage War* explains the causes of the conflict; describes the “war’s strategic framework;” and provides a very readable synopsis of the battles, campaigns, and generals of the war. Serious students of the Civil War will enjoy new perspectives on various aspects of the war. As a lifelong student of the Civil War, who has read dozens of books about the war, I learned a number of things I never knew before.

Though a military history of the Civil War, neither a political nor an economic history per se, Murray and Hsieh provide a concise, but enlightening, explanation of the political, economic, and societal origins of the war. Murray and Hsieh’s thesis is that the nature of our Civil War was the result of the nexus of two revolutions: the French Revolution and the Industrial Revolution. The French Revolution unleashed the “nationalist fervor” that permeated and sustained both sides during a war with its massive casualty lists, and the Industrial Revolution “allowed for the

**>Maj Crawley is a former infantry officer who served during Operation DESERT SHIELD/DESERT STORM. He is currently the Central Regional Network Coordinator for the Marines for Life Network.**

mobilization of the great armies in both the North and South.” Together, these revolutions gave the Civil War its character that combined the *levee en masse* of the Napoleonic Wars and the “modern” aspects of the Civil War, such as trench warfare, that foreshadowed future conflicts and sometimes cause the Civil War to be characterized as the first modern war.

For me, the most enjoyable aspect of *The Savage War* was learning several intriguing things I have never read elsewhere. It is well known that MajGen George B. McClellan failed to attack Gen Robert E. Lee’s army at

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***Serious students of the Civil War will enjoy new perspectives ...***

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Antietam when much of Lee’s army had yet to arrive in the Sharpsburg area, being occupied with Harpers Ferry, before finally giving battle. But why did McClellan attack at all on 17 September after his actions the previous days indicated he had no desire to fight the Army of Northern Virginia? Murray and Hsieh believe McClellan thought Lee would retreat, but when he didn’t, McClellan felt

compelled against his will to attack so as to not be branded “among ... the Army of the Potomac, not to mention outside observers, as an out and out coward.” When, in early 1865, Lee was appointed General-in-Chief of all Confederate armies, Jefferson Davis supported it only “because he knew that Lee had not the slightest desire to run the war.” This surprised me, given the close working relationship Davis and Lee had in the Eastern Theater when Lee commanded the Army of Northern Virginia. It rings true, however, in the sense of Davis acting as the South’s defacto “general-in-chief,” a role he played throughout the entire war—normally to the detriment of the South. As Gen Ulysses S. Grant says in his memoirs, “Mr. Davis had an exalted opinion of his own military genius ... [O]n several occasions during the war he came to the relief of the Union army by means of his *superior military genius*.”<sup>1</sup> It is well known that Davis replaced Gen Joseph E. Johnson with LtGen John B. Hood, resulting in the loss of Atlanta and the crippling of the Army of Tennessee, the Confederacy’s principle army in the Western Theater, by launching ill-conceived attacks against MajGen William T. Sherman’s much stronger armies. I was aware of the dissension within the senior leadership of the Army of Tennessee prior to the Battle of Chattanooga and how Davis’s (mis)handling of it, by refusing to see that Braxton Bragg, the army’s commander, was at fault, was instrumental in Grant’s victory. But I wasn’t aware that Davis encouraged subordinate generals to write to him personally, which undermined the Confederate chain of command in the west.

While I enjoyed reading *A Savage War* and learned much, I do have a few problems with it. Most importantly, I find Murray and Hsieh’s quasi-obsession with quoting from Thucydides’ *The History of the Peloponnesian War* numerous times early in the book to be very distracting and generally irrelevant to the subject matter being discussed. Fortunately, they generally stop referencing Thucydides after Chapter 5.



Other problems: The authors rate Thomas Jackson as one of the best corps commanders the war produced, yet by their own admission, Jackson bungled *four times* during the Seven Days Battles and a *fifth time* during Second Bull Run. (Until reading *A Savage War*, I thought Jackson only botched three of his attacks during the Seven Days Battles, not four of them.) In my view, “bungler” is a more accurate moniker for Jackson than “Stonewall.”

I also feel the authors misconstrue the Henry Halleck-Grant relationship. While the discord between them was real, the authors paint too negative of a picture of their relationship. While acknowledging that Halleck “provided Grant with ... warning about” Illinois political MajGen John McClelland’s attempt to supersede Grant prior to the Vicksburg campaign, they put it in the most negative light possible. However, as

Jean Edward Smith, author of *Grant*, states, Halleck and Grant “worked together seamlessly” to undermine McClelland and that, when Grant replaced Halleck as General-in-Chief, Halleck’s response was to write to an associate “General Grant is my personal friend and I heartily rejoice

Army of Tennessee in his rear first was the correct one, is repudiated by the Battle of Franklin, where Schofield barely managed to avert disaster by marching his army out of Hood’s trap by a night march “past bivouacked Confederates.” Sherman’s decision to commit arson on a statewide scale

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***But students of history, students of the art of war, will always have honest disagreements about individual generals, specific battles, and the dynamics of campaigns.***

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at his promotion.”<sup>2</sup> The claim that Halleck contemptuously dismissed Grant’s proposal to “move against Mobile after Vicksburg’s surrender.” In reality, as Smith points out, it was Lincoln’s priority of “reestablishing national authority in western Texas” that ended the possibility of taking Mobile when Grant desired, not any contempt on Halleck’s part for Grant’s proposal.<sup>3</sup>

I very strongly take issue with the authors’ contention that MajGen George Meade’s pursuit of Lee following Gettysburg was understandable because Meade’s “army had been as badly battered as Lee’s.” In reality, Meade had absolutely no stomach to fight Lee again (shades of McClelland at Antietam), hence his willingness to allow Lee to escape, despite a swollen Potomac River at Lee’s back that trapped his army north of the Potomac for several days. I feel the authors don’t recognize that Sherman’s decision to march his 60,000 veterans through Georgia while leaving Hood’s Army of Tennessee in the rear for MajGen George Thomas and MajGen John Schofield to take care of appears like the right decision only in light of Hood’s failure to destroy Schofield before he combined forces with Thomas. The authors’ contention that Hood’s army was “an irrelevancy,” to support their view that Sherman’s decision to make “Georgia howl” instead of destroying Hood’s

before destroying the enemy’s army might have resulted in disaster if Hood had the presence of mind to destroy Thomas’s forces before they came together.

But students of history, students of the art of war, will always have honest disagreements about individual generals, specific battles, and the dynamics of campaigns.

In their introduction, Murray and Hsieh state the purpose of *A Savage War* is to “examine the major factors that explain the course of the military campaigns and operations” of the Civil War. While I don’t agree with all of their conclusions or opinions, they have fulfilled their charter admirably. Both the amateur and the serious student of the Civil War will find *A Savage War* to be profitable reading and well worth their time. I highly recommend *A Savage War* both to those who are looking for a single volume history of the Civil War to add to their knowledge and to those with a lifelong interest in the Civil War.

#### Notes

1. Ulysses S. Grant, *Personal Memoirs of U.S. Grant*, (Cambridge: DeCapo Press, 2001).
2. Jean Edward Smith, *Grant*, (New York: Simon & Schuster, 2001).
3. Ibid.

USMC

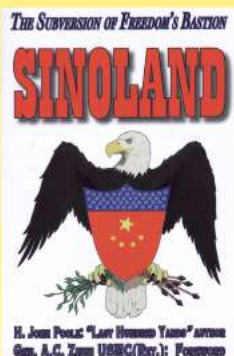
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# For Further Reading



**SINOLAND: THE SUBVERSION OF FREEDOM'S BASTION.** By LtCol H. John Poole, USMC(Ret). Reviewed by LtCol K.A. Knowles, USMC(Ret)

In the Foreword to *Sinoland*, Gen Anthony C. Zinni, USMC(Ret), asks the question, "Is China a strategic partner, a strategic competitor, or a strategic adversary?" In answering that question, the author, LtCol H. John Poole, presents examples of China's use of non-military attacks, categorized by efforts within their sphere of influence; their outreach and inroads in other continents; and their efforts within the United States to insert themselves into our industries, media outlets, and politics to detail increasing Chinese aggression and infiltration.

If nothing else, *Sinoland* is a comprehensive presentation of the Chinese effort to shape a world that most readers will be unfamiliar with. LtCol Poole goes into historic detail to describe Chinese relations within its sphere of influence. "Remember that China is bordered by 14 nations, two of which China has gone to war with—India and Vietnam." Chinese actions with their peripheral, regional neighbors along with the greater South China Sea region may be described by Chinese leaders as defensive in nature but, when examined as a whole, it is clear to see that Chinese defensive aggression in the region is being conducted to secure offensive objectives.

The author continues by arguing and supporting the premise that Chinese intentions are long-term expansionist in nature. Their objectives, outlined in a 1999 publication by the PLA—*Unrestricted Warfare*—are to be conducted primarily in a non-military manner. From influencing political leaders to trade agreements to international law, the Chinese are singularly focused on establishing hegemony over its border regions; establishing control over the sea lines of communication in the South China Sea; and exerting influence over other regions—Africa and South America, for example—through support for Marxist politicians and political parties in addition to supporting building projects. This last effort doesn't draw much attention because it's economic in nature and appears non-threatening to United States national interests. The chapters on Chinese investing in U.S. industry are comprehensive.

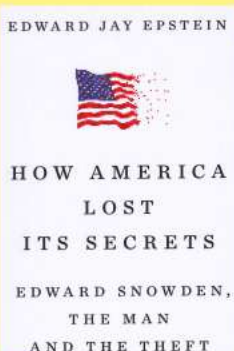
Using quotes from Sun Tzu to sections of *Sinoland*, the author sets the stage for a detailed discussion of how the Chinese are insinuating themselves into our Nation, ranging from their purchase of national industries to their collection of American technology, energy resources, and computer systems. Sun Tzu wrote, "All men can see the tactics whereby I conquer, but what none can see is the strategy out of which victory is evolved." The book is filled with extensive maps and charts to support the author's contention that China is not a strategic partner, but rather a competitor and adversary whose sole aim is control of the international scene.

Emerald Isle, NC: Posterity Press, 2016

ISBN: 978-0981865980

Price: \$16.95 (Member \$9.65)

To order, go to <http://amzn.to/2kIQkMB>



**HOW AMERICA LOST ITS SECRETS: EDWARD SNOWDEN, THE MAN AND THE THEFT.** By Edward Jay Epstein. Reviewed by Bradley A. Davis.

Writing in the style of John le Carré or Ian Fleming, investigative reporter and author Edward Jay Epstein recounts the life and lies of Edward Snowden in his latest book *How America Lost Its Secrets: Edward Snowden, the Man and the Theft*. Dividing his argument into three distinct parts—Snowden's backstory, speculative generalizations, and Cold War legacies—Epstein paints a fascinating analysis of Snowden not as a whistleblower or traitor, but rather as a spy. Unfortunately, Epstein falls short of coming to any forceful declarations, sacrificing raw proof or a single theory of the crime for a variety of possibilities ranging from potential accomplices to the timing of the theft to the possibility of international involvement. Epstein's book, which draws parallels between Sino-Russian military advancements and the 2013 discovery of an operational Russian sleeper cell in the United States, reads more like a spy thriller and less like a declarative work rooted in definitive fact. For those who push through the speculation, however, Epstein provides a unique and fascinating look at the current state of America's spy apparatus and, more importantly, how it has changed since Edward Snowden successfully pulled off one of the most serious intelligence heists in U.S. history.

New York: Random House, Inc., 2017

ISBN: 978-0451494566, 368 pp.

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# The Decision Room

**Leveraging available technology**

by 2ndLts Austin Dickey, Hugo Jury, Kevin Lowring,  
Seamus Haggerty, and Andrew Veal

**I**magine you are 1st Squad Leader, 2d Platoon, Co G, 2d Battalion, 6th Marines (2d Bn, 6th Mar). This morning, you decide to fill white-space training with a tactical decision (TDG) game in the barracks lounge over a whiteboard. After briefing the order, the attention of your Marines fades quickly as only the most outspoken fire team leaders brief their plans. At the conclusion of the TDG, most of the Marines immediately take out their phones and heatedly discuss a video game. Frustrated by their enthusiasm for a game and not their job, you realize you need to find an improved way to teach your Marines better decision-making skills through competition.

2d Bn, 6th Mar believes the “decision room” is the solution. Remodeling lounges into computer labs, decision rooms contain 16 DVTE (deployable virtual training environment) computers, tablet computers, a projector, white boards, and a large television screen. This dynamic room is designed to train decision making through interactive TDGs (ITDGs), combat decision ranges (CDRs), and virtual force-on-force gaming through Close Combat Marine (CCM).

As infantrymen, we do not spend as much time in the field as we would like. The decision room is a way to maximize our training and tactical prowess garrison. With little adjustment, DVTE computer systems that are already sourced to units throughout the Marine Corps can support a variety of software designed to test and develop the skill and will of young Marines. With the addition of ITDG, CDR, and force-on-force gaming, we can optimize the natural technical aptitudes of millennials while not requiring units to purchase additional materials.



**Marines have the opportunity to explain the actions they have taken.** (Photo by LCpl Tojyea Matally.)

The ITDG system is a leap forward from the traditional pen-and-paper TDG. It is a developing effort supported by the Office of Naval Research. 2d Bn, 6th Mar is fortunate to be assisting in the beta testing of many decision-making programs. Marines build TDGs electronically, using simple electronic overlays and any base map they import. An instructor may observe students build their schemes of maneuver, then brief the scheme of maneuver part by part, injecting enemy actions before, during, or after the student executes his plan.

ITDG layers graphics, much like an acetate overlay on a map. The instructors may digitally overlay new enemy situations as the students execute their

scheme of maneuver. ITDG allows for an unlimited number of decision points reinforced by multimedia inserts into the game. For example, a video or image of a T-90 may be inserted onto the map if the student chooses to travel through an open field. The instructor may then explain the tank's actions in reaction to the field crossing.

Marines may create new enemy situations in response to the student's plan, but they can also develop totally new TDGs. For example, we uploaded digital TDGs sourced from the *Marine Corps Gazette* into ITDG. This allows us access to hundreds of previously-made TDGs easily distributed to students. Marines may upload their own map image, write an associated operations order, import multimedia, and then present this to their class.

To operate ITDG, the instructor must have the ITDG program on his

**>The authors are Platoon Commanders, 2d Bn, 6th Marines.**





**Marines can also increase their knowledge and proficiency within their MOS.** (Photo by LCpl Alexis Schneider.)

computer, which will then act as the host computer. Student devices connect to the host via a local area or wireless network. ITDG is hosted through the Chrome browser, allowing easy access via smartphones, tablets, and computers without requiring Internet access. This is beneficial because it allows a unit to run ITDGs almost anywhere that we can bring power. For example, using a Toughpad and wireless router, a battalion staff may war game potential plans over ITDG.

It also allows the instructor to build his own scenarios from field exercises. An instructor may upload video from the Instrumented Tactical Engagement Simulation System (ITESS) location feed, UAV feed, or even audio and video from body cameras. This allows the leader to extend his lessons learned and decision making to subordinates while debriefing them in an interactive manner. This capability may also be utilized to mimic case studies of decisions made in historic battles. ITDG also provides the opportunity to conduct virtual force-on-force exercises with minimal setup.

The second program used to build recognition-primed decision making is CCM, a virtual force-on-force game. CCM contains scenarios which highlight specific infantry tactics. Each of

these tactics can be tied back to *Infantry Training and Readiness Manual* tasks. (NAVMC 3500 44B, Washington, DC: 2013). The instructor may focus on specific tactics critical to the mission ahead, organizing and equipping each force according to the mission. He may assign battalion-level assets, such as heavy machine guns and fixed- and rotary-wing air support, and pick the terrain based on a variety of different maps. Just as with ITDG, CCM requires the instructor to write an order or they may select one already written.

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### ***ITDG layers graphics, much like an acetate overlay on a map.***

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CCM IV features a system that accounts for the experience and human factors of each virtual Marine. The student must utilize sound tactics or risk his troops potentially disobeying orders. With unit tactics and the human decision of each simulated Marine, being factored into the success of the mission, this force-on-force simulator reinforces that both skill and will are required to win battles.

Virtual Battlespace (VBS III), a computer-based first person simulator, is the third program used. The program places the Marine into squad- and platoon-level force-on-force scenarios where he is forced to think tactically, make decisions, and communicate to his subordinates and adjacent units in a complex, competitive environment utilizing a range of supporting assets.

VBS III is a flexible system that promotes creativity in Marines and allows them to formulate their own scenarios that have different focus points or demonstrate different tactics. 2d Bn, 6th Mar, has integrated the above two systems to execute force-and-force exercises in a competitive manner—the Spartan Tactical Competition. During the competition, platoon commanders and squad leaders compete in a tournament against platoons from different companies. The planning process was integrated with the ITDG system prior to game play. At the end of the tournament, the platoon and squad that have demonstrated the best tactical decision-making skills in the battalion are identified. These competitions help us identify the strongest skills and leadership qualities in our Marines and are a practical, educational way to strengthen tactical decision making and morale in addition to building unit cohesion. We have already experienced leaders applying lessons learned in the decision room to force-on-force field operations in order to achieve an advantage over their opponent.

The decision room presents unlimited training possibilities for developing the Corps' small-unit leaders. By and large, the Marine of today is more proficient than ever in gaming technologies. The Marines of 2d Bn, 6th Mar, are capitalizing on this advantage and leveraging the technology of the decision room to develop the most adept small-unit decision makers in the Corps who can innovate, adapt, and win any fight.

*>Author's Note: A version of this article was published in the February Web Edition of the Marine Corps Gazette.*





# Tactical Decision Game 04-17

## Part III: "Right Encrypt, Authenticate Down"

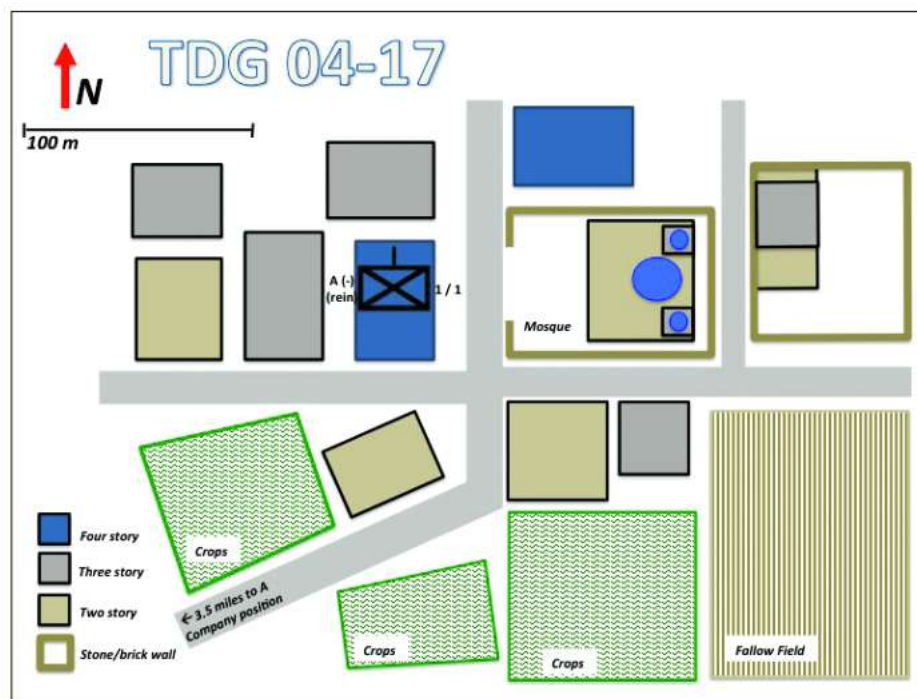
by the Staff, *Marine Corps Gazette*

### Situation

It has been three days since a patrol from your command, A Company, 1st Battalion, 1st Marines reinforced with a MUGA Commando Platoon, occupied the four-story building immediately west of the Al Mumeet Mosque now known to your Marines and Sailors as "the Ritz." Since occupying this building there have been no IDF attacks originating in the mosque neighborhood, overall IDF attacks on the battalion FOB have been reduced, and the local residents are demonstrating support for the Marine presence.

However, the entire JTF has been operating with degraded communications since the incident at the mosque. While your patrol made contact with a well-trained sniper team, the JTF networks were penetrated by malicious code downloaded through a "Trojan Horse" attack on one of the numerous commercial-off-the-shelf "tactical tablet" computers in use across the force. In addition, localized jamming of GPS satellite signals has rendered systems employing GPS time inaccurate and/or inoperative. USCYBERCOM, DISA, and the relevant agencies of the coalition partners have taken measures to contain the effects of these attacks to the operational networks in theater while the JTF and subordinate forces work to reestablish their networks. National intelligence analysis of these sophisticated attacks indicates likely support from the People's Republic of China to one or more of the local mining syndicate's armed gangs.

Communications are now limited to unencrypted, frequency static, voice-only radio, wire (analog field telephones still common among members of the



coalition and MUGA forces), and of course couriers. The commercial Ouadiyyan telecom enterprise (landline and cellular) is also functional although typically unreliable and obviously unsecure. You have sufficient radios to maintain a company tactical radio net, one battalion tactical net, and the infantry battalion mortar net. Your JTAC team have also uncovered UHF radios to coordinate RW CAS and medevacs.

Given the present situation, you have decided to retain command of the company minus/reinforced at "the Ritz" while your XO, 1st Lt Espinoza, and the remaining elements of the company continue to secure the eastern entry point into the battalion FOB. In establishing your hasty defense you have negotiated with the two families of squatters in "the Ritz" through your in-

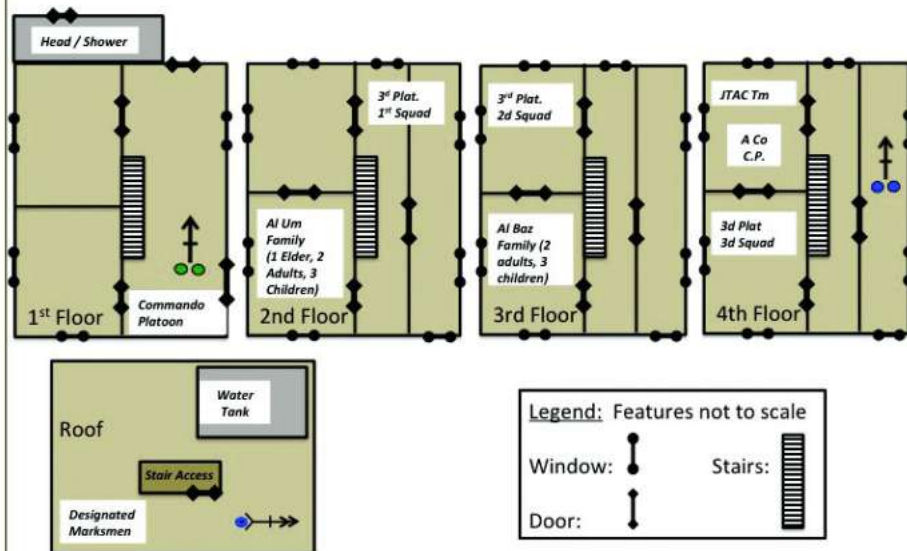
terpreters and the Elder of the Al Umm family. The families have moved into the most secure rooms of the building. Your Marines and the Commando Platoon are dispersed throughout the building in combined living areas/fighting positions as shown in Figure 2. (See on next page.) Your squad leaders have already conducted short duration local security patrols in the neighborhood.

You have the following attachments and supporting arms available:

- 1 Machinegun Section (-) (4x M240B 7.62 machineguns).
- 1 Assault Squad (2x SMAW 83mm rocket launchers).
- 1 Joint Tactical Air Controller (JTAC) Team
- 2 Interpreters
- 1 MUGA Commando Platoon: 40 Commandos total, equipped with



### Basic Floor Plan of A Company's Position



**Figure 2.**

AK-47 rifles, rifle grenades, and is reinforced with an RPK Machinegun Section (4x RPK 7.62 machineguns)

Fire support is currently limited to the battalion's organic mortars and Marine rotary-wing CAS on alert +15 at the battalion FOB.

The battalion's alert +5 section of medevac helicopters has a dedicated radio net. Response time is less than 10 minutes, and the JTF Level III treatment facility is 45 minutes flight time.

Your battalion commander is on his way to your position in a motorized

## Infantry Battalion

### Organic T/E Comm Equipment

1	COC CAPSET III	
4	PRC-150	HF/VHF
11	PRC-117F	VHF/UHF/TACSAT
8	PRC-117G	VHF/UHF/TACSAT/ANW2
26	PRC-152	VHF/UHF
34	PRC-153	VHF/UHF
13	VRC-110	VHF/UHF TACSAT
2	VRC-104	HF/VHF
2	VRC-112	Radio Adapter
1	TVSS	Telephone Switchboard

## Regiment/MEU Provided Equip Teams\*\*

1 to 4 VSAT-S SATCOM Teams  
1 to 4 MRC-142 Mux Team

\*\* Mission Dependent

**Reference 2.**

patrol with a resupply of ammunition, water, and MREs as well as additional communications equipment and a "tiger team" to provide refresher training on the Automated Communications Electronics Operating Instructions (ACEOI) including Authentication, Alphanumeric Call signs, Encoding/Decoding Grid Coordinates and Scheduled Frequency Changes.

When he arrives, he will assess the situation and give you his intent and orders.

**Requirement:**

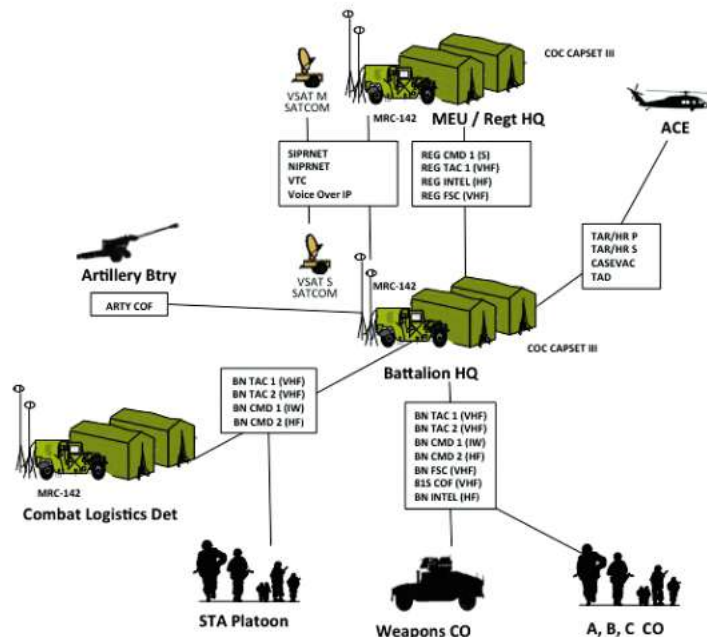
1. What is your recommendation to your battalion commander? Do you hold "the Ritz," and if so what reinforcements do you need? Do you withdraw back to the battalion FOB?
2. What recommendations do you have regarding communications?
3. In the meantime, what are your priority of work and deliberate defensive plan for "the Ritz?"

Include an overlay sketch and provide a brief discussion of your rationale. Submit your solutions by email at [gazette@mca-marines.org](mailto:gazette@mca-marines.org) or to the *Marine Corps Gazette*, TDG 04-17, Box 1775, Quantico, VA 22134. The *Gazette* will publish solutions in an upcoming issue.

*>Editor's Note: References 1 and 2 were provided by Maj Paul Stokes, USMC(Ret), Operations Officer, Future Operation/Plans Officer, MCCES, Twentynine Palms, CA.*



## USMC Infantry Battalion Communications Overview – 2 Mar 2017



**Reference 1.**



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## Editorial Policy and Writers' Guidelines

Our basic policy is to fulfill the stated purpose of the *Marine Corps Gazette* by providing a forum for open discussion and a free exchange of ideas relating to the U.S. Marine Corps and military and national defense issues, particularly as they affect the Corps.

The Board of Governors of the Marine Corps Association & Foundation has given authority to approve manuscripts for publication to the Editorial Advisory Panel and editor. Editorial Advisory Panel members are listed on the *Gazette's* masthead in each issue. The panel, which normally meets as required, represents a cross section of Marines by professional interest, experience, age, rank, and gender. The panel also judges all writing contests. A simple majority rules in its decisions. Other material submitted for publication is accepted or rejected based on the assessment of the editor. The *Gazette* welcomes material in the following categories:

- **Commentary on Published Material:** The best commentary can be made at the end of the article on the online version of the *Gazette*. Comments can also normally appear as letters (see below) 3 months after published material. BE BRIEF.
- **Feature Articles:** Normally 2,000 to 3,000 words, dealing with topics of major significance. Manuscripts should be DOUBLE SPACED. Ideas must be backed up by hard facts. Evidence must be presented to support logical conclusions. In the case of articles that criticize, constructive suggestions are sought. Footnotes are not required except for direct quotations, but a list of any source materials used is helpful.
- **Ideas & Issues:** Short articles, normally 750 to 1,500 words. This section can include the full gamut of professional topics so long as treatment of the subject is brief and concise. Again, please DOUBLE SPACE all manuscripts.
- **Letters:** Limit to 200 words or less and DOUBLE SPACED. As in most magazines, letters to the editor are an important clue as to how well or poorly ideas are being received. Letters are an excellent way to correct factual mistakes, reinforce ideas, outline opposing points of view, identify problems, and suggest factors or important considerations that have been overlooked in previous *Gazette* articles. The best letters are sharply focused on one or two specific points. Email submissions to [gazette@mca-marines.org](mailto:gazette@mca-marines.org) are preferred.
- **Book Reviews:** Prefer 300 to 750 words. Please DOUBLE SPACED. It is a good idea to check with the editor in advance to determine if a review is desired. Please be sure to include the book's author, publisher (including city), year of publication, number of pages, and cost of the book.

**Writing Tips:** The best advice is to write the way you speak. Organize your thoughts. Cut out excess words. Short is better than long. Avoid abbreviations as much as practicable. Write to a broad audience. The key is to start with a thesis sentence or two and put the main idea up front.

**Submissions:** Articles may be submitted via email to [gazette@mca-marines.org](mailto:gazette@mca-marines.org). That is the preferred method. Email the manuscript in Microsoft Word format DOUBLE SPACED in Times New Roman 12 font as an attachment. **Photographs and illustrations must be in high resolution TIFF, JPG, or EPS format (300dpi) and must not be embedded in the article. Please attach photos and illustrations separately.** (You may indicate in the text of the article where the illustrations are to be placed.) Include the author's full name, mailing address, telephone number, and email address. Submissions may also be sent via regular mail and should include one hard copy of the manuscript and a disk. Mail to: *Marine Corps Gazette*, Box 1775, Quantico, VA 22134. Please follow the same instructions for format, photographs, and contact information as above when submitting by mail. Any queries may be directed to the editorial staff by calling 800-336-0291, ext. 180.

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