MARINE CORPS Gazette

Professional Journal of U.S. Marines

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The future of amphibious shipbuilding must be part of Marine Corps force modernization. (Photo by LCpl Dana Beesley.)

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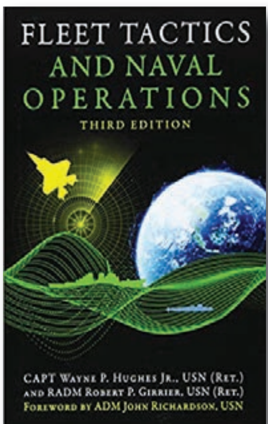

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GEN ROBERT E. HOGABOOM LEADERSHIP WRITING CONTEST

Gen Robert E. Hogaboom.

The Marine Corps Gazette's second annual Gen Robert E. Hogaboom Leadership Writing Contest is here. The contest honors the essay that is the most original in its approach to the various aspects of leadership. Authors should not simply reiterate the 11 Principles of Leadership or the 14 Leadership Traits of an NCO addressed in the Guidebook for Marines. Authors must be willing to take an honest, realistic look at what leadership, either positive or negative, means to them and then articulate ways and methods of being an effective leader of Marines.

DEADLINE: 31 January, 2023

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Background

The contest is named for Gen Robert E. Hogaboom, USMC(Ret), who served the Corps for 34 years. Upon graduating from the Naval Academy in 1925, Gen Hogaboom saw service in Cuba, Nicaragua, and China. Following action in a number of key Pacific battles in World War II, he later served first as assistant division commander, then division commander, 1st Marine Division, in Korea in 1954–55. Gen Hogaboom retired in 1959 as a lieutenant general while serving as the Chief of Staff, Headquarters, U.S. Marine Corps, and was subsequently advanced to the rank of general.

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. A cover page should be included identifying the manuscript as a Gen Robert E. Hogaboom Leadership Writing 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 acceptable, but please include a disk in Microsoft Word format with the manuscript. The *Gazette* Editorial Advisory Panel will judge the contest during February and notify all entrants as to the outcome shortly thereafter. Multiple entries are allowed; however, only one entry per author will receive an award.

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MARINE CORPS Gazette
Professional Journal of U.S. Marines

OCTOBER 2022

Editorial: Remembering Beirut

Thirty-nine years ago this month: Sunday morning, 23 October 1983, the first of two suicide bombers detonated a truck bomb at the building housing 1st Battalion 8th Marines, "Battalion Landing Team 1/8," killing 220 Marines, 18 sailors, and 3 soldiers. Some 115 Americans were wounded in the blast. Soon after and several kilometers away, a second truck bomb struck the building where the French contingent of the Multinational Force in Lebanon was stationed killing a total of 58 paratroopers from the 1st and 9th Parachute Chasseur Regiments and wounding another 15. At least six Lebanese civilians were also killed in these attacks. A group calling themselves "Islamic Jihad" claimed responsibility for the bombings to force the Multinational Force to leave Lebanon; however, to this day the involvement of the Shiite extremists of Lebanese Hezbollah and the government of Iran remains unclear. Having spent nearly half of the last four decades in conflict with extremists from the other main sect of Islam, the Sunni Al Qaeda-associated movements, regional Islamic State affiliates, and the Taliban groups of Afghanistan and Pakistan, it is vital we maintain vigilance on the threat of trans-national extremist ideologies. Above all, we must continue to honor those who made the ultimate sacrifice as peacekeepers. On page 72, "Mission Impossible" by MajGen James M. Lariviere presents his reflections as a junior officer during the Multinational Force peacekeeping mission in Lebanon.

This month's edition also highlights the prize-winning essays from the 2021 Gen Robert E. Hogaboom Leadership Writing Contest: "Slapping the King" by Maj Dilan M. Swift on page 60, "Be Curious" by Maj Andrew D. Messenger on page 64, and "Responsibility and Fault" by LtCol Brian J. Wilson on page 68.

Other articles of note this month continue the ongoing professional discourse on a range of current topics including Strategy and Policy on page 54 with "Cross Border Payment Systems' Impact on National Power" by Maj Geoffrey Irving. We also present multiple articles examining new observations and insights into Future Force Design and Modernization including "Transforming FMF Medicine to Survive EABO" by LT Toby Keeney-Bonthrone, "21st-Century Foraging" by Maj Antonio Cillo, and perhaps most important for the future amphibious/expeditionary force-in-readiness "What Comes After LPD 17 Flight II?" by LtCol Noel Williams. In the related Talent Management modernization effort, we present "How Can I Influence Retention?" by MSgt Nicholas J. Greuel, "Talent Strategy and Execution Mismatch" by MAJ Mark P. Ziegenfuss, U.S. Army, and "Fixed-wing Pilot Retention" by Maj Jim Bernthal.

Your professional journal remains the authoritative source for debate and all readers and members of the Association are encouraged to join the discussion. Visit us at https://mca-marines.org, explore what Marines and Friends of the Corps are thinking and writing about, and let us know what else we can provide to support your leadership development efforts in the future.

Christopher Woodbridge

MCA President and CEO, LtGen Charles G. Chiarotti, USMC(Ret); *VP Foundation Operations,* Col Tim Mundy, USMC(Ret); *VP Strategic Communications, Retail Operations & Editor, Leatherneck magazine,* Col Mary H. Reinwald, USMC(Ret); *VP Professional Development, Publisher & Editor* Marine Corps Gazette, Col Christopher Woodbridge, USMC(Ret); *VP Corporate Sponsorships, Events & Advertising,* Ms. LeeAnn Mitchell.

Col Peter Ortiz

We are writers researching the life of Col Peter J. Ortiz (1913–1988), who distinguished himself fighting behind German lines in 1944 and has recently been honored at CLNC. We have been in touch with his family and authors who previously wrote about him. We would now like to hear from anyone else who might have original material (esp. letters or memorabilia), and/or would like to reflect on what his legacy means to Marines today. Please contact us at Reynolds.history@icloud.com or Katie@Katiessanders.com.

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2021 Hogaboom Winners

The Marine Corps Association and the *Gazette* are proud to announce the winners of the 2021 Gen Robert E Hogaboom Leadership Writing Contest. This annual contest honors the essay that is the most original in its approach to the various aspects of leadership. Authors are expected to take an honest and realistic look at what positive and negative leadership means to them and propose ways to be an effective leader of Marines. We welcome the continued generous support of St John's College as a sponsor of the contest.

The First-Place winner is Maj Dilan M. Swift for his article, "Slapping the King" which explores the issue of humility and how being humble enables a leader to be a critical thinker and capable of adaptation.

The Second-Place winner is "Be Curious" by Maj Andrew D. Messenger where he argues that a critical characteristic of leadership is curiosity instead of judgement.

This year's Honorable Mention goes to LtCol Brian Wilson for his essay, "Responsibility and Fault".

Congratulation to this year's winners. *Gazette* readers can see the winning essays in this month's issue of the *Gazette*.

Maj Dilan M. Swift

Maj Andrew D. Messenger

LtCol Brian Wilson

Marine Corps Reserve

The Commandant has spent the past several years leading a transformation of the force. Formally sacrosanct ideas and ways of doing things have been upended—and in many cases done away with. The changes have been hard on the force and not perfect. Much of the short-term change has been fiscal in nature to pay for the long-term changes—tactics and doctrine, new equipment, and an older (and hopefully, wiser) force.

Here is another "change" idea—one that will immediately (if executed over the next two-three years) result in both cost savings of millions of dollars annually as well as making the force more agile, efficient, and relevant. Gen Berger needs to immediately disband Marine Corps Reserve and its Major Subordinate Commands. Doing so, and eliminating the general officers of the reserves, will result in millions of dollars in additional savings (pay, entitlements, pension costs). Marine Corps Reserves as a physical headquarters should be disbanded as well. Its location—in the low area of New Orleans—is problematic because of yearly flooding. Additionally, the location of New Orleans is like a tour in Baghdad but without your M4, sidearm, and a quick-reaction force on call. Again, closing the location will result in immediate savings, though not dollar for dollar, as facilities needs are still a requirement.

... immediately disband Marine Corps Reserve and its Major Subordinate Commands.

Where do the reserve Marines go? Who should they report to? Why, the MEFs, of course. Selected Marine Corps Reserve units should be re-aligned to I and II MEFs. The Individual Mobilization Augmentee program should be reassigned (and managed) by Marine Corps Forces Command. Furthermore, Active Reserve Marines from New Orleans should be assigned to support (MEFs and Marine Corps Forces Command), creating a company-sized cadre at each location.

By doing this, the force as a whole will become more agile and efficient—often training side-by-side with their active-duty counterparts, and the battalion and squadron staffs reporting up the same chain as their active duty counterparts.

The Marine Corps Reserve Headquarters and its Major Subordinate Commands—with their bloated general staffs—will go away, and much dead wood—officers who should have retired years ago, and now just hang around for a paycheck—will go along with them. The savings will be in the millions of dollars annually and the quality of the force will be better.

LtCol Bryan Andersen, USMCR(Ret)

World War II Defense Battalions

Recent issues of the *Marine Corps Gazette* address the potential for war in the Pacific, and Capt W. McGee discusses landbased expeditionary advanced bases in the July *Marine Corps Gazette*. The situation preceding World War II was similar and provides a historical perspective. While preparing for a possible Pacific war in the 1930s, the Marine Corps established Defense Battalions which were deployed prior to the outbreak of war. A detachment of the 1st Marine Defense Battalion at Wake Island, the 1st, 3d, and 4th Defense Battalions at Pearl Harbor, and the 6th Defense Battalion at Midway Island are notable examples.

I learned about these units while researching my father's service in the 10th Defense Battalion, and references on Defense Battalions that may interest *Marine Corps Gazette* readers are provided below:

- "Marine Defense Battalions, October 1939-December 1942: Their Contribution in the Early Phases of World War II: 1002656626-maynard.pdf (unt.edu)
- *Condition Red: Marine Defense Battalions in World War II. Marines in World War II Commemorative Series*: ConditionRed.pdf (archive.org)
- "Thomas Holcomb and the Advent of the Marine Corps Defense Battalion, 1936-1941": Thomas-Holcomb-1936-41.pdf (fdlp.gov)

While preparing for a possible Pacific war in the 1930s, the Marine Corps established Defense Battalions ...

- *Special Marine Corps Units of World War II*: Special Marine Corps Units of World War II PCN 19000413200 (marines.mil)
- *Expeditionary Advanced Base Operations (EABO) Handbook*: Expeditionary-Advanced-Base-Operations-EABO-handbook-1.1.pdf (mca-marines.org)

The World War II Marine Defense Battalions are noted in the *2018 Expeditionary Advanced Base Operations Handbook* and might provide insights and ideas that are relevant to current planning for littoral, island, and shoreside operations.

Matthew A. Cronin

A Different Approach for Similar Results

MajGen Mullen's article, "A Different Approach for Similar Results," (*MCG*, Jun22) touches on the complicated issue of Marine Corps Recruit Training. The mythic status of recruit training is at odds with the realities of the professional, technically, and tactically proficient Marine. I say this; having attended recruiting training at San Diego (1969), having served as a Drill Instructor at Parris Island (1974-75), and having attended Officers Candidate School (WOBC) in 1976. For thirty years, I led civilian colleges, with alternating periods of policy involvement with JPME programs

Letters of professional interest on any topic are welcomed by the *Gazette*. They should not exceed 300 words and should be DOUBLE SPACED. Letters may be e-mailed to gazette@mca-marines.org. Written letters are generally published three months after the article appeared.

The entire *Gazette* is now online at www.mca-marines.org/gazette.

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and institutions. My experiences are not unique but should at least afford me a small place in a conversation of recruit training and professional military education.

Marine recruit training is mythic. Mythic structures become the expression of a social ethos that defines a person, organization, or culture. That can be a good thing until the myth becomes contaminated with a collectively shared story about supernaturally powerful beings whose adventures and interactions are set in some primordial chronotype, developing cult-like adherence. For far too long, Marines have had a shared devotion to the recruit training experience rather than to the actual Marine Corps and its historic accomplishments.

I have seen far too many Marines who viewed recruit training as the seminal event in their Marine Corps experience. The expedient discharge program of the 1970s was filled with young Marines who had done well in recruit training but were disappointed with the operating force to the point of acting out to obtain early release. Recruit training needs to prepare Marines for service within the operating force. This should be the initial first step in professional military education, and it will not erode the recruit training experience if the final weeks of recruit training were modeled on the rifle platoon.

The Corps' current system of recruit training was developed in response to levée en masse national conscription beginning with the First World War. It is an extraordinary departure from how Marines had been onboarded and trained previously, and it resulted in an expanded Corps capable of augmenting the Army. However, the mission of the Marine Corps is not to augment the Army. If the Corps is to remain a viable separate Service and not some homage to the past, it needs to ground itself in a system of Marine Corps professional military education. This starts with a fresh look at recruit training and how we prepare Basic Marines.

Dr. Michael E. Doyle

Atmospheric Water Extraction

🗎 I was glad to see Maj Cusack's concise and clear explanation of how 3d Reconnaissance Battalion is experimenting with atmospheric water generators to meet the hydration demands of reconnaissance operations. Most Marines can appreciate the logistical challenges that expeditionary advanced base operations pose but seeing potential solutions getting into the field is encouraging.

A program at the Defense Advanced Research Projects Agency, which the logistics community and Marine Corps writ large should be interested in is Atmospheric Water Extraction (AWE). The name may suggest it is fundamentally the same as current dehumidifier technology like RussKap's Tiffany Model atmospheric water generators, but Defense Advanced Research Projects Agency AWE focuses instead on foundational improvements to the chemistry of the underlying sorbent materials in a water capture device. At the moment, much of this material chemistry improvement exists at proof-of-concept or bench-scale readiness, but the program aims for a prototype device ready for transition in FY24.

The AWE program metrics reflect the transformational aspects of the research. Two embodiments of the technology are planned: an expeditionary canteen-sized form factor that produces at least 1.5 gallons/water per day, and a larger stabilization unit that fits in the bed of a JLTV (4-Marine lift) but produces more than 300 gallons/water per day. One can easily imagine carrying two expeditionary units to meet the three gallons daily personal requirement or using the stabilization unit with a JLTV or ULTV for larger units or redundancy.

While there are many ways to address the hydration challenge of distributed operations, AWE offers dramatically increased efficiency over existing dehumidifiers—the stabilization unit aims for 50-70 gallons/water per gallon of fuel—as well as improved operation even in arid conditions, something which is not achievable with commercial dehumidifiers.

Kenneth Hampshire

"Logistics Operations in a DDIL Environment"

🗎 I read the article on the use of Global Combat Support System-Marine Corps in a denied, degraded, intermittent, and low-bandwidth (DDIL) environment with great interest. This challenge has existed since the beginning of Global Combat Support System-Marine Corps and has been an abject failure that resulted in two "acquisition breaches" over the life of the program. Thus, I applaud the continued work to solve this critical issue, but I think it provides an overly optimistic view that the current efforts will yield positive results. If there is one thing we have learned after nearly a one billion dollar investment in this program, nothing has ever been delivered as promised (sadly). However, even with such horrendous past performance, we continue to invest and try to make it work on the "backs of our Marines." It is time we recognize that the Global Combat Support System-Marine Corps foundation of the Oracle Enterprise Resource Planning system is not able to meet the requirements of the future operating environment. Unequivocally, it has struggled to meet the basic functional requirements of the past, so why do we continue to think it will meet the even more arduous requirements of the future? We need a new logistics system strategy and should stop trying to put lipstick on a pig.

… we continue to invest and try to make it work on the "backs of our Marines."

BGen K.J. Stewart (Ret)

Join the conversation. Read opinions and post your comments on our blog at mcgazette.blogspot.com.

Transforming FMF Medicine to Survive EABO

Beyond the "Golden Hour"

by LT Toby Keeney-Bonthrone

>LT Keeney-Bonthrone is a Navy Reserve Medical Officer with 2/24 Mar in Fort Sheridan, IL. He is a member of the Joint Trauma System's Prolonged Casualty Care Working Group and the recipient of a DOD grant to improve Prolonged Casualty Care training and equipment. He is also an Emergency Medicine Resident at Northwestern University.

The FMF transformation for Expeditionary Advance Base Operations (EABO) has generated significant momentum.[1] However, the *Commandant's Planning Guidance* and *Force Design 2030* are force-level documents that, as one might expect, do not discuss how Navy medical capabilities should adapt to EABO.[2] Plenty of scope, therefore, remains to frame the implications of EABO for medical care.

Much of warfare is cyclical, and so it goes with the conditions of casualty care. As mentioned previously in this publication, the Global War on Terror's "Golden Hour" model of the fast evacuation of casualties to nearby definitive care will no longer be feasible with EABO or with future warfare in general given its distributed nature.[3] The dispersion requirements of future conflicts coupled with the extensive area-denial capabilities of near-peer competitors require us to prepare for a grave scenario: when Marine Corps operations turn kinetic against a near-peer competitor, casualty care conditions may become the most extreme since the Battle of the Chosin Reservoir.[4]

Two corpsmen from 2/24 Mar evaluate a casualty during a Prolonged Casualty Care field exercise. *(Photo by Scott Sturkol, Fort McCoy Public Affairs Office.)*

The Golden Hour model will have to be abandoned in favor of battlefield medical teams that can "stop the clock on the Golden Hour" and stabilize casualties for days at a time while they await evacuation and definitive surgical management.[5] In medical parlance, such care is referred to as Prolonged Casualty Care (PCC). This article will discuss five key changes to the battlefield that FMF medicine must recognize in order to provide effective PCC during EABO and other future operations against near-peer threats.

1. While Preparing for EABO, Advances in Medical Technology Are Incremental

From a casualty care standpoint, we should not expect any major technological advancements during EABO. Expensive "make-a-wish" aspirations such as stealthy casualty evacuation drones are unlikely to materialize. Incremental improvements such as lightweight ventilators and bloodwork analyzers are achievable but will not be game-changers. Much of a corpsman's medical

HM3 Alec Bushong from 1st MarDiv's Whole Blood Program instructs corpsmen from 2/24 Mar as they become the first reservists trained on the Valkyrie blood transfusion system. (Photo by LT Toby Keeney-Bonthrone.)

loadout will be the same in 2035 as it was in 2020. This means that the FMF can already focus on maximizing the survival chances of wounded Marines through changes to organization and training, rather than having to wait on inventions that may never materialize. Those changes will make future corpsmen substantially more capable than their current predecessors. However, non-medical advances in technology will still contribute to major changes in the provision of casualty care.

2. During EABO, Medical Capabilities Must Be Stealthy and Dispersed

Given the known, intractable issues with U.S. military procurement,[6] FMF personnel must be prepared for a scenario where our own capabilities have not kept up with competitors'.[7] In particular, we can expect that competitors' satellite imaging and drone platforms will play a significant role in the battlespace, transmitting gigabytes of imagery back to mainframes that use pattern recognition software to sift through the visual, electro-optical, and other gathered data, then prioritize them to the screens of enemy intelligence analysts. Anything resembling a troop concentration or command post will be rapidly subjected to precision fires.[8]

Our ability to destroy, disable, or hack these satellites and drones will be far from absolute. Marines will therefore have to scatter widely and improvise to break up their outlines in order to fool the pattern recognition software. Under these mobile, low-signature conditions, which put a premium on concealment across the visual and non-visual spectrums, a traditional battalion aid station (BAS) tent or vehicle is no longer safe or effective. We also must not expect adversaries to adhere to the Geneva Conventions, and even if they do adhere to them, the presence of conspicuous medical assets and discernible evacuation routes will enable adversaries to trace the locations of our combat elements.

3. During EABO, Battalion-Level Medical Capabilities Are Upgraded Significantly

In the EAB environment, the role and skills of corpsmen within line companies will remain largely unchanged. Their training will continue to focus on individual Tactical Combat Casualty Care skills to stabilize injured Marines for minutes to hours.[9] Major changes will instead occur at the BAS level and above. PCC is essentially intensive care under a tarp. It requires a team to perform correctly. Because of this team requirement, the BAS is the lowest-level medical element capable of performing PCC.

Given the distributed nature of operations, decreased infantry battalion manning that leaves minimal room for litter bearers, and enemy area denial capabilities, the BAS will have to be broken down into forward resuscitation teams (FRTs) allocated to those areas most likely to see casualties. FRTs moving to collect casualties from the forward line of troops will have to be prepared to find themselves in contact with enemy troops while moving between Marine positions and will have to rely on their training in concealment, fire, and maneuver to break contact and survive without backup. This will require a significant rethinking of how BAS corpsmen and medical officers are trained.

Rather than the step down in tactical training and fitness that the BAS can represent for corpsmen at present, assignment to an FRT-capable BAS would increase demands on corpsmen across both the medical and tactical domains. Just as significantly, the act of trusting their sailors to operate semi-independently will require a major shift in the attitudes of Marine tactical commanders toward their Navy brothers and sisters. "Every Marine *and sailor* a Rifleman" is the most prudent way to approach EABO.

4. During EABO, Prolonged Casualty Care Is the New Standard of Care

Handoff of casualties from line corpsmen to FRTs close to the forward line of troops will already prove a significant challenge. Line corpsmen and FRT providers will also need to be prepared to make brutal triaging decisions in environments where returning five lightly wounded Marines to the fight competes with the ability to keep one severely wounded Marine alive. If FRTs decide that they have the capacity to provide PCC for severely wounded casualties, they will need to be able to provide it for at least 72 hours and do so on the move. FMF battalion-level providers are beginning to receive early training in PCC and new corpsmen are beginning to attend Marine Combat Training to receive basic rifleman skills. However, this only represents the first step in training them to the advanced level of tactical and medical proficiency required during future distributed operations. Corpsmen will not only have to be trained in a much deeper medical understanding of patient critical care but also work together closely to perform complex patient care and maintain tactical awareness in a manner that represents a significant leap forward for corpsman training outside of special operations.

5. During EABO, Medical Evacuation to Definite Care Is an Unsolved Challenge

The sparsity of air- and ship-borne evacuation to transition casualties from PCC to definitive care at a military treatment facility will perhaps be the greatest obstacle to casualty survival during future operations. Truly stealthy aeromedical evacuation is likely still decades away. CH-53K King Stallions and MV-22 Ospreys can potentially carry larger numbers of casualties and potentially host Critical Care Air Transport Teams to keep those casualties alive in transit, but possess fundamental limitations to their ability to perform casualty evacuation in hostile areas with small landing zones as well as air-to-air and ground-to-air threats.[10]

There is also a significant possibility that U.S. amphibious and carrier task forces will be unable to safely operate close enough to provide evacuation capabilities because of the threat of massed hypersonic missiles.[11] Strategic commanders may be forced to improvise a complex evacuation network of tiltrotor aircraft and Expeditionary Fast Transport catamarans or other small, fast vessels to hop island-to-island via multiple well-camouflaged and well-defended Forward Arming and Refueling Points.[12] Even then, it is likely that competitors will be able to destroy significant numbers of such evacuation craft. Planners at the operational and strategic levels must therefore be realistic about expected casualty survival rates even if PCC can be successfully implemented at the tactical level.

Conclusion: Surviving EABO

Distributed operations such as EABO and near-peer proliferation of sensors and precision weapons will require significant force adaptation, including within FMF medicine. Indeed, the transition from the Golden Hour in Iraq and Afghanistan—with readily-available evacuation and hospital assets—to PCC with severe constraints on evacuation and definitive care could be described as profound. The most immediate adaptation needs to occur at the battalion level.

Distributed operations such as EABO ... will require significant force adaptation, including within FMF medicine.

The Joint Trauma System has begun to publish tri-service guidelines for PCC.[13] These guidelines need to be translated into significant organizational, training, and equipment changes at the battalion level as soon as possible to enable Marines wounded during future conflicts to survive. By historical comparison, the United States went into the wars in Iraq and Afghanistan unprepared to optimize Tactical Combat Casualty Care, and service members paid a price in their lives because of that lack of preparation.[14] Swift implementation of PCC teams to a high standard within FMF medicine will go a long way towards maximizing the survivability of Marines conducting EABO and other distributed operations.

Notes

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MCICOM 2030

Using the OODA loop to guide transformational change to installations

by GS-13 Amy Bevan

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Marines are familiar with the Observe, Orient, Decide, Act (OODA) Loop decision-action framework. This article takes that framework and looks at the concept of "change management" for the Marine Corps Installation Management Community. Boyd's OODA Loop has long been held up as a means to reduce reaction time and enable quicker, more streamlined decision making. In a combat situation, the OODA Loop framework is non-linear, with *observation* and *orientation* occurring simultaneously and constantly prior to engagement. We make sure to use the Marine Corps Planning Process well before any combat situation to pre-develop courses of action for various engagement scenarios so that when the need arises we are able to make decisions quickly. We train and drill over and over again, so when it is time to *act*, our response is muscle memory, based on our *orientated* state that we have assessed through continuous *observations*—making our decisions more efficient, accurate, and automatic. While greater speed is clearly an advantage in combat, orientation which feeds the careful planning and consideration of scenarios and implementation of those plans—is critical to the *decision-making* step and the follow-on step of taking *action*. By understanding that speed and timing are complementary, the potential of the OODA Loop can be maximized by focusing it to identify those moments of vulnerability for Marine Corps Installations and provide options to exploit those openings at the most opportune time.[1]

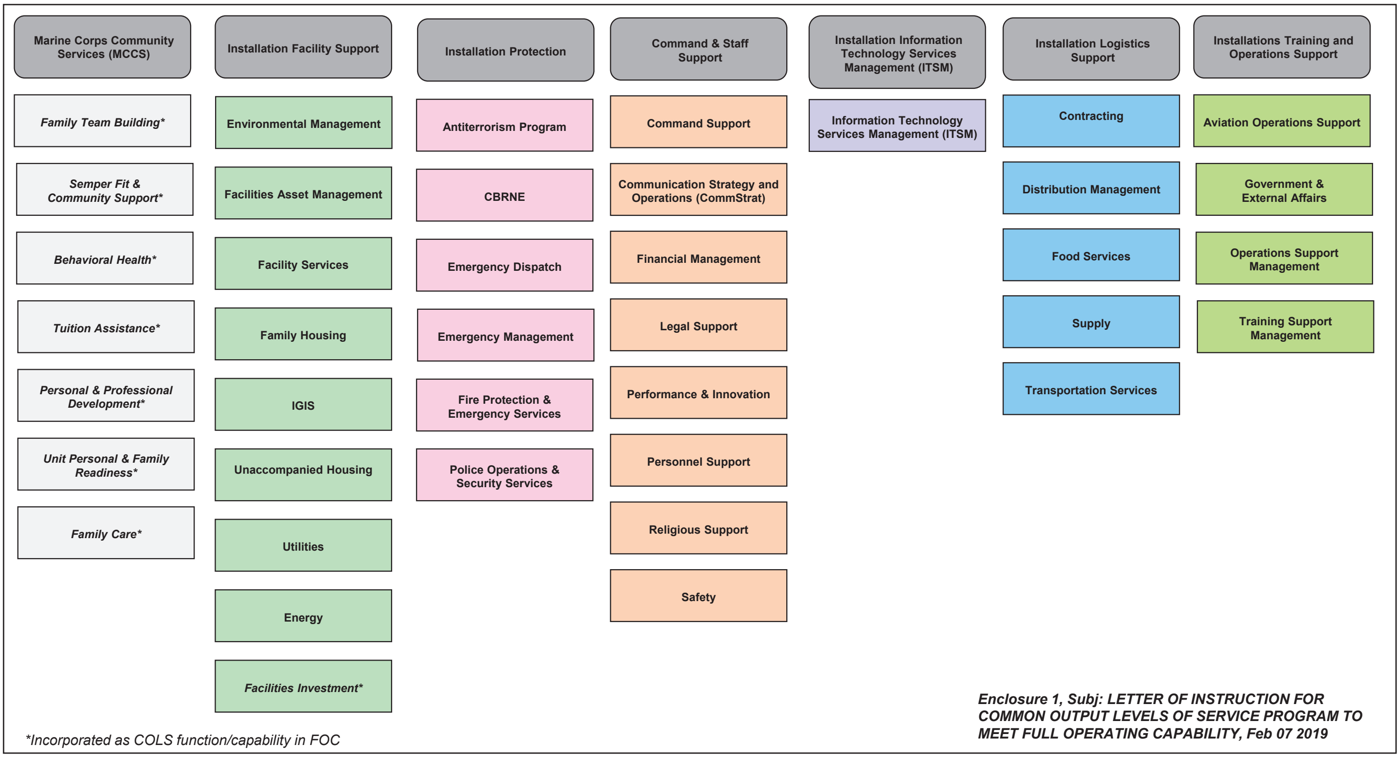
Observe

Many articles from diverse sources have pointed out troubles with installation management across all Services, not just the Marine Corps. For the Army, installations have been called a flock of 156 pink flamingos "wading around the beach of national security" susceptible to disruption with real impacts on "readiness and the timely application of combat power."[2] Bases are home to valuable information systems, infrastructure, and networks that support combat power capabilities, requiring us to rethink the role installations provide.[3] Installations are no longer the sanctuaries they once were because of the increasing connectivity between them (and the soldiers, airmen, Marines, sailors, and civilians who work there) to the Internet of Things.[4] Because they are not considered true weapons systems, installations get left behind in the modernization process, exposing a vulnerability that an enemy could exploit.[5] The Marine Corps is spectacular at putting lead on target, winning battles, and adapting and overcoming nearly any obstacle, except one: modernizing installations.[6] Funding for sustainment must be consistent, despite the hefty cost, but the task of modernization must be prioritized as well.[7]

Orient

In his change-management of the Marine Corps, it is clear that the CMC is using a careful and methodical approach as he steps through the Kotter 8-step change model. The 8-Step Process for Leading Change was cultivated from over four decades of work in leadership by Harvard professor, Dr. John Kotter's observations of countless leaders and organizations as they were trying to transform or execute their strategies. He identified and extracted the success factors and combined them into a methodology.[8] Currently, the CMC is on track to complete the last two steps of this change model as MCICOM has yet to even undertake Kotter's method. Many of us may be familiar with the Kotter model for change management; this method is often talked about as a cycle—something that takes the form of a wheel. As the wheel moves, organizations make progress down the path of change. Where you are—as the wheel moves—not only marks where you are in the progression of change but also marks what actions immediately proceed and immediately follow the step you are on.

In 2019, Gen Berger's first step was to deliver the Marine Corps' sense of urgency for change with the *Commandant's Planning Guidance*, stating that force design was the top of five priorities. Next came the 2020 release of *Force Design 2030,* which further elaborated on "the (Marine Corps) argument for change." When the *Commandant's Planning Guidance* was released, it said, "we created separate chains of command for our installations and the operating forces they support, further inducing friction and inefficiency," and it was meant to be a wake-up call. It was here that MCICOM was being called to develop a command-level sense of urgency, asking: why is MCICOM perceived as inducing friction and inefficiency for the Enterprise, and how can this be made better?



Installation Management Business Model with 7 portfolios and 40 functions. ***(Figure provided by author.)***

The CMC did not reveal his change methodology until the release of *Force Design 2030* where he quoted Kotter, "Transformation is a process, not an event." He has now moved to Kotter's Step 6 with the release of the *2021 Force Design 2030 Annual Update* as his expectations for short-term wins are explicit for MCICOM, such as "Create an installation support plan for the future force per base." Outside of the report, additional CMC-directed tasks and requests for information are being sent to the Deputy Commandants, including Installations and Logistics, to continue to foster the pursuit of more short-term wins. Ideally, these wins would have been generated by MCICOM vice being given to us as tasks by the CMC. This technique of directing our short-term wins for us is one that is usually done in extremis when the higher-level intent was missed.

Considering that the MCICOM Kotter-wheel has yet to move, and the Marine Corps' Kotter-wheel is maturing, the distance between these two change efforts is becoming greater and greater. In response to this, the CMC is now taking action to drag us along our wheel in order for us to keep up with his. Unfortunately, MCICOM is now in a position where it is necessary to make the quantum-"leap" advancements to buy time for the organization so it can make more deliberate incremental or transformational changes. *Incremental change* is the gradual adaptation of an organization that is gentle, decentralized, and produces a shift with minimal upheaval. This is change at the pace of sustainment, a continuous process improvement that—as installations—is our business as usual. *Transformational changes* by contrast are fundamental alterations that shift a business' culture at its foundation resulting from a change in the underlying strategy and processes that the organization uses. Changes such as this can be disruptive, and because of this disruptive tendency, transformational change is often viewed as a "heavy lift" and can be difficult to initiate and sustain as it comes up against organizational inertia. MCICOM is stuck with a need/requirement for transformational change wedged between the incremental changes it knows how to execute and the *quantum-leap change*—the transformative change at the speed of relevance—that the CMC requires. Quantum-leap change puts our transformational change process into hyper-drive in the face of the existential crisis we find ourselves in with Force Design—but it cannot be the kind of *reckless radical change* that we as Marines often do.

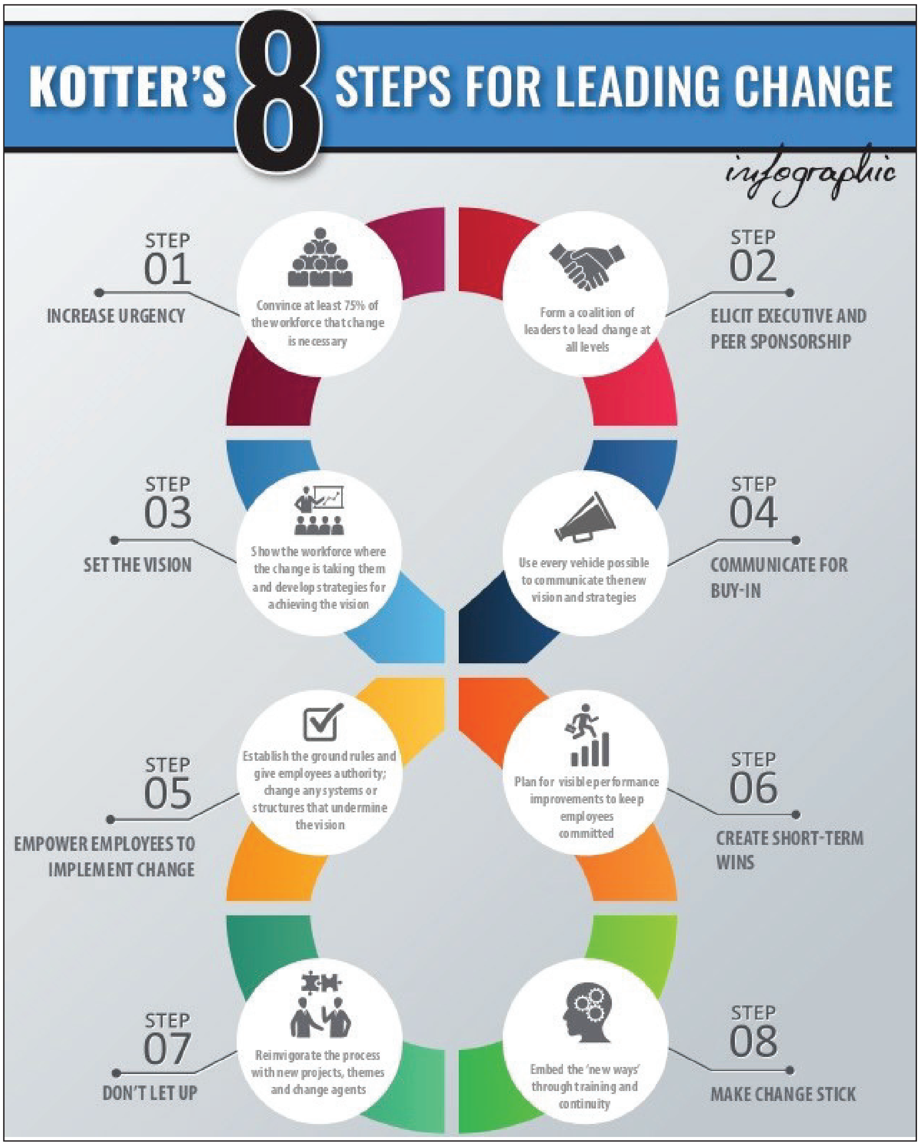
… why is MCICOM perceived as inducing friction and inefficiency for the Enterprise, and how can this be made better?

Reckless radical change—such as our reaction to arbitrary deli-slices to our budgets—is often done with negligence, without partners, lacking deliberate analysis of the problem, and while skipping over incremental and fundamental changes necessary to sustain it. In "Redefining Installations for Future Success," LtCol John E. Young (Ret) addressed one-seventh of the MCICOM business model and proposed both incremental and transformational changes to the Installation Logistics Portfolio in the form of refreshed frameworks and processes in order to avoid reckless radical changes that could otherwise be harmful to both the Installation Enterprise and the tenants we support. He builds off incremental changes by suggesting and outlining transformational changes such as the use of Other Transition Authority, expanded exploitation of Enhanced Use Lease, and Public-Private Ventures. As Force Design details unfold, some installation functions that need transformational change are obvious while others, as LtCol Young stated, are more thinly veiled, "While the Corps has been successful in establishing and executing DOTMLP, the 'F' for facilities has never fully integrated into force design and it shows."[9]

> ***"We cannot accept or accede to recommendations for incremental change or better versions of legacy capabilities, but must pursue transformational capabilities."*** [10]

Following articulation of his sense of urgency, the CMC created a guiding coalition within the Marine Corps, his volunteer "army," who are guiding, coordinating, and communicating the necessary changes. We know this coalition developed the strategic vision, known as *Force Design 2030*, which clarifies how the future of the Marine Corps will be different from the past and how we can make that future a reality through initiatives linked directly to that vision. The vision was born of analysis and outlines the shared outcome that the coalition and the rest of the Marine Corps are all working toward together to achieve the end-state (transformational change). However, large-scale change can only occur when massive numbers of people rally around a common opportunity and are bought in on the urgent drive to change. The Commandant is asking MCICOM to enlist in his volunteer "army" because *Force Design 2030* is not a project or a series of projects—it is a movement.

It should be noted that MCICOM has had success in making change, long before *Force Design 2030*, led by the installation-level Business Performance Offices. For years the Business Performance Offices have enabled action by removing barriers through incremental change such as fixing inefficient processes, teaching continuous process improvement classes, and massaging rigid hierarchies to give installations the freedom to work across silos and generate real impact. But their work has largely been in the realm of incremental change that has been just enough change to sustain operations but not create disruption. We need to shift our mindset and leverage the same tools and practices but focused on more transformational change at the speed of relevance. The barriers before us are greater than they have



Change management according to the 8-Step Kotter model. ***(Image provided by author.)***

ever been and both time and inertia are against us.

Barriers often rise when the work we do no longer aligns with the vision or strategic initiatives and there fails to be a clear path between what we do and why we do it. The *how* to overcome those barriers is the capability we seek when we have a clear sight picture of what we need to accomplish. Often, it is the human that has difficulty letting go of executing the task long after the organization has eliminated its requirement to do a certain thing. That is because the act of meeting the requirement was the focus (with the act of letting go as the barrier) and that means that the focus was not on the mission for which the requirement was initially created.

Deciding and Taking Action

Over the past thirty years, the Marine Corps has largely relied on the force development model process to navigate change, but the future security environment requires we go beyond incremental improvements. An examination is underway "of operational logistics that leverages a new FMF Logistics Command" that combines tactical and installation logistics.[11] This is an unprecedented example of transformational change that begs the question, "Is MCICOM still the single authority for all Marine Corps installation matters?"

The OODA Loop will not be the framework that carries us entirely through transformation, but rather, it might serve its purpose to help prevent transformational changes from happening to us and provide us the awareness to take part in our own change management and make sure that transformational changes happen with us included. MCICOM must be an active participant in shaping future support establishment requirements by integrating them into the overarching effort. How can MCICOM create an advantage for itself using the OODA Loop? The sense of urgency should be clear for us now. How will the installation management community build a guiding coalition to support change and a strategic vision that will direct MCICOM through the kind of quantum leap changes that now need to take place?

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US MC

21st-Century Foraging

What it is and what it isn't

by Maj Antonio Cillo

>Maj Cillo is a Ground Supply Officer serving as the Operations Officer for Marine Corps Logistics Operations Group in Twentynine Palms, CA.

Traditional Marine Corps resupply and sustainment methods such as those of the past two decades may stand the test of time, but they do not stand the test of the operating environment. Expeditionary Advanced Base Operations (EABO) is a form of expeditionary warfare that require creative logisticians to solve complex time-space challenges within an adversary's weapons engagement zone, and the typical push logistics system to build up three days of supply at the forward edge of battle is plainly not expeditionary. This mental model is insufficient and inaccurate for this mission set. A new starting point for logisticians is the concept of *21st-century foraging*; however, the Service introduced this concept without providing context as to what it is, what it isn't, or how we should think about foraging within the scope of EABO. Most of us invoke ideas of *Lord of the Flies*, picking berries and skinning rabbits in some type of last-person-standing war of attrition. The term "foraging" is so entrenched in our lexicon that attempting to eradicate it would be a losing battle. Instead, we need to understand what the Commandant meant in *Sustaining the Force in the 21st Century* when he identified foraging as a form of sustainment.

This article begins by providing historical examples of foraging from various conflicts across different continents and sets the stage to highlight the differences between survival and sustainment when qualifying the definition of 21st-century foraging. Next, this article suggests logistics activities that should and should not be considered under the umbrella of 21st-century foraging when planning a concept of logistics support for an overall scheme of maneuver. Arguably, this is the most confusing aspect of the modern-day foraging concept, and it deserves a great deal of attention to help commanders understand how to employ available logistics capabilities. Lastly, this article makes numerous recommendations intended to lend credibility to 21st-century foraging as a realistic method of sustainment. The Service undoubtedly requires left and right lateral limits to its creativity in this regard, particularly when considering the instruments of national power in an EABO environment.

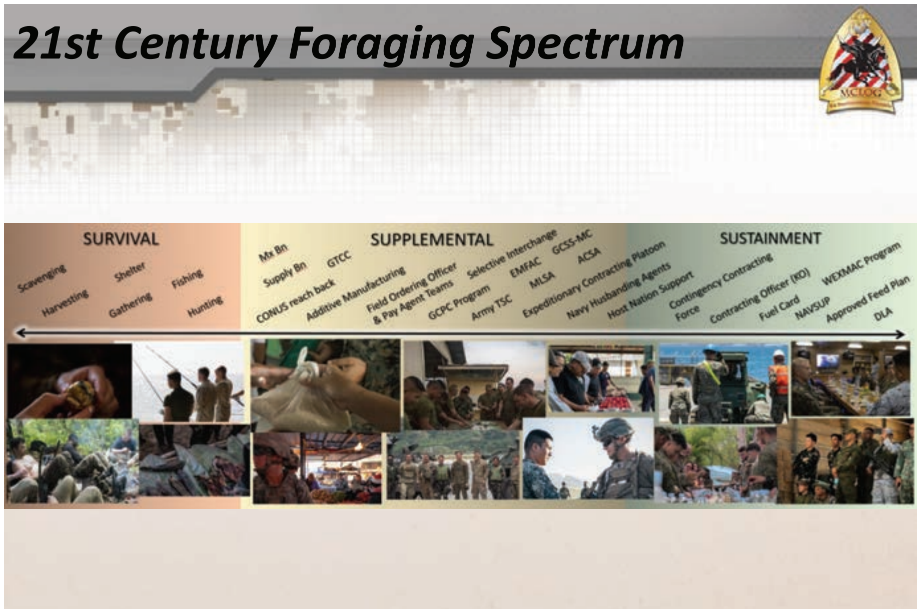
Defined literally as "food for animals especially when taken by browsing or grazing,"[1] *foraging* is not a new concept to militaries. Armies foraged across Europe during 15th–17th century land campaigns, moving primarily in corps formations along main supply routes. Commanders sent their commissaries, equivalent to modern-day contracting officers, ahead of their armies to form agreements with towns and villages to provide long-term supplies and provisions when forces arrived. Local markets strained to meet the demand of large armies, and surrounding populations naturally incurred shortages. Therefore, if one or more towns could not meet the demand, then commissaries would redirect the corps on a more favorable route. Many populations along the army's route were left with nothing as soldiers and civilians competed for finite resources. Since foraging was the primary sustainment method in Europe during this period, supply trains carried supplies for contingencies only. In a modern-day fight, this would have clear operational-level logistics impacts.

> ***A new starting point … is the concept of* 21st-century foraging*; however, the Service introduced this concept without providing context as to what it is, what it isn't …***

During the American Civil War, Gen William T. Sherman's force of 60,000 foraged across the state of Georgia during the Union's "March to the Sea" in 1864. Understanding his force would be operating deep in Confederate territory and completely cut off from Union supply chains, Gen Sherman studied 1860 census data on livestock and crop production to determine the best foraging routes from Atlanta to Savannah. His army left Atlanta with twenty days of rations spread between individual packs and wagon trains, and when depleted, Gen Sherman directed his army to live off the land and "forage liberally on the country."[2] His intent was to keep at least ten days of provisions in the wagons at all times to use in emergencies and to forage another three days of provisions along the route. To aid this effort, he task-organized foraging parties to "gather" food, horses, mules, and wagons from the locals as the army marched through the countryside.[3] Much like centuries before in Europe, and despite an awareness of the negative impacts on morale and living standards for Georgians along the route, Gen Sherman adopted foraging as his army's primary sustainment method.[4]

From 1914 to 1918, German Gen Paul von Lettow-Vorbeck's force of 14,000 foraged across German East Africa, winning countless small victories using guerrilla warfare to sustain his troops throughout the entirety of World War I. After each victory, they seized rations, water, weapons, ammunition, medical supplies, shelter, and riverboats to sustain themselves until the next skirmish against the much larger British force of 300,000. Essentially cut off from German support due to British naval blockades in the Mediterranean, Gen von Lettow-Vorbeck's force foraged through local villages and established food caches in mountainous regions during gaps in the fight. Throughout the war, his force contributed to widespread famine across the African continent, thereby leaving it vulnerable to the coming Spanish Flu Epidemic that swept the globe in 1919.

For most, the term 21st-century foragingbrings about thoughts of Marines picking berries, slaughtering goats, and raiding backyard sheds across the Philippine islands. Undoubtedly, the Marine Corps cannot morally, ethically, politically, or justifiably apply the literal definition of foraging on the 21st-century battlefield. We cannot plan to eat our way across an island chain in the Pacific, fish our way across Norwegian fjords, or hunt our way across the Korean peninsula. Superficially, these short vignettes represent methods of survival, "the act or fact of living or continuing longer than another person or thing,"[5] rather than sustainment, "the provision of logistic and personnel services required to



21st-century foraging encompasses a multitude of forward provisioning techniques to include individual survival skills on one end and Joint Logistics Enterprise capabilities such as Defense Logistics Agency on the other. *(Image provided by author.)*

maintain and prolong operations until successful mission accomplishment."[6] Understanding the difference between these two meanings is key to planning an appropriate concept of logistics support.

Foraging in the 21st century is not equivalent to foraging in the past. The term 21st-century foraging simply serves as a catch-all name for the way Marines will employ available contracting authorities at the tactical level in various operating environments.[7] Defined as "the coordinated and integrated supply action using organic operational contracting support, Navy husbanding agents, and regional, joint, and/or Department of State capabilities,"[8] 21st-century foraging fundamentally describes how Marine Corps and naval forces sustained themselves across the globe for the past decade. A ship supply officer would read this definition and mutter, "How else would we do it?" Essentially, this concept is nothing more than applying existing capabilities in a layered, unique method within the scope of a sourcing logic tailored to the specific operating environment.

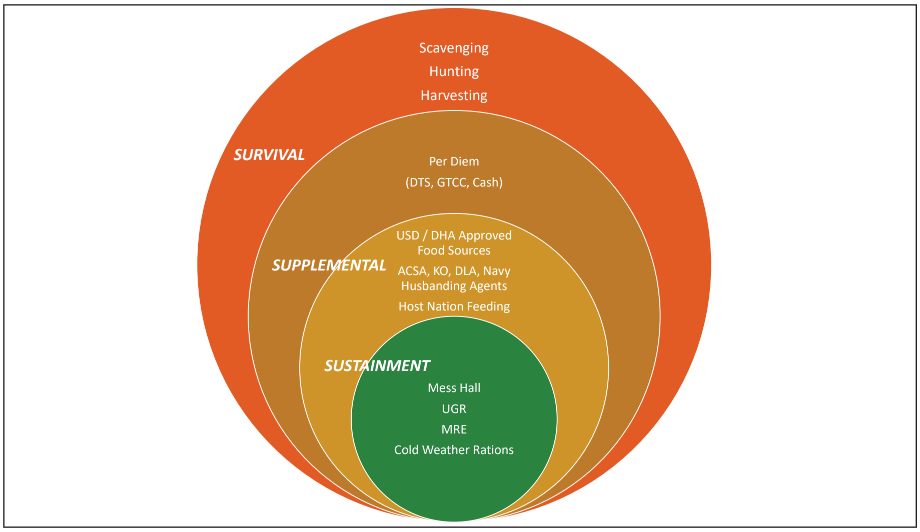
The Service can take low-cost, low-risk action now to incorporate 21st-century foraging into our training. First, commanders and their logisticians must carefully craft a sourcing logic that is naval in flavor, considerate of red cell and green cell inputs, and nested within the theater's concept of logistics support. This may not be achievable in every training event; however, it represents the standard for which we should aim to achieve. A sound sourcing logic has the potential to contribute to the commander's deception plan, affect the information domain, enable cache network development, employ the local populace, increase situational

Understanding the difference between these two meanings is key to planning an appropriate concept of logistics support.

awareness, facilitate tempo, and provide the commander with decision-making space. Sourcing logic development truly requires commanders to synchronize all warfighting functions, invite supply officers and contracting officers to the table, and achieve shared understanding across the entire staff to ensure the sustainment plan supports tactical actions in all domains. Best of all, developing a sourcing logic requires no funding.

Next, as a force-in-readiness, all Marines should challenge themselves by pushing their personal level of discomfort further toward their breaking point. This may sound ridiculous or unethical, but all this really means is focusing more on resourcefulness as an individual leadership trait. In other words, we should individually seek to optimize what little we have at a defined time and place, so we can adapt and overcome a challenge. Doing more with less is a significant point of pride for the Marine Corps—dating back to our birth—and its relevance continues into the future. Also, this mental model shift toward improved resourcefulness also includes extending the life of our equipment, improving SL-3 and repair part accountability, reducing food and water consumption, and actively seeking opportunities to out-think our adversaries. The saying "travel light, freeze at night" speaks to the type of mentality we need to espouse in an EABO environment. This will be uncomfortable, but we need to immediately adapt our training to match this mentality.

Maj Thermos and Capt Maldonado highlighted the need to begin using 21st-century foraging techniques in our training in their March 2020 article.[9] Yet, the Service's initial response to incorporate a somewhat immature interpretation of this into our training involved teaching new food service specialists how to butcher cows and second lieutenants at The Basic School how to scale a fish.[10] These are unquestionably good individual survival skills, but arguably lie on the opposite end of the 21st-century foraging spectrum. Why are we messaging to our Service that we need to prepare for a type of survival, evasion, resistance, and escape environment? While this mindset is valued, and to a certain degree aligns with resourcefulness, it is rather contrary to that of the CMC's. We started at the wrong end of the spectrum. Perhaps a more sensible, balanced approach to training event design is for commanders to reallocate resources toward implementing sustainment methods we intend to employ during EABO in accordance with strategic guidance from the Service Chiefs.[11]



A simple sourcing logic can help commanders understand provisioning options and limitations in a given theater of operations. ***(Image provided by author.)***

We are limited only by our imagination ...

We are limited only by our imagination when it comes to experimenting with low-risk, low-cost changes to training that could provide useful feedback on supplemental methods to sustain a force. For example, consider using a fleet of Toyota Hilux trucks during MAGTF Warfighting Exercise to train using locally sourced transportation methods.[12] This represents an element of realism that is missing from current training opportunities. We could also consider employing role players in an urban training area where field ordering officers and pay agent teams could experi-

21CF – Questions for the Future

- What classes of supply are relevant when developing a concept of foraging?
- Can you forage for energy?
- Role of fuel additives to local fuel?
- Where is the crossroad between proven methods and innovative new methods?
- Who is the institutional owner of 21CF?
- Who is responsible for 21CF training?
- What are the service's or the GCC's priorities for 21CF?
- What is the appropriate balance between foraging and the organic supply chain?
- How much do we care about OPSEC when developing a concept of foraging?
- How could foraging impact OIE?
- Do we need to update service-level and joint policies?
- Do we need to change Title X authorities?
- How does foraging impact Rules of Engagement?
- How much do we care about audit readiness?
- How is foraging tied into the red cell? Green cell?
- How can foraging contribute to a deception plan?
- Difference between foraging in the Middle East and foraging in the Pacific? Africa? Europe?
- Changes to the way we train?
- Changes to logistics support to TSC exercises?
- Is every Marine a forager, or do we need foraging teams?
- Who accounts for foragers and foragees?
- Do we need a foraging COP? NIPR or SIPR?
- Does the JLENT have a role in foraging?
- Is foraging capable above the tactical level?
- Is *Operational* Contract Support a part of tactical level foraging? Changes to policy?
- Is foraging the primary COLS, or is it COA 2?
- What role does the HN military play in US foraging? Local populace? HN government? State Department? Embassy?
- Should we forage to support coalition allies?
- Should Amazon be considered a source of supply in 21CF?
- Where does additive manufacturing fit in?
- Where is the line between foraging and looting, scavenging, gathering, stealing, plundering, harvesting, etc.?
- How can we forage without telegraphing our next move?

Creative thinking will help the Service advance and adapt foraging techniques to the changing operating environment. ***(Image provided by author.)***

ence a realistic bartering economy using monopoly money to test micro-purchase thresholds for small-sized elements on a fictional expeditionary advanced base. Another idea is to include approved food vendors in a training scenario for added realism. Incorporating cache networks, specifically water and food caches in urban training areas, is another way to increase the practicality of our training events. A final example is to use fuel caches for engineers to experiment with testing and additives to convert fuel for our own equipment.

The Marine Corps is always ready to adapt, but we need to ask the right questions. Morally and ethically, I think not. We need to revisit our history books.

These ideas are not new. As our force ages since the attacks on 11 September 2001, the similarities between logistics sustainment during World War II, the Vietnam War, Operation IRAQI FREEDOM, and Operation ENDURING FREEDOM become more accentuated. In each of these, commanders operated from a network of forward operating bases or patrol bases, connected by a system of systems in the form of a supply chain. Each supply chain included links to organic logistics, local sources, theater and naval sustainment capabilities, and some semblance of a reach-back capability to CONUS. While supply chains work in most environments, a more effective mental model is that of a supply web, or a network of networks within the larger sourcing logic, that provides commanders multiple options in multiple domains to accomplish the same task while maintaining an expeditionary posture. EABO requires us to limit our footprint ashore, and 21st-century foraging directly enables this line of effort.

Sustaining a littoral force during EABO is achievable using the constellation of 21st-century foraging options. While survival skills are undoubtedly necessary, our commanders and logisticians have to think beyond the next meal. Furthermore, strategic messaging and tactical training have to align for us to avoid repeating historical blunders, namely in the information domain. The Marine Corps is not going to eat every chicken on an island and leave the local population starving with pockets full of useless cash. As a Service, we need to begin deliberately leveraging 21st-century foraging techniques in training events to help commanders develop their sourcing logic for a given operating environment. Maj Thermos and Capt Maldonado would ask, *Are we ready?* Mentally, yes. The Marine Corps is always ready to adapt, but we need to ask the right questions. Morally and ethically, I think not. We need to revisit our history books.

Notes

1. *Merriam-Webster*, s.v., "Forage," https://www.merriam-webster.com.

2. See Gen William Tecumseh Sherman's Special Field Orders, No. 120, paragraph IV.

3. Ibid.

4. Ulysses S. Grant, *Personal Memoirs of U. S Grant*, Vol I, (New York: Charles L. Webster & Company, 1885).

5. *Merriam-Webster*, s.v., "Survival," https://www.merriam-webster.com.

6. Headquarters Marine Corps, *MCTP 3-40C Operational-Level Logistics*, (Washington, DC: April 2018).

7. The list of available contracting options and authorities includes Expeditionary Contracting Platoon, Contingency Contracting Force, Army Contracting Support Brigades, Logistics Civil Augmentation Program, Worldwide Expeditionary Multiple Award Contract, Air Force Contract Augmentation Program, Acquisition and Cross-Servicing Agreement, Field Ordering Officer Pay Agent teams, Contracting Officers, Regional Contracting Office, Operational Contract Support Integration Cell, Defense Logistics Agency, Host Nation Support, Navy Husbanding Agents, and various support agreements. This is not an all-encompassing list of joint contracting capabilities.

8. Headquarters Marine Corps, *Sustaining the Force in the 21st Century: A Functional Concept for Future Installations and Logistics Development,* (Washington, DC: May 2019).

9. Maj Peter Thermos and Capt Angel Maldonado, "21st Century Foraging: Are we ready?" *Marine Corps Gazette* 105, no 3 (2021).

10. Jessica Foraker, "Marine Detachment Fort Lee Food Service Implements New Skills to Curriculum," *Defense Visual Information Distribution System*, 02:34, May 14, 2021, available at https://www.dvidshub.net; and Andrew Herwig, "The Basic School Foraging Class," *Defense Visual Information Distribution System*, September 8, 2021, available at https://www.dvidshub.net.

11. Service Chiefs provided strategic guidance in *Sustaining the Force in the 21st Century, Tentative Manual for Expeditionary Advanced Base Operations, Transforming Naval Logistics for Great Power Competition, Littoral Operations in a Contested Environment, Advantage at Sea: Prevailing with Integrated All-Domain Naval Power*, (Tri-Service Maritime Strategy), and *Department of Defense Additive Manufacturing Strategy*.

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Contested Space

Intelligently developing space capabilities in the Marine Corps

by Maj Adam Fountain

> ***"To be specific, the service's responsibilities include targeted reconnaissance and tracking, global positioning operations and space assets management, as well as defense against electronic warfare and hostile activities in cyberspace. These are all major factors that will decide whether we can win a future war."[1]***
>
> ***—Yin Zhuo, Director of the Chinese PLA Navy's Expert Consultation Committee, 2016***

>Maj Fountain joined the Marines in 2003 and has served most of his career in the infantry and intelligence communities. He has served four combat tours to CENTCOM and has been an Infantry Squad Leader, Scout Sniper Team Leader, S2A, Scout Sniper Platoon Commander, and a Force Recon Platoon Commander. He stood up the Marine Corps' first Marine Space Support Team at II MEF Information Group and is currently serving as the CTF-61/2 Space and STO planner in support of U.S. 6th Fleet objectives in EUCOM.

The core concepts of this article are to establish a common understanding of the military use of space and to convey the need to create an organizational structure intelligently designed to address the full integration of space capabilities across the Marine Corps from the operational to the tactical levels of war.

Over the past two decades, while America has been busy fighting third-world enemies, our peer adversaries have been carefully studying how we wage war, observing our dependence on space capabilities, and have been working diligently to build the means necessary to mitigate and defeat our space-enabled military advantages. They have communicated very clearly through their national strategy documents[2] (and other national and military publications) that *they intend to topple the world order* led by Western thought, freedom, and democracy.[3] Great power competition is here and with it comes the harsh reality that we have been focused far too long on organizing to fight a war against adversaries that cannot challenge us technologically, and in doing so, we have not organized the forces, nor fielded the new cutting-edge technologies, necessary to enable us to defend our nation's interests in the modern operational environment. The peace of mind and freedom of action that we have enjoyed for so long is gone. Warfare in the Information Age presents new challenges that we have never before faced, and if we are to survive the wars of today and tomorrow, it is an existential imperative that we properly address our dependency on space-enabled technologies as well as field the equipment and organize the force structure necessary to attack our enemy's space infrastructure, defend our own, and fully integrate these capabilities from the operational level down to the tactical level of war.

The history of warfare has shown that when great leaps in technology occur, they produce *significant advantages for the nation that realizes their value and integrates them into their military operations first*. Advancements such as gunpowder, internal combustion engines, machineguns, wireless communications, aircraft, radar, and rocketry (to name a few) have dramatically shaped the character by which we wage war. History has proven time and time again that whomsoever harnesses the power of these breakthroughs first, has a decisive advantage on the battlefield.

> ***"Many countries are purchasing satellites to support their own strategic military activities. Others believe that the ability to attack space assets offers an asymmetric advantage and as a result, are pursuing a range of anti-satellite (ASAT) weapons."[4]***
>
> ***—National Security Strategy, 2017***

Space technology is no exception. In the modern operational environment, we use space platforms to meet a vast majority of our military needs. We use satellites to collect imagery as well as to tip and cue other collection assets. In the targeting cycle, we use satellites to gain positive identification, correlate multi-source targeting data, and assist in battle damage assessments. We use satellite communications to maintain battlespace awareness and command and control our forces in near real-time. We use GPS satellites to deliver the positioning, navigation, and timing critical in maneuvering our forces, employing precision-guided munitions, and synchronizing the timing required to enable our communications architecture.[5] The bottom line is that we are completely dependent on space capabilities to facilitate the means by which we conduct warfare. Our adversaries have carefully taken note of this and are relentlessly developing and fielding the means to deny us our space advantages. If we continue as we have been, allowing our adversaries to integrate cutting-edge technologies before we do, we are surrendering the temporal and technological high ground, leaving new attack vectors and maneuver space uncontested, and ceding the first use of decisive new military advantages to our enemies.

The other Services have already begun addressing these issues through the creation of space formations and the fielding of space control capabilities.[7] However, *the Marine Corps is still behind the power curve*. With this in mind, there are still actions that we can take immediately, with the tools that we have available to us now, to begin our evolution to a Marine Corps that is leaning forward in integrating space capabilities; but before we begin conducting our own force design changes and developing our own space capabilities, wisdom demands that we first look at the Services already integrating space and evolving with changes. By doing this, we may avoid incurring additional costs and valuable time as well as intelligently develop a way to integrate the space domain into our warfighting methodology.

Recently created to address our warfighting shortfalls in space, the Space Force was designed, organized, and born primarily to conduct the strategic fight in the space domain. Though support to the tactical level is still presented as a Space Force capability, the primary focus of this new understaffed Service is the on-orbit fight beyond Earth's atmosphere. Currently, Space Force is acquiring most of the space personnel, equipment, and infrastructure throughout the DOD, *stripping the adjacent services of their organic space capabilities*. Though this course of action may be necessary to quickly stand up and build a new Service, it is at the cost of the organic space capabilities within the other Services. It is absolutely essential that each of the Services retain their own organic space capabilities to regularly integrate them within training and operations and have them on-call when needed. The justification for this is for the same reason that the Navy, Marine Corps, and Army all retain their own organic aircraft. If the Air Force retained all military aircraft, the other Services would be significantly challenged to integrate these capabilities on a regular basis and would not be able to maintain their readiness for conflict. This model is unsustainable for scalable and flexible forces that can operate independently if needed.

"From a security perspective, an increasing number of countries are looking to use space to enhance their military capabilities and national security. The growing use of, and reliance on, space for national security has also led more countries to look at developing their own counterspace capabilities that can be used to deceive, disrupt, deny, degrade, or destroy space systems."[6]

—Global Counterspace Capabilities, 2018

… Space Force is acquiring most of the space personnel, equipment, and infrastructure throughout the DOD, stripping the adjacent services of their organic space capabilities.

The Army, on the other hand, has been doing space operations for well over a decade and has a very good pulse on what space support to tactical and operational-level operations looks like. However, they have reversed course on a couple of initiatives, changing the way they are integrating space operations. Recently, they began experimenting with employing active-duty Space Control Planning Teams (SCPTs) and moving their Army Space Support Teams (ARSSTs) to the reserves. After discussing this point at length with several Army Space Operations officers from both ARSSTs and SCPTs as well as looking over the training and readiness tasks of both ARSSTs and SCPTs, there is a common concern that the SCPTs will be deployed to the theater to conduct their space control tasks yet will still have to manage special access programs/special technical operations capabilities and cover down on other space support roles normally provided by an ARSST—only now having to do so with four space soldiers in lieu of the six normally found within an ARSST. These concerns are compounded with the realization that the *long lead times and mobilization requirements that activating, qualifying, and deploying reserve*

ARSSTs would additionally entail with respect to a quickly developing peer conflict. With this problem being identified relatively early on in the Army's force design changes, there is still time to adjust course and solidify an employment model that adequately covers down space capability employment across the Marine Corps. With this in mind, the proposal that I will lay out for the Marine Corps could potentially work as a way forward for the Army—should they find utility in these insights.

> ***"Space provides the warfighter a combat advantage from the ultimate high ground to the last tactical mile."[8]***
> **—U.S. Space Command Commander's Strategic Vision, January 2021**

Building space capability within the Marine Corps should be done through the creation of two separate teams that specialize in space support and space control respectively. This is because the difference in the roles and responsibilities of each of these tasks, and the echelons of command that each should be employed, bring out the distinction between the missions of *space support* and *space control*.

The *space support* mission is conducted by pulling information from our space architecture, pushing it through our space support software tools, conducting the analysis, and providing the end products to our tactical units. These are passive measures taken to receive, analyze, and integrate space considerations and information into our planning cycles. Space support includes *Space Domain Awareness* of friendly, adversary, allied/partner nation, and commercial overhead systems and when they will be over us to support or potentially endanger our forces. Space support also includes *battlespace awareness* of overhead persistent infrared and electronic intelligence anomalies as well as the *geolocation* and modeling of these events *to support targeting* and to determine how they will affect friendly force operations. Space support also includes assessing space weather and determining friendly actions to mitigate its effects or use its effects to our advantage.

The *space control* mission, on the other hand, is simply offensive and defensive space capability employment. These are active measures taken to target adversary space architecture and measures taken to protect our own. Space control (*think "space fires"*) requires the integration, coordination, and deconfliction of space capability employment within our fires and effects plans at the strategic, operational, and tactical levels of war.

> ***"It is important for our commanders to understand that, even when we are conducting training in our own backyards, we are under observation."[9]***
> ***—"The Ultimate High Ground,"* Marine Corps Gazette, *September 2021***

Both the space support and space control functions are *labor-intensive* in their own respects and have different manning, training, and equipping requirements based on where, how, and at what echelon they will support the fight. It is important to keep these mission areas separate in order to address our tactical and operational requirements with respect to day-to-day space support integration and the operational and strategic-level authorities needed to employ space and special access programs and special technical operations effects within the battlespace.

Over the past few years, the Marine Corps has created some of the force structures necessary to accommodate the increasing need for space integration. This force structure currently exists in two places: within the MEF Information Groups (MIGs) and within Marine Forces Space Command. The placement of Space Marines within these two entities at different echelons of command readily lends themselves to the provision of space integration at both the tactical as well as the operational level of war.

> ***"Integrating space support into planning at the lowest tactical level is vital to ensuring that our tactical maneuver units inside the weapons engagement zone can operate independently without relying on operational-level space support entities far removed from the front lines."[10]***
> ***—"Fighting from the Ultimate High Ground,"* Marine Corps Gazette, *2021***

For space integration at the tactical level, the MIG is tasked with providing tactical space integration to the MEF and its subordinate units.[11] II MIG began providing ongoing space support capability in the Summer of 2020 through the creation and employment of a Marine Space Support Team (MSST). This team conducts tactical-level space support by providing overhead vulnerability assessments that can support planning within all of the warfighting functions. These vulnerability assessments are especially helpful in conducting operational security planning, deception in support of operational security, and informing signature management and emissions control standard operating procedures.[12] MSSTs can also provide tactical support to collections, targeting, and maneuver by delivering GPS accuracy predictions, GPS jammer effects in the battlespace, and near realtime battlespace awareness through electronic intelligence and overhead persistent infrared monitoring. Though aspects of this sort of space support should also be employed at the operational level, *the ways in which we intend to employ the force during Expeditionary Advance Base Operations (EABO)*[13] *dictate that larger numbers of Space Marines should be trained* to provide space support at the tactical level. This is a result of the dispersed and rapidly-changing positions of our forces arrayed across hundreds and potentially thousands of miles during the conduct of these types of operations. At least four of these MSSTs should be created at each respective MIG to enable sufficient tactical-level space support to the MEF and its subordinate units while conducting EABO.

For operational integration as part of the Navy/Marine Corps team, Marine Forces Space Command is already poised to provide space capability integration at the operational level.[14] This can easily be done by renaming the current Marine Forces Space Command MSSTs to Marine Space Control Planning Teams (MSCPTs) and filling the structure already allocated on the Marine Forces Space Command table of organization and equipment. MSCPTs will provide the planning, coordination, and deconfliction of offensive and defensive space capability employment at the operational level and provide the linkage between the MSSTs at the tactical level and other space entities at the operational level, such as U.S. Space Command (USSPACECOM), the Combined Space Operations Center, the Director of Space Forces, Joint Integrated Space Teams within each COCOM, and at the Navy's Maritime Operations Centers within each respective fleet. Ideally, these MSCPTs will be made up of space-trained Marines of higher rank, who have already served time working within the MSSTs at the tactical level and have the resident knowledge, training, subject-matter-expertise, historical context, and experience needed to provide adequate and appropriate operational-level support expected of company and field grade Marines of this position.[15] Additionally, the creation and integration of MSCPTs at the operational level will be necessary to address the coordination and deconfliction of special access programs and special technical operations capabilities in theater. Since some of these capabilities may be dispersed and employed by tactical units spread across the battlespace, the coordination and deconfliction of these assets in the fires plans of our tactical units and higher echelons of command will be essential in ensuring that their tactical-level employment is fully integrated with operational-level theater objectives. These very distinct roles and responsibilities can only be fully addressed through the creation and integration of MSCPTs at the operational level and MSSTs at the tactical level.

For operational integration as part of the Navy/Marine Corps team, Marine Forces Space Command is already poised to provide space capability integration at the operational level.

To bring our *Commandant's Planning Guidance* to fruition, bottom-up refinement needs to be communicated and changes made to highlight a few key issues from the perspective of the space warfighters engaged in this domain.

"As a naval service, the Marine Corps contributes substantively in the development of the naval operational concepts that will guide how the joint force conducts expeditionary operations in the future. The character of war is increasingly dynamic, and the rapid advance of new technologies by both friend and foe has accelerated the rate of change, ensuring that the character of war in the future will be much different than that of the recent past."[16]

—Commandant's Planning Guidance, 2019

One of our issues is that we currently have to rely on the Space Force and the Army to get our Marines trained. These other Services have their own training requirements that they must meet, making school seat availability extremely limited. This creates a bottleneck that is currently delaying our progress. Until we establish our own schools to train our space professionals (or reinforce the existing schools with more instructors, classroom space, and equipment) we must rely on the already strained DOD training infrastructure within the other Services to meet our training objectives.

The Marine Corps has always been known as our Nation's force-in-readiness and the first to fight. Our sole purpose is to deploy as shock troops,

> ***"The United States considers unfettered access to and freedom to operate in space to be a vital interest. Any harmful interference with or an attack upon critical components of our space architecture that directly affects this vital U.S. interest will be met with a deliberate response at a time, place, manner, and domain of our choosing."[17]***
> **—National Security Strategy, 2017**

dull the brunt of the enemy attack, secure a foothold, regain the initiative, and provide our adjacent Services and allies the time and space necessary to muster, deploy, and echelon forces into the theater for war. We must continue maintaining our reputation as the first to fight and continue to be able to secure these footholds—*in every domain*. What success looks like for the Marine

> ***We run the risk of quickly being defeated through new attack vectors and uncontested maneuver spaces if we do not make organizing to fight a war in the modern operational environment a priority.***

Corps is action. We need to build, train, and integrate new space personnel and space technologies into the force structure and employ them now. This means fast-tracking research and development, streamlining our acquisitions processes, and allocating the funding necessary to develop, test, and field new technologies while experimenting with organizing the force to integrate and employ these new capabilities. Though these are all actions that take time to implement, we cannot afford to slow-roll the process. We run the risk of quickly being defeated through new attack vectors and uncontested maneuver spaces if we do not make organizing to fight a war in the modern operational environment a priority. Taking into account the increasingly brazen actions of our peer adversaries, *the next war is not a matter of if but simply a matter of "when"*. Their aim is nothing but the dissolution of Western power in the world. Space will be key terrain in this next conflict and the Marine Corps must be ready to fight in and through the space domain. It is an *existential imperative* for our Nation and our Corps that we continue to be a force in readiness when that time comes, leading the way as the first to fight, and able to establish a foothold in the contested space of every domain.

Notes

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Caring for Marines Through A Legacy Gift

Join the Samuel Nicholas Society

SSgt Gerald “Jerry” Schommer was proud to have served his country as a Marine mortarman. Jerry rose to the rank of staff sergeant in four years serving with the 6th Marine Regiment at Camp Lejeune, and spent nearly two years in Adak, Alaska. From his own service, Jerry understood the importance of helping those Marines following in his footsteps. He supported Marines by donating to the Marine Corps Association Foundation since 2009 and also decided to include the Foundation in his will. In so doing, he joined the Marine Corps Association Foundation’s Samuel Nicholas Society.

Sadly, Jerry passed away in July 2021, but his legacy lives on to help Marines now and in the future through the legacy gift he made to the Marine Corps Association Foundation. Jerry’s gift will ensure Marines receive the professional development programs they need to be ready for the challenges they face.

If you’d like to be a member of the Samuel Nicholas Society and support Marines through your estate plan or will, contact the Foundation at **m.collins@mca-marines.org** or visit our website for more information at **mca-marines.org/legacy-gift-planning/the-samuel-nicholas-society**.

Jerry Schommer (far left) and fellow Marines, Alaska, 1951.

Culture Corps

How I learned to stop worrying about the MAGTF and love the Navy

by Maj Zane Jones

> *"Human beings live in ideas."*
> *—Kim Stanley Robinson, Aurora*

>Maj Jones is a Logistics Officer currently serving as Company Commander, Truck Company, 25th Mar.

I distinctly remember being told during my entry into the Marine Corps, "The Army has its tanks, the Navy has its ships, the Air Force has its planes, and the Marine Corps has its culture." Since our founding, young Americans have decided to take the road less traveled and join our Corps because we are a culture-first organization. Culture, like warfare, is both timeless in its nature and ever-changing in its character. Today, as has been the case in years past, the Marine Corps is embroiled in a debate over our identity, relevance, and existence.[1]

Our transition from nearly two decades of counterinsurgency to preparing for an upcoming global confrontation is coming at a time of tremendous social and technological turmoil. The timeless and regrettable institution of war cannot help but change as a result of these forces. Humanity's capabilities are broadening as the world itself shrinks. We Marines must be both humble and creative as we adapt our organization to meet the needs of tomorrow's war. In that vein, I offer the following thesis.

The timeless nature of amphibious warfare will be characterized by drastic changes caused by the proliferation of social media, low-cost high-impact weaponry, the impact of global climate change, and the added cyber and space warfighting domains. To best posture itself for success, the Marine Corps must recapture its singular warrior culture and naval purpose by making dramatic reductions to its focus and investment in areas that, when viewed from the *National Defense Strategy*, perspective are excessively costly, ancillary, and redundant. Most critically, should be the divestiture of Marine Air. Additionally, it must reinvest its savings in the training and equipping of ground-based personnel.

Why does the Navy's Army need an Air Force? The USS* America*, LHA 6, deploys twelve Marine F-35B Lightning II 5th generation fighter aircraft. *(Photo by LCpl Dana Beesley.)*

> *"The world has turned and left me here."*
> *—Weezer, Blue Album*

Changing Nature of War

If the last quarter of the 20th century was defined by the exponential growth in technological power, then the first half of our new century will be defined by the democratization of this ever more powerful technology. In the new world, participants in amphibious war will need to contend with ever-present communications tools and powerful, low-cost weaponry capable of precision fires that will cause massive physical and economic damage.[2]

In addition to this growing proliferation of technological capability, amphibious warriors of the future will also see a high demand for their skills as a result of rising sea levels and climate change.[3] In the past 200 years, religion has been the dominant cause of mankind's march to war. Over the next 200 years we will see, as we are today, global conflicts among peer states and proxy actors being caused by population migrations, urban growth, and limited resources. Maritime conflicts will especially be concentrated around offshore oil fields and maritime passages critical to commerce.

If these changes were not enough, the new domains of warfare in cyberspace and near-Earth-orbit will be made available to anyone with the will and means to exploit their advantages. Enemies from small technologically savvy terrorist organizations to the largest actors can and will use cyberspace to influence public opinion, access military systems, and conduct intelligence gathering.[4] To those belligerents with the most resources, the allure of developing ballistic weapons will be too much to pass up. Iran, North Korea, Russia, and China can and will continue to develop anti-ship equipment capable of outperforming our best anti-missile defenses.[5]

"Never half-ass two things; whole ass one thing."
—Ron Swanson

Meet the New Corps Same as the Old Corps

The recently published *38th Commandant's Planning Guidance* concluded firmly saying, "we are not experiencing an identity crisis."[6] I disagree. We have sought to export our warrior culture, designed to conduct "land operations as may be essential to the prosecution of a naval campaign" to domains and operations that are causing it to fray. The portion of U.S. Code that directs us to "perform such other duties as the President may direct" even warns us against focusing too much on extraneous actions by saying "these additional duties may not detract from or interfere with the operations for which the Marine Corps is primarily organized."

If this did not cause enough alarm, the relationship between what we tell ourselves we are and what we show ourselves to be can at best be described as

The Marine Corps could divest itself of aviation programs, reinvest in GCE capabilities, and integrate with the Navy for aviation support. *(Photo: Courtesy U.S. Navy.)*

bi-polar. Our investment in and focus on air operations and other extraneous structures is causing degradation and confusion in our Corps. Marines are not sure who we are. How, after 60 years of operating apart from our core culture, can we truly call ourselves soldiers of the sea in light of the following:

- 2.3BN for F-35B procurement in 2019.
- Marine Corps maintains 34 percent of total Primary Aircraft Authorization-Active in the DON.
- 2019 Budget Authorizes 1.4BN toward maintenance of Marine Corps Aircraft and 1BN in additional logistics.
- We maintain over 230 air-centric MOSs.
- We are a "naval force-in-readiness," but our main pre-deployment ground-certification exercise is in the middle of the desert.

Our unique culture is intimately tied to our core identity as a maritime fighting ground element. We cannot, in good faith, continue serving as America's Second Army and Fourth Air Force on four percent of the DOD budget without altering our core mission and begging for elimination, no matter what we tell ourselves.

That future warfare will be conducted in littoral areas is without question. The numerous multi-domain conflicts of the future will require a Marine Corps that has concentrated its culture around the domain where it can be most lethal, ground operations in littoral areas, and relies on the Navy and Joint Forces for assistance in the others. We must take dramatic action to reform ourselves in the likeness of our early Corps in a way that prepares us for the amphibious wars of the future.

We cannot … continue serving as America's Second Army and Fourth Air Force on four percent of the DOD budget without altering our core mission and begging for elimination …

To do this, I recommend we adopt a divest-invest strategy as it relates to our spending and operational priorities. First, we must transfer all equipment, personnel, and operations devoted to Marine Corps Air to the Navy. This transfer, while painful, will consolidate air naval operations under one branch, culture, and operating structure allowing for savings of redundant forces and their related investments. Second, we must eliminate whatever fetal cyber operations elements we have created in recent years. The new cyber domain will undoubtedly have enormous impacts on amphibious warfare, but it seems unlikely that we Marines will be capable of determining such impact or combating it once we do. We can and should rely on other agencies and our division-sized cadre of civilian employees in this area. Finally, any redundant capabilities of Marine Forces Special Operations Command among its peers should be eliminated.

Once these actions are taken, the redundant savings should be put to better use by investing in better armored amphibious service connectors such as the Amphibious Combat Vehicle which could broadly be organized into infantry battalions. Our cost and investment in training should be migrated from exercises such as Integrated Training Exercise to those conducted prior to the deployment of an ARG/MEU. Finally, our third area of investment should be the Marines themselves in the form of equipment, additional pay, and benefits. Marines choose the hard life of our sea Service and should be rewarded for it, especially when they perform at the highest levels.

These painful and controversial actions will serve to better intertwine ourselves with the Navy as we refocus on ground operations. Naval aviators can serve as air officers within infantry battalions much as naval gun liaison officers do now. The individuals throughout our Corps who will see these changes as the death of the MAGTF will, over time, come to see the relevance of a Joint Air-Ground Task Force in the new world where war moves too quickly for a Marine Corps that endeavors to be okay at all things as opposed to being great at our thing. Difficult change is necessary to keep our search for relevance from sacrificing combat effectiveness in the new century.

... the future will require a Marine Corps that has concentrated ... where it can be most lethal, ground operations in littoral areas, and relies on the Navy and Joint Forces for assistance in the others.

"Whatever promise you make ... keep it." —Elizabeth Sammons

Closing

Our Corps has the responsibility to honor the trust placed in us by the American public and the duty to be faithful toward those who choose to join our culture. The future we face holds tremendous technological, social, economic, and environmental change. It comes at a time of strain for the Marine Corps as we reach both rearward toward our naval tradition and forward to meet to dynamic challenges of tomorrow's amphibious war. We can do this by throwing off the yoke of "everything to everyone" dogma, transferring some of the load to our naval partners, and reinvesting in the Marines that storm the beach.

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What Comes After LPD 17 Flight II?

The Navy's next surface combatant

by LtCol Noel Williams (Ret)

> ***>LtCol Williams is a Technical Fellow at Systems Planning and Analysis and provides strategy and policy support to Headquarters Marine Corps.***

The Navy and Marine Corps must work together to develop the ship that will replace the San Antonio-class LPD because, by necessity, this new ship is likely to look nothing like its predecessor given a combination of emerging threats, new technologies, and persistent resource constraints. Converging operational requirements (function) suggest the opportunity for a convergence in ship design (form), and if the ship's function and form are similar, there is a great strategic advantage in developing a mission agile platform to take advantage of economies of scale, while also allowing for strategic tailoring of the fleet's mission profile to address emergent circumstances. Thus, the next amphibious ship and the next surface combatant could be the same platform. A mission agile platform, coupled with platform agile payloads, provides an architectural schema that offers an improved operational capability and increased effectiveness at a reduced cost.[1]

Demand and Design

Since World War II, efficiency has been the principal metric the Navy has followed for developing amphibious shipping—efficiency in moving the Marine Corps "payload." It made sense for the Navy to optimize for lift efficiency given that up until about a decade ago, the Marine Corps stated its amphibious ship demand in terms of lift capacity. The result has been a smaller amphibious fleet but with individually larger ships. With lift capacity being the preeminent criterion, the Navy understandably followed the same logic as commercial shipping companies by adopting ever-larger ships to reduce the cost per ton of cargo moved. While the Austin-class LPD was approximately 10,000 tons, the successor San Antonio-class was 25,000 tons displacement—2.5 times larger.

The Marine Corps now recognizes that lift is an inadequate metric for a future surface combatant confronted with peer adversary threats, near-ubiquitous sensors, and anti-ship missiles that pose a substantial risk to any surface ship. The threat has changed such that a more distributed fleet of smaller, more numerous ships is required to avoid complete catastrophe if a ship is taken out of action.[2]

Looking more broadly to the fleet as a whole, during this same seventy-plus year timeframe, the Navy has maintained an aircraft carrier-centric fleet architecture. The Navy's aircraft carriers are the most expensive combatants in the world, with the new Ford CVN-78 costing over $13 billion.[3] The Congressional Budget Office estimates it will cost roughly $380 billion (in 2018 dollars) to replace the naval aviation fleet.[4] This massive investment in aircraft carriers and their associated aircraft substantially constrains the Navy's fleet design options. While other nations have carriers and are building more, none have super carriers because none can afford them—with the exception of China, which is nevertheless building small numbers of more modest variants. Additionally, these expensive platforms must be protected, requiring a large proportion of surface combatants to be dedicated to their defense, thus making the carrier-centric fleet the fundamental structural element driving Navy investments. Unless this prevailing fleet architecture changes, ship requirements will substantially exceed resources in perpetuity, and the fleet will only be able to modernize at the margins.[5]

Options

The Navy has three options for modernizing the fleet: (1) it can ask for more money, (2) it can further reduce the size of the fleet, and (3) it can change the fleet architecture by leveraging new technologies that achieve mission demands more efficiently.

Throughout living memory, the Navy has pursued the first option, to argue for more money to build and maintain the current carrier-centric fleet architecture. This consistency has consistently met with the same result—inadequate resources, thus necessitating a reduction in ship inventory. Given that the national economy is more leveraged than ever before, with the national debt at historic proportions and inflation at its highest level in 40 years, a strategy reliant upon substantial increases in budgets, a strategy that has not worked even in more healthy economic circumstances, is not going to succeed.

Even if the current fleet was the right answer, CBO Analysis of the Navy's Fiscal Year 2022 Shipbuilding Plan "estimates that the cost of shipbuilding for a fleet of 398 to 512 manned ships and unmanned vessels as envisioned in the 2022 plan would be about $25 billion to $33 billion (in 2021 dollars) per year, over 30 years, compared with an average of about $23 billion per year over the past five years."[6] As addressed above, there are substantial non-ship investments required to procure, operate, and maintain the current carrier-centric fleet design, perhaps most strikingly exemplified by the Navy spending more on aircraft than ships from 2009 to 2018.[7]

There is no shortage of defense commentators calling for greater investments in the fleet and the need for a larger fleet. They have been consistent in this perspective for several decades; meanwhile, the fleet continues to shrink. Recently, during the WEST 2022 conference, CNO Gilday

> concluded—consistent with the analysis—that we need a naval force of over 500 ships ... We need 12 carriers. We need a strong amphibious force to include nine big-deck amphibs and another 19 or 20 [LPDs] to support them. Perhaps 30 or more smaller amphibious ships to support Maritime Littoral Regiments ... to 60 destroyers and probably 50 frigates, 70 attack submarines and a dozen ballistic missile submarines to about a 100 support ships and probably looking into the future about 150 unmanned.[8]

Unfortunately, it appears both the defense commentariat and the Navy maintain the need for the unattainable—more of today's fleet to meet tomorrow's demand as if the problem is simply needing more of today's ships rather than a fleet with improved fitness for purpose. Both communities implicitly affirm that the current fleet architecture is appropriate—we just need more of it to deal with a growing People's Liberation Army Navy.

The Chief of Naval Operations and the Commandant of the Marine Corps recently testified that a healthy amphibious fleet is a requirement.[9] Yet, while the LPD Flight II ship class is planned for thirteen ships, the President's budget submission truncated the program to only two ships.[10] The Navy's position that these ships are unaffordable given other more pressing needs, such as ballistic missile submarines and aircraft carriers, is correct if the carrier-centric fleet remains the objective.

Given that Navy and Marine Corps leadership have affirmed the need for amphibious ships and Congress is contemplating legislation to create a floor of 31 amphibious ships, it is essential for the Navy and Marine Corps to work together on what comes after the truncated LPD Flight II-class. To begin this endeavor, it is important to recognize a fleet is an interdependent system of systems, making it essential to consider the fleet as a whole and not separate elements like amphibious ships and surface warfare ships operating in stovepipes. This is especially the case when surface warfare ships and amphibious warfare ships occupy the same sea space, face the same threats, and often contribute to the same sea control or sea denial missions.

Fortunately, missions, threats, and new opportunities are converging and combining to shrink the historic distinctions between surface combatants (warfare) and amphibious (transport) ships. This affords important opportunities should we recognize the tectonic forces at play and use them to our advantage.

As I explained in *A Fleet for the Unmanned Era*, fundamental changes in technology and associated threats and opportunities require a different fleet architecture to be affordable and fit for purpose.[11]

Amphibious ships fall into two general categories, big decks and small decks, or more precisely, LHAs and LHDs for the former and LPDs and LSDs (rapidly retiring) for the latter. The big deck amphibious ships, LHAs and LHDs, are workhorses of the fleet operating as small aircraft carriers employing the F-35B, and as helicopter carriers employing light, medium, and heavy-lift rotorcraft, while their welldecks accommodate surface effect and standard displacement surface connectors for ship-to-shore mobility. This wide range of capabilities makes the big deck extremely versatile in peacetime, crisis, and war. The Marine Corps' investment in fixed-wing, rotary-wing, and emerging uncrewed aviation platforms guarantees that big decks will be in the fleet for decades to come. Thus, the most pressing issue for the future of the amphibious fleet is the question of the future small deck ship.

... fundamental changes in technology and associated threats and opportunities require a different fleet architecture to be affordable and fit for purpose.

LSDs are reaching the end of their service life and will soon be retired completely, leaving the LPD 17-class as the sole small deck amphibious ship class. The San Antonio-class LPD 17 began service in 2006, a decade after the contract award. Given a similar building trajectory, the time is now to determine what the next small deck amphibious ship should be.

In the aforementioned article, I argued the next small deck should be a Frigate Helicopter Dock (FHD). The FHD would be a large frigate of perhaps 10,000 tons displacement with a 48-cell vertical launch system, a flight deck to accommodate MV22, the ability to carry a company of Marines, and possessing enough beam for an LCAC-capable welldeck. In the intervening years since that article, the Navy has chosen a more traditional frigate design, the Constellation class with twenty ships currently planned.

Of note, the Chinese Navy is also considering a new Type 054B frigate that could be up to 6,000 tons displacement and would be powered by an integrated electric propulsion system, carrying an array of anti-ship cruise missiles and at least one Z-20 helicopter or drone.[12] This indicates that both the Peoples Liberation Army Navy and the U.S. Navy recognize a platform that can be built affordably and in numbers, while still providing a suite of sensors and weapons, is an important fleet asset.

Having failed at convincing the Navy of the benefits of an FHD, what other options might be available for consideration? Since 2014, it has become even more obvious that unmanned systems have a substantial role in the future of naval combat given the commercially driven progress in autonomy, microelectronics, power, and control systems yielding incredible opportunities for reimagining the fleet. Sensing and precision fires have also evolved, presenting both threats and opportunities to be considered and concepts like Distributed Maritime Operations, Expeditionary Advanced Base Operations, and Stand-in Forces have been introduced.

In response to the need for greater sensor range and standoff, the Navy's Flight IIA destroyers are equipped with helicopter hangars. LT Mark Langford, the U.S. 7th Fleet's Deputy Public Affairs Officer stated, "U.S. Navy Flight IIA destroyers, with embarked helicopters and aircrews, greatly expand the range and capabilities of anti-submarine warfare throughout the Indo-Pacific with their ability to carry helicopters to areas beyond the reach of landbased helicopters."[13]

Thus, even though the FHD was not realized, the Navy has recognized the benefits of surface combatants with flight decks and hangars. As uncrewed surface and subsurface platforms evolve, it is no stretch of the imagination to see that welldecks will similarly be recognized as greatly expanding the utility of surface combatants. At this point, perhaps, the FHD concept can be revisited.

More Options

The Marine Corps has registered a requirement for a Light Amphibious Warship (LAW) for littoral mobility and maneuver. The Marine Corps wants 35 of these small ships that will be between 200–400 feet, displacing up to 4,000 tons with a crew of 40 sailors and the ability to embark 75 Marines. Armament will only be for basic self-

An SH-60S Sea Hawk helicopter lands on the guided-missile frigate USS* Thach *while underway conducting maritime security operations. *(Photo by Petty Officer 3rd Class Torrey Lee.)*

defense consisting of a 25 or 30mm cannon and machineguns. However, these small vessels are not a replacement for traditional amphibious ships, and they are focused on providing shore-to-shore mobility. Thus, the Marine Corps wants to maintain 31 traditional amphibious ships in addition to 35 LAWs.

Since the LAW is anticipated to be approximately 4,000 tons displacement and the LPD is 25,000 tons, the replacement small deck amphibious ship will naturally fall somewhere between these upper and lower bounds. The previously mentioned FHD was postulated to be around 10,000 tons displacement and given the imperatives for greater numbers to allow for greater dispersion of personnel and critical assets, the second-best alternative after the FHD would logically come in at around 6,000 to 8,000 tons to provide reasonable platform differentiation across the fleet.

The expected average cost of the LAW is \$145M. The Iver Huitfeldt-class frigate of the Royal Danish Navy is a fully functional frigate of just under 7,000 tons, 455 feet in length, and costing approximately \$325M per ship. Thus, this Danish frigate fits the size and price parameters for a small-deck falling between the LAW and the postulated 10,000 FHD while also being far smaller and cheaper than the current 25,000 ton, \$1.7B San Antonio-class LPD. Within these length and displacement parameters, the Navy and Marine Corps could develop a highly flexible combatant that would serve many purposes across the fleet beyond an amphibious transport role.

The new LPD-S (small) would have a flight deck and welldeck. The flight deck would accommodate MV 22 take-off and landing and would have a hangar deck that could store various uncrewed aviation systems capable of vertical take-off and landing such as the VBAT 128. The welldeck would be too small for LCAC or LCU connectors but could carry an array of patrol craft and crewed and uncrewed surface and subsurface vessels. The under-utilized ESBs would be leveraged to carry traditional surface connectors and could be tethered to ARG/MEUs as required.

This LPD-S would accommodate a company of Marines who would also assist in flight deck and welldeck operations to gain maximum efficiency in crew size. It would not have complete combat systems such as the Constitution-class frigate; thus, it would operate as a remote magazine for other platforms or shore-based EABs. As efficiencies in processing power, autonomy, and power storage and distribution progress, uncrewed vessels, carried in the welldeck, could be deployed to autonomously station-keep and provide offboard sensors such as multi-static radar nodes and self-defense weapons systems. Changing the uncrewed payload mix would allow for easy tailoring to accomplish anti-submarine, anti-surface, anti-air, or amphibious missions as desired. This sort of mission agility is necessary to get the most bang for the buck given budget-constrained ship numbers.

LPD-S would be a useful complement to the LAW, with the ability to command a LAW flotilla while the LAW could be used to move forces and materiel from the LPD-S to shore. Armed with approximately 32 vertical launch system cells and other canister-mounted missiles such as the Naval Strike Missiles, the LPD-S could provide substantial fires in support of stand-in forces, allowing them to focus more on reconnaissance/counter reconnaissance missions with a smaller signature and reduced logistics demand. A system of LAWs, EPFs, ESBs, LPD-S (small), San Antonio-class LPDs, and LHAs/LHDs would provide many options for persistent forward presence, engagement with allies and partners, scouting, screening, and kinetic and non-kinetic fires.

As sensors continue to improve in sensitivity and discrimination, while becoming cheaper and therefore more proliferated (mobile phones to satellites), it will become impossible to hide. We must counter this challenge by producing smaller more distributed platforms to increase fleet resilience while focusing EAB and small combatant defenses on defeating terminal stage attacks through signature management, obscurants, deception, electronic countermeasures, close-in weapons systems, terrain masking, or operating within air defense umbrellas provided by the fleet, Joint Force, allies, or partners.[14]

Conclusion

Amphibious operations are more central to fleet operations than at any time since World War II. During that war, amphibious assaults captured island after island to extend the reach of fleet aircraft, ships, and submarines. Rather than rollback enemy anti-access/area denial systems, stand-in amphibious operations provide a sea and land-based advance force, to defend allied and partner terrain while scouting and screening for the fleet. This approach enables fleet operations as in World War II but without the necessity of conducting a bloody island-hopping campaign to achieve necessary positional advantage—stand-in forces are already there. This approach allows the fleet to engage at range without exposing its capital ships to higher density attack options available closer to the adversary's shore. The centrality of this contribution to sea control and sea denial means the priority the Navy assigns to amphibious ship acquisition should change to reflect its increasing importance to fleet operations. A replacement for the LPD is not just a Marine Corps desire, it is a fleet imperative.

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The Colonel Thomas M. O'Leary Memorial

Future Force Development Writing Contest

For the 2022 Contest

In an essay of **1,500-2,000 words** answer the following question:

The Marine Corps operating concepts for EABO and Stand-in Forces are intended to enable Marines to "operate inside actively contested maritime spaces in support of fleet operations"? What capabilities, produced through new approaches to organization, training and equipment does the Marine Corps need to overcome the challenges inherent in employing these concepts? Essays must propose a feasible solution to any of the following: securing access/entry, tactical mobility, sustainment, casualty care, and the reconnaissance – counter-reconnaissance fight across warfighting domains and geographic regions.

Proposed Awards

1st Place

$2,500 and a plaque/trophy

2nd Place

$1,000 and a plaque/trophy

Two Honorable Mentions

$500 each and a plaque/trophy

Contest is open to all Marines and Friends of the Corps. Participants associated with the Gazette editorial advisory panel may not compete.

Contest runs from 1 August to 31 October

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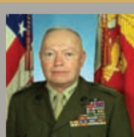

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A Better Path to Success

Establishing command and staff career paths for Marine officers

by LtCol David S. Rainey

>*LtCol Rainey is a 5803, Military Police Officer with over eighteen years of faithful service. He is currently serving as the Commanding Officer for Security Battalion, MCB Quantico.*

Impending changes to service member benefit programs will force the Marine Corps to adapt its manpower policies and business practices associated with the officer career progression process. During the last decade, talent management emerged as an increasingly important topic within the Marine Corps and the entire DOD. It consists of the implementation of initiatives designed to recruit, retain, and develop personnel to improve an organization's ability to achieve its established goals. In the years since the creation of the all-volunteer force, the Marine Corps has consistently been able to satisfy its retention goals. It has maintained the desired level of service while continuing to preserve the ability to capitalize on the DOD's retirement, education, and other forms of economic incentives. In Fiscal Year 2018, the Marine Corps established the Personnel Studies and Oversight Office. Its purpose is to assess manpower policies and recommend changes to optimize the ability to attract, assign, and maintain the talent required to achieve institutional objectives. One issue the Personnel Studies and Oversight needs to investigate is the impact impending changes to notable DOD programs will have on the Marine Corps' ability to sustain its high level of officer retention. Reductions in the restrictions and limitations related to service-connected benefits will make it difficult to incentivize officers to remain on active duty for a full twenty-year career. The already rigorous screening and selection processes ensure the Marine Corps chooses the most qualified officers for accession and advancement. One of the keys to retaining the number and type of desired personnel in the future will be to give officers a sense of control over their respective career paths. Providing the opportunity to select and follow a command or staff career progression path will offer an incentive to aid with the mitigation of impending Marine Corps officer retention challenges.

... give officers a sense of control over their respective career paths.

The current career progression path for the majority of Marine Corps officers is designed to ensure they remain competitive for promotion, advancement, and command selection. After completing The Basic School and initial MOS training, officers complete their first assignment as a platoon commander or officer-in-charge of a section within their respective MOS. As officers obtain the requisite level of MOS credibility, they are assigned to subsequent billets in the supporting establishment or other duties outside their MOS. When eligible for captain, Marine officers compete for career designation to determine their suitability for retention within the active component. Those offered career designations are considered the best and most qualified officers within their respective year groups. They are subsequently afforded the opportunity to remain on active duty until resignation, retirement, or another method of separation. Following career designation and promotion to captain, assignments officers and career counselors require Marines to complete designated key billets, in grade, in their respective MOS, and in the operating forces. Billets may include, but are not limited to, company commander as a captain, then executive officer or operations officer as a major. The billets are advertised as an essential component for an officer to remain competitive for advancement and command selection. Should an officer not complete one of the proposed assignments, in the respective grade, their competitiveness for promotion is presumed to be reduced. The situation may lead to a high-quality officer getting passed over for advancement, eventually resulting in a termination of service involuntarily or by choice.

The DOD authorizes a variety of programs to reward, retain, or reduce the structure of the military Services. The Marine Corps complies with and observes the permitted programs, using them as a mechanism to assist with the execution of force-shaping initiatives. Forthcoming changes in the prerequisites and requirements for the use of certain benefits will generate retention challenges for the Marine Corps in the future. For example, the time requirements associated with the use of the Post-9/11 GI Bill were recently eliminated. Service members are now able to capitalize on the advantages of the program any time after separation, eliminating the inclination to remain in service longer to avoid losing the benefit. The minimum time-in-service requirements associated with the Tuition Assistance program were also removed. Marines are now allowed to use it immediately, significantly decreasing the time required to serve before they can enjoy its returns. The Temporary Early Retirement Authorization was recently extended, enabling officers to retire after their fifteenth year of service. While they will not be eligible to receive the full retirement compensation package, they will garner a substantial portion of the annuity and recoup valuable years for subsequent employment. The most noteworthy incentive to change is the military retirement system. The newly implemented Blended Retirement System enables service members to separate with a commensurate share of retirement benefits at any point in their career. Service members will be less concerned about separating early when they recognize they will still get to leave with some level of retirement compensation. Impending changes will likely result in more qualified officers deciding to depart the Marine Corps earlier, as they will be able to take advantage of benefits sooner once constraints are reduced.

The Marine Corps' rigorous screening and selection processes are designed to ensure only the most qualified personnel are promoted and afforded the opportunity to remain in service. Officers selected for the rank of major within their tenth or eleventh year of service will have already completed screening by numerous boards or panels. They will have been evaluated and selected for career designation, the rank of captain, as well as one or two resident professional military education opportunities. The thorough evaluation process of each board verifies only those with the knowledge, skills, and abilities desired in future leaders are retained. Selection illustrates an officer's high level of sustained performance and highlights their propensity for advancement, rendering any subsequent requirement to validate their potential for continued service moot. Requiring officers to complete a potentially unwelcome key billet becomes an unnecessary impediment for those whose service has already been assessed as exceptional. Removing the requirement for all officers to fulfill a key billet will create additional opportunities for those that desire to compete for selection as a CO. It will also afford more time for the evaluation of officers serving in key billets, providing a better assessment of their potential aptitude for future command.

Service members will be less concerned about separating early ...

Despite the impending changes to current retention incentives, some Marine officers can be attracted to remain if given a level of control over their respective careers. Company-grade officers must still be required to obtain the requisite degree of MOS credibility, while also experiencing different aspects of the FMF and supporting establishment. The processes for career designation and selection to captain should also remain unchanged, as they form the foundation for ensuring the retention of only the highest qualified officers. Once selected for the rank of major, Marine officers should be afforded the opportunity to decide the ensuing path for their careers. To remain competitive for selection as a CO, Marines will need to complete an assignment as an executive officer or operations officer, in the FMF, within their MOS. However, only those desiring to be a CO will be screened and placed in established key billets by manpower officials. Officers with no inclination to be a CO will be designated as general MAGTF officers and assigned to requisite staff billets. MAGTF officers will still be assigned to billets across the FMF and supporting establishment, dependent upon the needs of the Marine Corps and the individual's qualifications. MAGTF officers may be assigned to billets specifically coded for their respective MOS or assigned to the 8006 and 8007 billets designated for any officer. Regardless of career path, all officers will continue to be evaluated using the Marine Corps Performance Evaluation System to ensure appraisals remain fair and consistent.

The Marine Corps is rapidly approaching an era in which it will face significant challenges with the selection and retention of high-quality officers in the active component. Preserving the desired caliber and quantity of personnel will become increasingly more difficult in the wake of reduced restrictions associated with retention incentives and other DOD programs. The current one-size-fits-all model for officer career progression will soon become an untenable manpower policy, requiring adaptation to account for future considerations. Marines that could once be counted upon to fulfill a full twenty-year career will soon be presented with fewer constraints as they ponder the benefits of not remaining on active duty. Consequently, it will become much easier for them to opt for resignation as they retain the ability to preserve an acceptable level of service-related benefits. The easing of restrictions associated with the Post-9/11 GI Bill and the Tuition Assistance program will enable officers to leverage education benefits without having to remain on active duty for extended periods of time. Changes to the Temporary Early Retirement Authorization and Blended Retirement System will provide officers the opportunity to leave active duty sooner while retaining a portion of coveted retirement benefits. The Marine Corps will encounter a talent management crisis as officers become less inclined to accept billets, not in concert with their desired professional objectives but are still able to separate with an acceptable degree of service-related benefits. One of the keys to retaining the best and most qualified personnel will rest in providing opportunities for them to exercise a semblance of control over their careers. Establishing command and staff career paths will be the first step to help mitigate the officer retention challenges the Marine Corps will encounter in the future.

How Can I Influence Retention?

Thoughts for career planners and commanders

by MSgt Nicholas J. Greuel

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If we are informed, we are aware that the Fiscal Year 2023 retention season is already in our sights. If we are wise, we know that retention efforts for any given year do not begin when the reenlistment submission window opens in July. If we really get it, we understand that retention, like chow, is continuous. And, like chow, it is important. If we do not retain enough Marines, the Marine Corps will logically cease to exist. If we do not retain the best Marines, the quality of the Marine Corps will diminish. As a result, the Corps is always asking itself how to influence retention.

As a career planner, perhaps the most common question I hear from commanders is: "What can we do to increase retention?" The question refers to the percentage of eligible Marines who have reenlisted during the current fiscal year. The most common answers are, as a rule, short-sighted, as they focus only on the current year. For most Marines who have decided not to request reenlistment, their decision has already been made. A last-minute attempt to change their minds has little chance of success. We do not significantly influence retention by one-time morale-building events. We do not strongly influence retention with lump-sum incentives of money, time, or privileges. We do not meaningfully influence retention by talking to our Marines about their futures for the first time when they fall into the particular fiscal year's retention cohort. While the Marine Corps continues to address what *it* needs to do about retention, I need to ask myself what *my* role is. My influence on retention is about guaranteeing that the Marine Corps is and remains a place Marines want to be every day by consistently striving to ensure my Marines understand their role and purpose by creating a fulfilling work environment full of enthusiasm and by taking care of my Marines as though they were my own sons and daughters.

> ***We do not strongly influence retention with lump-sum incentives ...***

To address these important obligations, I need to understand what the Marine Corps is to an individual Marine. The answer: the unit to which that Marine belongs. Of course, the best branch of the military is larger than just the fire team/section, larger than the squad/shop, larger than the platoon, the company, or the battalion/squadron. However, what Marines *feel* about the Marine Corps is what they see and do every day in their own personal areas of operation. Even after serving with units from all areas of the MAGTF all over the world, I still find myself evaluating my feelings about the entire Marine Corps based mostly on the command climate and daily operations at whichever unit I am currently serving. Having interviewed thousands of enlisted Marines as a career planner for more than a decade, I know they tend to do the same thing.

Understanding that the Marine Corps—in the eyes of my Marines—is their unit and understanding that it is part of my role as a leader to influence retention in that unit, it follows that I must ensure my Marines understand their own purpose. If I hand my new Marines a copy of our unit's mission statement, I may be starting in the best way. But, alone, this may be the least impactful way to accomplish my goal. Explaining the mission in a way that the Marines can comprehend, analyze, and synthesize into their own paradigm goes one step further. A guided discussion over the way the Marines' section/shop/platoon/company contributes to that mission and specifically how the Marines are integral to that contribution has an even greater impact. But even all these sound like one-time-only efforts. Even if the Marines are convinced on their first day of how valuable they are to the team and how important their role is in accomplishing the mission, they will quickly forget if they are never reminded again. More importantly, they will forget if they do not experience the truths they were taught as they sweat and bleed over the mission day after day. They need to be reminded during and after the grueling field exercise how their unit has improved their skills, learned from their mistakes, and been transformed into a more capable force.

They need to be reminded when their section is working longer than all the others how this extra effort made all the difference and will not be forgotten tomorrow when a new task threatens their liberty and sanity with no hope of tangible reward. They need to be reminded when their ideas were not only heard and validated but utilized and credit was given where credit was due. If we take even a moment to consider ideas like these or discuss them with peers and senior leaders, we can come up with infinitely more. The difficulty is not so much in knowing the right answers but in the challenge of executing them with consistency and determination. Fortunately, when my Marines see that kind of consistency and determination in me, it fuels their own eagerness to accomplish their tasks and encourages their own sense of enthusiasm, nurturing a desire to stick with this organization when questions about a retention decision are brought to light.

I must foster a sense of enthusiasm in my Marines and in my workplace. The implied task is to ask myself whether or not *I* am fulfilled at work. Do I have a spirit of enthusiasm? If not, I need to put my own oxygen mask on before I can help my Marines with their own. If I lack *esprit de corps*, maybe some self-reflection can help me overcome the root of the issue. If my own leaders are stifling a positive environment, maybe I can have a serious, tactful conversation with them. If I am at a loss for creative ideas about creating a happy place to work, maybe I can gain some knowledge from books on leadership and human resources management (several of which are always recommended in the Commandant's Professional Reading Program).

The source of my personal obstacles can vary, but each one features a path to overcome. Once I have at least begun to climb those obstacles, I can start working on improving my sphere of influence. I can come to work with a smile on my face and greet my Marines with one. I can rejoice with their successes—both professional and personal. When they accomplish a task, I can show emotions that express my pride in their work (which bolsters their own self-esteem). When I overhear—or they tell me—that something is going well at home or they received some good news, I can put myself in their shoes and express my joy for them just as if it were my own because I have made it my own. It is genuine. When I see a downcast look on someone's face, I can take the time to find out more, to listen when they just need someone to hear them, and to offer potential solutions when they are seeking advice. All these daily interactions remind my Marines that they have a leader who cares for them, is in the same fight along with them, and is invested in their own sense of satisfaction and happiness. That is the kind of place I want to work myself. That is the kind of environment Marines want to retain for themselves.

My daily interactions that address my Marines' personal difficulties and triumphs are just the beginning. I must take care of my Marines as though they were my own sons and daughters. Do their problems really matter to me, or are they just distractions from my more important concerns? If I find myself feeling this way, I need to remember that it is the Marines who accomplish the mission. I enable them to accomplish it by taking care of them. Therefore, mission accomplishment is contingent upon the well-being of my Marines. That means they must see that there is nothing more important to me than their well-being. A selfish leader is not one I want to follow; a leader whom I know has my back in any situation, I will follow anywhere.

As a father, I know that my children's discontent can disrupt the entire household. A constant, unaddressed discontent will only increase the discord until the crescendo becomes unbearable. I have seen this unfortunate occurrence in Marine Corps units in every location I have served. When I address my young children, I physically come down to their level—see them eye-to-eye, and actively listen to understand their problems. If my children are having problems with a relationship, it physically hurts me inside. If they are facing harassment of some kind, it brings sincere sorrow to my heart. If they are battling against some perceived injustice, it kindles anger in my mind. My success in helping them very literally impacts my own physical and emotional state. It becomes a no-fail mission to see them through their trouble. I may have to counsel them, push them, or even carry them at times, but it is always worth it. I need this same attitude when my Marines are in need. This level of genuine care, exhibited rather than just spoken, goes miles in combating so many of the unsolvable problems the Marine Corps faces and makes all the difference in an individual Marine's decision to stick around.

... we leaders of Marines are wise to ask ourselves what we can do to improve retention within our own circles of influence.

The Marine Corps will probably never stop asking how it can better influence retention. Therefore, we leaders of Marines are wise to ask ourselves what we can do to improve retention within our own circles of influence. My role in retention is making the Marine Corps a place Marines want to be every day by ensuring my Marines understand their role and purpose, creating a fulfilling work environment full of enthusiasm, and taking care of my Marines as though they were my own children. If every leader did that for their Marines without fail, we might imagine a perfect Marine Corps. If I alone do that for my Marines, I contribute to a better one—a Marine Corps where my Marines want to be.

Talent Strategy and Execution Mismatch

Getting 360-degree feedback right: Lessons learned from the Army's 360-Degree Program

by MAJ Mark P. Ziegenfuss, USA

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The Marine Corps *Talent Management 2030* strategic approach is a welcome paradigm shift for transitioning from an Industrial Age personnel system to a 21st-century approach in managing the Marines' greatest asset: its people. In *Talent Management 2030*, the implementation of 360-degree feedback intends to open the aperture of insights in selecting the Marines' best for leadership positions across the Corps.[1] This article provides key lessons learned from the Army's substandard execution of its 360-degree feedback assessment in 2011 and its eventual elimination in 2018. These insights articulate a talent strategy-to-tactical execution mismatch for Marine planners to consider in their execution phase of a 360-degree feedback assessment program.

Historical Context of 360-Degree Evaluations

The origin of 360-degree feedback is not a relatively new concept, with attribution to Germany's military during World War II as a way of assessing their soldier's performance, considering the opinions of supervisors, peers, and subordinates, for the purpose of determining promotions.[2] The expansion of 360-degree feedback into mainstream use followed World War II and continues today in the business domain, with over 90 percent of Fortune 500 companies utilizing 360-degree feedback in some capacity.[3] In today's environment, there are a myriad of options for instruments and tools to select in designing a 360-degree feedback program that is right for the organization's culture and goals.

An abundance of research across time and space exists supporting or challenging the validity and reliability of 360-degree feedback. In synthesizing available research, the American Psychological Association's expansive cross-industry study finds that 360-degree assessment can have more harm than good—if not carefully executed.[4] Organizations encounter execution problems across a range of issues to include commitment from leadership, resistance from stakeholders, inaccurate ratings, time consumption to complete, and output of results lacking purpose. Despite these challenges, the DOD has long attempted to incorporate 360-degree feedback in the joint force.

In 2014, the National Defense Authorization Act directed the Secretary of Defense to assess "the feasibility of including a 360-degree assessment as part of performance evaluation reports."[5] An objective of implementing a 360-degree assessment intended to root out toxic leadership engulfing the military community. In the National Defense Authorization Act's language, the joint Services were directed to use the Army's Multi-Source Assessment and Feedback (MSAF) program as a starting point. The Army's MSAF, according to its program documents, is a 360-degree assessment tool designed to allow soldiers to navigate complex leadership challenges, enhance leadership adaptability and self-awareness, and identify Army leaders' strengths and weaknesses to help leaders become more self-aware and guide their preparation for future leader responsibilities.[6] From these core tenants, the Marines are structuring their own version of the MSAF some eight years after the origi-

This article provides key lessons learned from the Army's substandard execution of its 360-degree feedback assessment in 2011 and its eventual elimination in 2018.

nal National Defense Authorization Act directive and have an opportunity to design and execute a 360-degree feedback assessment more effectively than the Army's MSAF.

Lessons Learned from Army's MSAF Utilization for Marine Corps 360-Degree Assessment

The Army's push for officers to complete an MSAF evaluation led to changes in personnel policies. Specifically, that officers fulfill a regulatory requirement of including a date on their officer evaluation reports.[7] This policy change came from the negative perceptions of the force regarding its 360-degree feedback assessment. Early on its implementation, only 32 percent of field-grade officers and 33 percent of company-grade officers rated the MSAF program as effective in improving their leadership capabilities.[8] The failure to set conditions for the implementation of MSAF led to a rocky execution phase distracting the original purpose for officers to see themselves holistically from peers, subordinates, and superiors.

In an attempt to salvage the Army's 360-degree feedback assessment, a study was commissioned articulating the numerous flaws in execution and ways to improve the process. The study highlights what is typically the main execution issues with a 360-degree assessment in organizations: variability concerns, fairness, legal concerns, and output usage.[9] The Army suffered many of these issues with its MSAF problem, such as—but not limited to—a lack of control measures allowing for Army officers to select individuals who would be participants to achieve the minimum requirements for peers and subordinates. Moreover, officers only had to initiate the 360-degree feedback to complete the requirements for completion of an officer evaluation report. These major pitfalls in execution eventually led to the 360-degree feedback being useless and ineffective.

Recommendations

These lessons learned from the Army's 360-degree assessment are critical for the Marine Corps pilot program and subsequent enterprise-wide implementation. The adage of why good strategy fails in execution commonly references poor communication, people versus process, and choosing the right metrics.[10] The Marine Corps can avoid this trap by maximizing the 360-degree assessment program's transparency, focusing on what Marines desire from the 360-degree feedback, and using the evaluation outcomes effectively for developmental purposes over promotional evaluation management.

... 360-degree feedback assessments historically have proven a challenge to gain acceptance and reliability in outcomes ...

Conclusion

The Marines Corps' *Talent Management 2030* strategy encompasses a 360-degree feedback assessment to help oust toxic leadership in the ranks and deliver another mechanism for evaluation of its officers and senior enlisted personnel.[11] The theory and rationale to implement a program to expand the insights of strengths and weaknesses for a Marine is sound. However, 360-degree feedback assessments historically have proven a challenge to gain acceptance and reliability in outcomes as demonstrated by the Army's life cycle of its own 360-degree feedback program. To overcome these challenges, the Marine Corps must avoid the Army's well-documented problems in execution.

Notes

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Talent Management is a Total Force Effort

Optimizing the active and reserve components

by Maj Andrew R. Butler & Maj Jacob P. Pagragan

> ***"Our modern operational concepts and organizations cannot reach their full warfighting potential without a talent management system that recruits, develops, and retains the right Marines."[1]***

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Talent Management 2030, the Commandant's initiative to stimulate the Service's personnel system, does not prescribe the "how" concerning the implementation of bold goals; however, it does provide relevant rationales highlighting the need for change with some material and actionable tasks.[2] What is noticeably absent from the entirety of *Talent Management 2030* is any substantive mention of the same "total force" concepts previously provided as part of *Force Design 2030*.[3] Should the published *Talent Management* document proceed without modifications, the Service will likely miss an opportunity by failing to acknowledge the nearly 100,000 Marines in the Selective Marine Corps Reserve SMCR, Individual Mobilization Augmentee (IMA), and Individual Ready Reserve (IRR).[4]

At the Marine Corps Association breakfast in September 2021, Gen Berger, the CMC stated,

> I don't think successful companies prevent people from coming back to their companies if they want to come back in. But it ain't really easy to come back into the Marine Corps. Companies ... don't say, well, you left us four years; we're not interviewing you. They're like, welcome back. But in the military, it's more like a one-way door.[5]

The Service has a set model to address personnel management, and *Talent Management 2030* is focused on three key areas: recruit, develop, and retain. However, this plan lacks the ability to address the looming paradigm shift.[6] This has thus caused a scotoma.[7] The CMC has recognized this blind spot by indicating the Marine Corps has a one-way door model; nevertheless, the *Talent Management* plan does not address the *how*.

While one cannot solve all the Service's problems for recruitment and retention, we will offer concrete actions that the Service could take now with coordination and collaboration between Manpower and Reserve Affairs, Marine Corps Recruiting Command (MCRC), Training and Education Command, and Marine Forces Reserve (MARFORRES). Submitted for consideration are the following:

1. Naval Reserve Officer Training Corps (NROTC) scholarships to qualified Marines (to include the IRR) with plans to pursue careers in an area of the critical need for all-domain competition.
2. Dedicated communications plan for the IRR.
3. Creation of Reserve Marketing Specialists to target active-duty Marines on our significant installations.

NROTC

A common expression used throughout the Service is the "hardest thing we do is make Marines." The countless hours spent by a recruiter to locate prospects, sell the idea of service as a career, the numerous hours of instruction at either boot camp or Officer Candidate School, and the requisite MOS training are significant investments. The critical shortfalls detailed in the CMC's *Talent Management 2030* document in cyber, space, and Service-level innovation efforts could be addressed with the current talent pool.

The NROTC program is designed to allow recent high school graduates the opportunity to earn a commission in the Marine Corps as they complete their college education at universities that have chosen to participate in hosting these programs. Currently, these programs bring in relatively un-proven high school students based on academics, physical fitness, and leadership potential. While this certainly should not be done away with, would it make more sense for the Service to align some of these scholarship opportunities with Marines who plan to pursue professional careers in critical areas for all-domain competition?

However, the Service could, rather than offer what is tantamount to a $180,000 scholarship to an unproven high school senior, pool the population of meritoriously promoted IRR Marines for that same offer. Specifically, offer the right-of-first-refusal to a meritorious sergeant in the IRR for an NROTC scholarship to pursue a critically needed program tied to a follow-on service obligation.

For example, the Service pays for a Marine's education or advanced certifications and applies an accelerated promotion to a rank based on how much of that Marine's education the Service covered to ensure that Marine's salary is competitive to what they would make in the private sector. Specifically, if the Marine Corps pays for four years of education under this program, the Marine would graduate with advanced certifications and be promoted to the rank of captain before attending The Basic School. Further, to ensure that this investment provides the Service access to this Marine beyond their first tour, a reserve obligation to be served in either the Selective Marine Corps Reserve, IMA, or IRR is included in the contract. This contract mirrors the current structure of our existing service contracts.

Our data shows that most Marines leave service because, at some point, they feel that their personal goals are not aligned with those of the Service.[8] The previous scenario could be applied to any competitive Marine. Imagine the value of giving an O-5 commander the ability to specifically name one of their Marines for this type of program.

At some point, Marines feel that their professional aspirations do not offer them the opportunity to continue to serve. Service is a binary choice: either pursue a specialized career in robotics or be a Marine. However, this does not have to be the case as the Service builds a talent pool to combat our likely adversaries in the future. There is no need for the Marine Corps to hedge its bets on an unproven high school student when it has access to a proven commodity: the meritoriously promoted non-commissioned officer. Further, this construct need not require active-duty service. If an active duty Marine is interested in a program like the one described but not interested in continuing active service, they have a home in the Reserve component. In either scenario, the Service has retained the talent. Should the time come (i.e., future conflict), the Service has access to that warrior.

Dedicated Communications to the IRR

There are more former active component meritorious sergeants in the IRR than any of the active-duty Divisions or Wings combined.[9] The IRR consists of roughly 60,000 Marines who are primarily those finishing their required 4x4 service contract.[10] This means these Marines have served four years of active duty and are now serving four years in the IRR. There exists a tremendous amount of talent in this population of Marines. For the bulk of a given year, the Service ignores and rarely engages with the IRR talent, which then leaves the IRR to be primarily viewed as a group of Marines who can only be engaged with in the event of a large-scale conflict, which presents a tremendous opportunity lost with respect to managing talent. Currently, the touchpoints for an IRR Marine happen when they are placed in the IRR at the end of an active-duty contract and then again at the end of their IRR obligations; in most cases, this is via a form letter.[11] So, for most Marines, there are two touchpoints in four years. Building a marketing and communications plan tailor-made to educate and inform these Marines of their opportunities and obligations would significantly bolster the CMC's talent management efforts.

Creating a dedicated marketing and communications plan to increase to at least two touchpoints per month per IRR Marine would vastly improve the Service's ability to capture and catalog Reserve Marines' talent and overcome the imposed weakness in the management of these Marines. These touchpoints could support bringing talented Marines back into Service, supporting all-domain competition, and filling critical gaps in standard units of employment.

Instead of consistently and regressively looking at a Marine's capabilities at their time of separation from the active component, these touchpoints can be tailored to catalog current and project future capabilities which can provide opportunities for the Marine and the Service. For example, if a Marine leaves the active component and utilizes the Post-911 GI Bill to pursue a technical degree (e.g., electrical engineering, robotics, computer science, etc.), the current Marine Corps models will forever see that Marine as an 0111, Administrative Specialist, rather than the critical capability of which they are becoming. The proposed marketing model gives this IRR Marine an opportunity to present their new talents to the Marine Corps for consideration and gives the Marine Corps an opportunity to fulfill critical gaps.

The aforementioned marketing effort could be created, customized, and automated at a low cost, and it would only require two to four full-time Marines to manage with any vendor of one of the countless off-the-shelf software solutions. Additionally, leveraging existing capabilities within MCRC and

Our data shows that most Marines leave service because, at some point, they feel that their personal goals are not aligned with those of the Service.

MARFORRES to build the relevant information and content necessary to execute this plan would potentially require no outside-contracted resources to facilitate.

Further, building this digital-first campaign would leverage any number of civilian off-the-shelf software programs that are readily available to engage with IRR Marines continuously throughout the year. These programs provide detailed analytics for Marine Corps Individual Reserve Support Activity (MCIRSA) to tailor messages based on audience engagement. More specifically, if high levels of engagement with IRR Marines via email are focused on tangible benefits of Reserve service, MCIRSA (with the assistance of Communications Strategy [COMMSTRAT]) could produce a series of video messages to include in future emails that specifically outline those tangible benefits (i.e., a twenty-second, clip-on TRICARE Reserve and a link for more information). Again, this should be data-driven, leveraging industry-standard A/B testing of messages to determine precisely what content resonates with the target audience.

Unlike the previous NROTC concept, this has already been tested in New York by MARFORRES. The MARFORRES Capabilities branch leveraged a free commercial off-the-shelf tool to engage with IRR Marines to support the creation of a new Marine Innovation Unit. A purpose-built email campaign was designed ahead of an IRR Muster in New York City to create interest in joining this new unit.

This campaign was a generic, text-based message created in a few hours to engage the thousands of Marines scheduled to attend the muster. The execution was simple: three separate emails were drafted. One was initially sent to the entire list of attendees. Once delivered, data was collected on those who opened the email, specifically if the individual clicked on any of the embedded links provided in the message. If so, that individual received a follow-on email to provide further education on the unit's purpose and design while also reaffirming interest. The third email was designed for those who opened the email but did not engage with the content. This message was sent out to reinforce the importance of the unit and the specific skills desired while also providing an opportunity for the Marine to opt-out of future emails, especially if they did not have any of the desired specialized skills.

The results were well above marketing industry norms, with a 47 percent open rate versus the 15–30 percent industry average, and nearly 5 percent click-through rate versus the 2.5 percent industry average on cold emails.[12] This would only be improved with more sophisticated and tailored content over time.

The results were excellent, netting 22 qualified Marines (prospects) in the talent pipeline with minimal effort and no proper dedicated resources. Engagement levels with this basic format and minimal working links were effective at building awareness and generating the necessary demand in assisting this unit. Garnering 22 talented Marines with relevant skills, who previously believed there was no place for them in the Service, is proof that there exists tremendous opportunity with a more robust, purpose-built engagement plan with customized and research-driven content in follow-on iterations.

Finally, while these results show the case study to build demand in support of talent-management initiatives within MARFORRES, the application of this platform could do far more. An engaged and informed IRR only serves in the best interest of the Service. MARFORRES has a tremendous opportunity with a robustly staffed MCIRSA to build awareness and engagement within the IRR using this example. This was one identified opportunity that was relatively ad hoc in nature. With minimal resources in terms of time and talent, a legitimate email marketing and communications plan can be implemented with greater levels of success spanning far beyond that of filling billets in one unit.

MARFORRES has a tremendous opportunity with a robustly staffed MCIRSA to build awareness and engagement within the IRR …

Creating Prior Service Recruiter (PSR) Marketing Specialists

Marines who depart the active component do so largely because they view their choice as binary. The DOD utilizes the Joint Advertising Market Research and Studies (JAMRS) program to better understand perceptions and attitudes of the American military-age population toward service. This also includes members of the IRR. The idea of service as a binary choice is illustrated in the most recent JAMRS study, which shows that approximately half of all active-component Marines who leave active service and join the reserves do so in a sister Service.[13]

This fact is exacerbated by the realization that MCRC is not optimally postured to exploit the reserve manpower opportunity resulting from active-component force reduction tied to force design initiatives or any of the other multitude of reasons that the Service would reduce end-strength. Therefore, unless the Service bolsters MCRC with support and changes strategy for marketing reserve opportunities to the AC, many more of our solid non-commissioned officers and junior officers will be lost to sister Services in the coming years.

MCRC has the overall responsibility for both prior and non-prior service recruitment efforts. PSRs currently are afforded the opportunity to inform active-duty Marines of their opportunities in the Reserve Component aboard major Marine Corps installations during Transition Readiness Seminar (TRS) classes. Marines are provided resources during TRS and then again during their respective IRR musters through the

Reserve Obligations and Opportunities Brief. By far, the biggest issue with this construct is in delivering a Reserve Obligations and Opportunities Brief at TRS. At this point, as illustrated in the same 2017 JAMRS study, it is too late. Marines are making their decisions twelve to eighteen months out to separate from active service. And, increasingly, these Marines view active duty as the only true way to serve. Thus, the creation of the Reserve Marketing Specialist.[14]

In this scenario, Reserve Marketing Specialists will be assigned to major Marine Corps installations, operationally controlled by the respective Region PSR Operations Officer, and be in General Support of the PSR in that region. Although this Marine would be assigned to a major Marine Corps base, they would also work recruiting trips to satellite installations similar to standard travel associated with traditional PSR duties. As a result, they will complement the efforts of the TRS brief by conducting lead capture (gathering information of interested Marines) during the Reserve Obligations and Opportunities Brief and then disseminating those leads to the appropriate PSR. These marketing specialists would also be tasked with distributing professional marketing materials as created by MCRC in high-traffic areas and work with base leadership to create a dedicated marketing campaign to ensure the reserve opportunities are near top-of-mind with all active service members on that installation. This effort could directly shape future decisions of the Marines on our major bases. Additionally, these marketing specialists can assist in the targeting of specific low-density MOSs needed in the reserve component and arrange briefs specifically designed to target that population.

Imagine employing this capability against a growing gap in the cyber-domain in the reserve component. Reserve Marines increasingly have difficulty getting the 17XX MOS because of the course availability limitations. A dedicated effort to retain active component cyber Marines, who have already completed the required DOD School into the Reserve Component, ensures that we maintain some semblance of a tether to that individual as they pursue other professional ambitions. This vignette can be adapted to meet any number of Service-level gaps. More importantly, however, it helps mitigate the idea that service is a binary choice. It helps erode our Marines' idea that active duty is the only way to serve legitimately. Talented Marines will always, at some level, choose to leave service. By marketing directly to them, however, the Service improves its chances of retaining this talent so that, again, we have access when we need it most, whether in conflict or competition.

Conclusion

The CMC states clearly in his *Talent Management 2030* document that the priority of this effort is the individual Marine. If this is indeed the case, the Service should focus on individual Marines across the force. This force includes the nearly 100,000 Marines in the Selective Marine Corps Reserve, IMA, and IRR, and any effort that does not include those Marines should be chalked up to lost opportunity. The CMC has recognized the paradigm shift and the Marine Corps' one-way door model is aging poorly. We must recognize the scotoma and act before the Marine Corps loses the talent it worked so hard to create.

> ***"Our historical and legislatively mandated role as the Nation's force-in-readiness remains a central requirement in the design of our future Force. The most important element of this requirement is the individual Marine."*** [15]

Notes

1. Gen David H. Berger, *Talent Management 2030*, (Washington, DC: November 2021).

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Fixed-wing Pilot Retention

Barriers, recommendations, and broader implications

by Maj Jim Bernthal (Ret)

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In recent years, economic growth leading to increased job opportunities and reports of job dissatisfaction have coincided with fixed-wing military pilots leaving active duty service at unprecedented rates.[1] Whereas in the past, a slow economy has deterred pilots from leaving active duty, current studies have shown that pilots have been leaving active service at alarming rates when the economy has been uncertain or even poor.[2] These studies have also revealed that many pilots who stay do so begrudgingly, causing experts to assert that poor economic conditions provide only temporary relief from even higher attrition rates. This phenomenon has created national defense readiness concerns among top U.S. leaders, as pilot staffing has decreased to unacceptable levels within all our military branches.[3] As a retired Harrier pilot, I found the mass exodus of Marine aviators troubling and chose to focus on this topic for my doctoral dissertation. In January of 2021, I earned a PhD in Industrial and Organizational Psychology, which focuses on the study of human behavior in organizations and the workplace. The doctoral dissertation conducted for this terminal degree is entitled "A Qualitative Descriptive Study of Job Expectations, Job Satisfaction, and Retention Among Fixed-Wing Marine Pilots" for those interested in accessing the study.[4] This article has been produced using information obtained from that research. It is essential to note the data from the study was collected during the pandemic, and while the economic future of the United States was uncertain, the findings support a widespread retention problem within Marine fixed-wing aviation. It is also relevant to emphasize that retention is not solely a fixed-wing pilot concern. Many other MOSs are unable to retain the quality and quantity of Marines desired to sustain operational readiness.[5] Although it was my goal to investigate barriers to fixed-wing pilot retention while discussing the study's findings with experienced Marines from other MOSs, a high degree of agreement was noted. Thus, it is likely that problems similar to those found in the study are present within other Marine Corps MOSs.

As recommended by prior researchers, the pilot crisis was investigated from a qualitative perspective using qualitative description as the research design.[6] The theoretical construct which drove the examination was Porter and Steers' Met Expectations Model, which has been used in both military and nonmilitary applications. Those implementing this model assess what an individual expects to encounter in a career and what they experience as well as how this relationship relates to job satisfaction and retention.[7] Expectations are not fixed targets and are adjusted with experience to represent realistic outlooks. Expectations are spectrum-based, and certain factors are more important than others when considering their overall effect. Because of these considerations, it was crucial to recruit experienced pilots. Table 1 summarizes participant demographics for the two data collection instruments used in the study. Participants comprised active-duty personnel, reservists, transitioning active duty, and those who had left the Marine Corps.

Prior investigators conducted rigorous and replicable studies but admittedly left notable gaps in their findings.[8] Using surveys, questionnaires, and literature reviews, previous authors were able to identify several barriers to pilot retention such as "operational tempo" and "work unrelated to flying," but using these data collection strategies left much to be revealed. For example, they did not allow for a comprehensive analysis of what specific issues were troublesome regarding these broad categories, their overall influence, and what can be done to create higher job satisfaction and retention levels in the future. To answer these questions and fill these tremendously significant gaps, detailed interviews, and questionnaires with experienced active duty, transitioning, and former fixed-wing Marine pilots were conducted. The data collection instruments, the Marine Aviator Job Satisfaction and Retention Interview and Marine Aviator Job Satisfaction and Retention Questionnaire, were self-designed and subsequently field-tested by active duty, fixed-wing Marine pilots and subject to a panel of experts.

Upon completing the study, a thick, rich description was uncovered from Marine Corps pilots comprising all four of the Corps' fixed-wing communities: F-35 Lightning II Joint Strike Fighter, AV-8B Harrier, F/A-18 Hornet, and the KC-130 Hercules. The information shared in this article has been condensed from 190 pages of original data; 958 sections of text were coded from the data, leading to 66 candidate themes and 9 final themes. The nine themes affecting job expectations, job satisfaction, and retention in order of importance as perceived by the author were:

1. Participants described problems with Marine Corps leadership.
2. Participants described cultural problems within the Marine Corps.
3. Participants described the overall workload and tasks unrelated to flying as untenable.
4. Participants described insufficient levels of operational readiness.
5. Participants described insufficient flight time.
6. Participants described high levels of overall operational tempo.
7. Participants described insufficient work-life balance.
8. Participants described flawed promotion processes.
9. Participants described concerns with the aviation bonus program.

The themes were either discreetly (themes 1 and 2) or overtly (themes 3–9) present in the literature review conducted to study pilot retention. The study detailed the significant themes, sub-topics, and prevalence of job expectations, job satisfaction, and turnover. This was done to inform Marine leadership of barriers to retention and how they can be mitigated. The themes will now be summarized using participant quotes and questionnaire responses to provide perspective. Quotes taken from interviewees will be identified by using the terms interview participant, IP, or interviewee. Quotes taken from questionnaire respondents will be identified as questionnaire respondents. Finally, at least one questionnaire response concerning each theme will be revealed along with their total agreement rating ("agree" and "strongly agree" rows added). The summary will be followed by recommendations and the author's concluding thoughts.

Pilot Demographics		
n	**Questionnaire Participants 30**	**Interview Participants 12**
Avg. Age	**37**	**39**
Avg. Years Served	**11.2**	**13.1**
Total Deployments	**72**	**31**
Avg. Deployments/Pilot	**2.4**	**2.6**
Rank	**LtCol - 1 Maj - 18 Capt - 11**	**LtCol - 1 Maj - 9 Capt - 2**

Table 1. Note: Of the pilots interviewed, eight held at least weapons training officer and division lead qualifications, two were Weapons and Tactics Instructors, and one was a TOPGUN graduate and instructor. Table 1 summarizes pilot demographics for both data collection instruments. Pilot qualifications were not asked via the questionnaire.

Summary and Explanation of Themes

1. Participants described problems with Marine Corps leadership.

Choosing leadership and culture as the most critical issues was based on the fact that these two factors affected everything else in the study. In this sense, leadership and culture were not only problems in and of themselves but foundational to all the barriers to pilot retention. These two themes were so closely connected that they were nearly indistinguishable. However, a culture cannot exist without a governing body of leaders; therefore, leadership will be addressed first. While leadership was not directly identified during the literature review, it became immediately pervasive upon conducting the first interview and remained thematic throughout the entire data collection process.

Leadership problems were directed at the squadron (micro) and organizational (macro) levels of the aviation community as well as the broader Marine Corps. For example, one questionnaire respondent stated,

> MAG tasked squadron with night strafe EWTGPAC frag to support night CAS when no one is current for that flight. Doing more with less has killed good dudes and crashed airplanes, and has been completely counterproductive to the mission of maintaining readiness.

FMF pilots also stated they could not have open conversations with leaders because of a lack of trust. For example, one interview participant stated,

> but if you could go and have career conversations without reprisal, where you can speak freely (that would be productive). Not like if I say this (my true feelings) to this guy I'm never going to get a qual again, I'm not going to fly the (names aircraft type) anymore.

Another interview participant stated, "But you have to keep things secret, you never show your cards in the Marine Corps. I didn't even say a peep to anyone until the day I had my paper form to get out of the Marine Corps."

When asked via the questionnaire, "Marine Corps leadership is ill-informed regarding the time and effort it takes to maintain and gain pilot proficiency placing unrealistic demands on their time," there was a total agreement rating of 97 percent, with 90 percent selecting "strongly agree."

2. Participants described cultural problems within the Marine Corps.

As previously noted, culture and leadership influence each other. This is especially true in an organization such as the Marine Corps, which has earned such a coveted place in history. No commander wants to weaken the Corps or tarnish its reputation. Rather, they seek to uphold the cultural norms even when this comes at a cost to overall mission effectiveness. This fact was exemplified during the Budget Control

Act of 2011, which decreased the military's operating budget and forced the Marine Corps to reduce its force size and support structure.[9] Despite this fact, the Marine Corps maintained its operational tempo, which negatively impacted deploy-to-dwell ratios, as fewer troops were deployed more often.[10] Pilots communicated that they are asked to give their all but didn't get that same support in return. This caused one interview participant to state, "If I was running a business, I would tell them (the Marine Corps) they are failing miserably because they are too stubborn to understand that it only goes so far. Semper Fidelis only goes so far." When asked, "The Marine Corps could do a better job of creating a culture in which pilots want to be promoted," 13 percent agreed, and 65 percent strongly agreed for a total agreement rating of 78 percent.

3. Participants described the overall workload and tasks unrelated to flying as untenable.

It must be noted that this topic does not include deployments and overall operational tempo. That theme will be discussed in a subsequent section; however, when Marine pilots were doing the things they expected, such as flying, deploying with their squadrons, and joining infantry units as forward air controllers, they displayed high levels of job satisfaction. Outside of leadership and culture, the most pervasive barrier to retention was the type and amount of work pilots consistently performed. This discrepancy between what a person thinks or expects to do in their career and what they actually do is the central tenet of the met expectations model. Pilots routinely described working ten to twelve hours per day, often six days per week, conducting mainly non-flying duties. A questionnaire participant stated, "Flying really was my side hustle. My performance assessment was based primarily on my ground-job performance."

Additionally, pilots must perform mandatory training to include Marine Corps Mixed Martial Arts Program, annual rifle and pistol qualifications, swim qualifications, Personal Fitness Test/Combat Fitness Test, and training in the gas chamber. Marine pilots must also engage in professional military education, such as appropriate career-level schools and programs such as the Marine Corps Foreign Language Program.[11] Many of these initiatives must be completed on the pilot's own personal time to be promoted.[12] One noted, "The total time of all these requirements exceeds the time allotted in one year."[13] Marine pilots stated they were subject to seemingly endless other types of training, much of which they believed to be politically correct social programs. One questionnaire respondent wrote

> I signed up to fly fighters and go to war. I did not sign up for endless MarineNet training on information assurance, record keeping, tobacco cessation, alcohol dependence, etc. More time-wasting computer training gets piled on every year and detracts from the mission.

Concerning the overall workload, one interview participant asserted, "When I was the daily schedule writer/assistant operations officer, I was in every weekend working on the weekly." When questionnaire participants were asked, "Tasks unrelated to flying took up more time, energy, and resources than I expected," 13 percent agreed, while 87 percent strongly agreed for a combined total agreement rating of 100 percent.

4. Pilots in this study described they experienced insufficient levels of operational readiness.

The Heritage Foundation conducted a study that rated the Marine Corps' current capacities, capabilities, readiness, and overall strength.[14] They rated the Corps' capacity as weak, capability as marginal, readiness as marginal, and gave them an overall grade of marginal. Paxton asserted that 80 percent of the Marine Corps' operational squadrons lacked the minimum number of Ready Basic Aircraft as tactical fixed-wing assets such as the F/A-18 and AV-8B are aging.[15] Additionally, complications with the F-35 are hindering its ability to replace these older aircraft. Parts for these aircraft are also an issue; as Paxton proclaimed, "They must also have a complete block of vital spare parts, which have taken on even greater importance as we work to reset aircraft fleets flown hard over fourteen years of conflict."[16]

The participants of this study supported these findings. It was evident that pilots felt they lacked the manpower and equipment to maintain sufficient combat readiness. Discussing operational readiness, one respondent to

The combined time spent with annual training requirements and collateral duties drive some aviators to leave the Marine Corps. ***(Photo by Sgt Tyler L. Main.)***

the questionnaire stated, "We never had the people, parts, or planes we needed." One interview participant asserted:

> Of course. You don't have enough parts to fly airplanes and that's the reason why we had all the problems we had. And then we had the MAG COs with great ideas like if you had a squadron that was below 50% readiness then no squadron could fly period; 50% is pretty much the Mendoza line, you were below that a lot of days, but if you have one or two good jets fly them. So, we had problems with that (operational readiness). Then, specifically when I was deployed (during war), and parts started getting short and things started getting a little rushed, and things were starting to get overlooked—that always gives you pause.

Additionally, pilots stated concerns regarding expectations to deliberately falsify aircraft readiness numbers and complete flights and log flight codes even when the criteria were not met. This practice is contrary to what Marine officers are taught about integrity and leadership and was not expected. When asked about operational readiness, one interview participant asserted,

> there's some fuzzy math going on in maintenance for what we have ready for ready basic aircraft because it used to be if you fell below 50% you have to cancel your schedule for the day and you had to work on jets. But it was funny because we always end up being 75% to 80% and it was like what? We've got 5 jets out there.

When questionnaire participants were asked, "Proper staffing (both quantity and quality) impacted operational readiness within the squadron(s) I served," 36 percent agreed, while 55 percent strongly agreed for a combined total agreement rating of 91 percent. When asked, "FMF squadrons lacked sufficient aircraft and parts to maintain combat readiness," 13 percent agreed, while 77 percent agreed for a total agreement rating of 90 percent.

5. Pilots in this study described insufficient flight time.

Another primary concern discussed by participants in this study was a lack of consistent flight time as well as generally low overall flight time. This was communicated as a cultural problem, a leadership problem, and an operational readiness problem. One questionnaire participant stated, "This job consumed every minute of my time, and I often never thought about my flight until I was walking into the brief. It was like flying was 1% of my job or a minimal collateral duty." Regarding flight time and safety, one interview participant stated,

> I saw the impact that it (lack of flight time) had on the younger pilots around me, and it was really disturbing. And things that I saw pilots doing in the air, mistakes they were making … came down to … a reduced level of situational awareness because of lack of proficiency and task saturation.

Finally, most pilots stated that flight time was not consistent, maintaining it came in "ebbs and flows" or "feast or famine." Participants were in agreement that they primarily got consistent flight time only when deployed and did very little flying when they were home. One interview participant stated, "there were months in my logbook where I have one to two hours. You know the fact that I went to Iraq, and I was able to fly a bunch out there, got me over 500 hours for my first tour, which is pretty good."

Low and inconsistent flight time was a significant factor concerning pilots deciding to leave the Marine Corps. One interview participant said, "Yes. I'd say one of the biggest factors (of me getting out) was low flight time." When asked, "I expected to receive more flight time as an FMF pilot," 26 percent agreed, while 58 percent strongly agreed for a total agreement rating of 84 percent.

6. Participants described high levels of overall operational tempo.

Pilots in this study largely separated deployments and overall operational tempo as two distinct subjects. In general, they expressed high levels of job satisfaction when deploying as squadron pilots. One interview participant stated the following regarding his first combat deployment, "So the most rewarding thing I have ever done professionally was that deployment. You know, doing what you were trained to do, reconnaissance, patrol reconnaissance, you know, just everything. We were doing it all, so that was very rewarding." Marine Corps fixed-wing pilots were also very satisfied when deploying as FAC's/air officers. However, not all deployments were rated equally. In particular, participants displayed disdain toward Individual Augment billets/deployments. One questionnaire respondent stated,

> Non-flying IA [Individual Augment] deployments detracted from MOS qualification progression, increased operational tempo, disrupted unit cohesion, and adversely impacted the quality of life of the Marine and his family due to their typically short notice, unexpected nature. This affected me personally as well as at least half of the other company-grade officers in my FMF unit.

Pilots in this study expected to be subject to high operational tempos. However, there comes a time when pilots believe they are deploying too often and without enough dwell time. For example, one interview participant conveyed,

> My dwell, by the time you factor in workups and all the other stuff, was about 1:1. And while I was on the MEU, I got an email from the Battalion Air Officer; (this is like August) that said, hey, man, we're looking forward to seeing you in February. I was thinking what?

Operational tempo, however, includes more than just deployments. It includes workups for deployments, detachments, temporary additional duties, and supporting other exercises to include large force exercises and the pace of squadron life, to include ground jobs and tasks unrelated to flying. With regard to non-deployment operational tempo, nearly every respondent communicated they thought operational tempo would be high but was much more demanding than they anticipated. One interview participant indicated, "the operational tempo at home potentially was (a reason I left). It was really hard on my family. The thing that actually killed me the most about the in-between deployments piece and the thing that turned me off the most about staying in the Marine Corps was the consistent, when you got home, you didn't stop." When asked,

> The deployment/operational tempo experienced was higher than I expected, 32 percent agreed and 26 percent strongly agreed for a total agreement rating of 58 percent. While this is a high total agreement rating and indicates a problematic area, it is far from the 100 percent total agreement rating concerning the "overall workload and tasks unrelated to flying" theme. This suggests that pilots not only expected to deploy and work hard but actually enjoyed that part of their careers. However, 68 percent agreed with the questionnaire when asked, Deployments/operational tempo negatively affected my job satisfaction.

This indicates a deploy to dwell problem that was also stated in the literature review.

7. Participants described insufficient work-life balance.

With the themes stated thus far, it should come as no surprise that pilots said they focused almost all their attention on work, leaving family and personal issues on the backburner. After discussing work-life balance, this interviewee summed up his thoughts by stating it was, "Bad! That was a large factor in me departing. I loved the job. I had my dream job, but I was not a happy person." Another interview participant asserted, "12 hours days at least. Hopefully, you are not working weekends. If you're working weekends, it's 12-hour days there. Yeah, there's no work-life balance." When asked, "As a Marine pilot, I expected better work-life balance leading to a higher quality of life," 45 percent answered agree, while 32 percent responded strongly agree for a total agreement rating of 77 percent.

8. Pilots in this study described flawed promotion processes.

Regarding promotions, participants in the study communicated several concerns. One topic that continually arose was the lack of consideration given to the pilot's actual MOS/flying skills concerning promotion. Unanimously, pilots believed the majority of consideration for promotions was given to their ground job performance. They stated this was because infantry officers are in control of pilot promotions, and they do not understand aviation. Therefore, pilots emphasized that they were promoted via the same criteria used to promote ground officers. For example, one interview participant stated,

> But when the Marine Corps was looking at me for promotion and they didn't look at all of those other things that I did and give those things the equivalent weight as some of the other things they look at. And it's because aviation is such a small slice of the evaluation piece. That is what tripped my decision to leave. Because I saw all of the hard work that I put in over the years, all the overtime that I put in, it wasn't being valued by the Marine Corps. Why would I stay there? That's like normalized deviance; why would I endorse that as an ongoing way to do business?

One questionnaire participant responded, "Tasks unrelated to flying take up 95% of your daily effort. Additionally, your fitrep was written off of your performance of non-flying accomplishments." Another interviewee asserted, "promotion boards are (run by) grunts, and they want to see FAC tours. I had a combat FAC tour, and that helped me a lot to get promoted to major."

Because of their belief that pilots are promoted by infantry officers based on their ground job, they stated their concern that the Marine Corps was not promoting the best pilots but rather those who looked good on paper to ground personnel. For example, one interview participant stated, "As a matter of fact, I think one of the biggest problems in the Marine Corps is most of their best people leave early. I mean, that's what you're kind of getting at; why are they leaving?" A questionnaire respondent put it this way, "Is the Marine Corps doing all it can to keep the best people for the jobs it has? To that, I would say, 'No.' This is particularly true in aviation, where a bunch of people who have spent their lives differentiating themselves has no ability, in the Marine Corps' eyes, of differentiating themselves." When asked directly via the questionnaire, "My expectations regarding Marine Corps pilot promotions were not met," 23 percent agreed, and 36 percent strongly agreed for a total agreement rating of 59 percent.

9. Participants described concerns with the aviation bonus program.

When discussing the total compensation package Marine Corps pilots receive, it was clear they did not join the Marine Corps to become wealthy. For example, an interview participant said, "This is a service, this is a public service, I didn't join the Marine Corps thinking I was going to get rich." However, they also communicated a deep understanding that their training and education could lead to well-paying opportunities outside the Marine Corps, specifically, but not limited to, the major airlines. Pilots make more money working for the airlines, work much less, have no collateral duties, and do not deploy. For example, one interview participant said, "the guys who go to the airlines, cut your teeth for three or four years, and they are in the $180,000 per year range, working three days a week and someone else is doing your flight planning for you." These were not simply off-the-cuff remarks. Marine pilots indicated that they had conducted detailed cost-benefit analyses to weigh their career decisions. The literature review corroborated the pilots' investigative labors.[17]

The retention bonus was also brought up continuously. Many pilots discussed the fact that the bonus is only used by the Marine Corps when absolutely needed. Thus, Marine pilots, unlike their Air Force counterparts, are unable to count on receiving an annual retention bonus. One interview participant stated:

> The thing that rubbed me wrong about it (the bonus) was the Navy guys who were department heads got bonuses to the tune of 25 to 30 grand per year, and you're showing up doing the same job, and you're getting nothing. And you think, how is this fair?

This interview participant stated:

> I told Gen … (names very senior general), you're asking me to commit to you, and you're asking me to give up this chance to go to the airlines, you're asking me to give up this amount of seniority, and quality of life but your

> only willing to commit to me this little bit of money to 16 years. I told him Semper Fidelis should go both ways. The Air Force takes it (the bonus) out the 20 (years); I just thought that was insulting.

When asked via the questionnaire, "The Marine Corps uses the AVB program only when they find themselves in a retention crisis," 16 percent agreed, while 84 percent strongly agreed for a total agreement rating of 100 percent.

Recommendations

Participants in this study clearly communicated that the Marine Corps has closely related leadership and cultural issues, leading to other problems that led them to leave the Marine Corps. It could be argued that all the themes mentioned earlier stem from these two foundational issues. For example, before the drawdown, which started in 2011, the Marine Corps already had documentation that their pilots were overworked.[18] Despite this and the fact that they were reducing force size, the Marine Corps continued to maintain its operation tempo.[19] This meant more work for fewer Marines, leading to numerous problems, including increased deploy to dwell ratios and decreased operational readiness. Moreover, the Marine Corps did not adjust for this increased workload by reducing other demands on their pilots. Based on the data collected from the study, which was corroborated via the literature review, the following measures are recommended.[20] If implemented correctly, it is this writer's belief that job experiences will be more fully aligned with job expectations, which will lead to greater job satisfaction and an increase in quantity and quality of those desiring to remain on active duty.

Reduce non-pilot-related workload.

No other MOS requires the amount of continuous training and education to become competent in their profession. Unfortunately, this reality has been demonstrated by aviation mishaps, pilot deaths, and a lack of tactical proficiency leading to readiness problems. Pilots unanimously stated they were asked to do too much as fleet pilots. Allison (2010) documented this, asserting that "FMF pilots are tasked with impossible workloads." To reduce pilot workload, squadrons should add non-aviators and contractors to take over some of the ground jobs within squadrons.

Additionally, professional military education requirements should be changed for pilots. Training requirements, primarily non-aviation-related training, should be reduced or, in some cases, eliminated. Leadership needs to allow this to happen. If the Marine Corps wants to reduce mishaps, promote mission effectiveness, and create an environment in which pilots wish to remain, they should allow their aviators to focus on being pilots as their primary MOS dictates. It should not be a collateral duty, as so many in the study indicated. It is this writer's fear that even if Marine leadership mandated some of these changes, other leaders would create or resurrect programs to make their Marines work harder for their own benefit. Sometimes it takes more courage to say no to leaders' requests for more.

Reducing force size while maintaining operational tempo combine to decrease pilot readiness and retention. ***(Photo by SSgt Amanda Stanford.)***

2. Fix operational readiness.

Operational readiness problems have reduced mission effectiveness, decreased flight time, and increased aviation mishaps and pilot deaths. Pilots reported not having enough qualified people to run FMF squadrons proficiently. They also reported not having the necessary aircraft and parts to maintain operational readiness. Increasing operational readiness could be done by adding non-pilot Marines and contract support to include maintainers and professional S-shop staff. Facilitating FMF squadrons with contractors would increase operational readiness, enhance standardization, maintain corporate knowledge, and allow Marines to progress in their MOSs. Finally, a full audit of maintenance supplies must be conducted to determine what must be done to supply legacy platforms with the parts they need. If the Marine Corps is truly out of the necessary parts and supplies to maintain their aircraft, they need to reproduce them.

3. Educate non-pilot Marine Corps leadership to better understand the aviation MOS.

Pilots routinely state that ground leaders do not understand the pilot MOS and FMF squadron life demands. This leads to a fundamental disconnect causing many of the issues brought up in this study. This needs to be rectified as ground officers, specifically those within the infantry, possess considerable decision-making power. Pilots asserted that ground leaders hold incorrect and often negative views toward those in the MAW. Pilots have a working knowledge of Marine Corps infantry units as the Corps is the only Service to train its officers in basic infantry tactics. They are also the only military force requiring its FACs to be pilots. Thus, many pilots serve and deploy within infantry units. However, because of Marine Corps structure and operations, infantry officers are not afforded the opportunity to serve in FMF squadrons and know little about the demands of squadron life. Although rare, when senior enlisted ground Marines are transferred into FMF squadrons, they communicate they never knew how hard wing Marines work and how demanding life is. An additional benefit to implementing this measure would be a more knowledgeable MAGTF.

4. Fix pilot promotions.

Pilot promotions should be fundamentally changed. A pilot is tasked with becoming an expert in a highly specialized aircraft. Training a single fixed-wing pilot costs millions of dollars and approximately three years to complete. Whereas the standard ground officer receives a few months of MOS training and gets to the fleet as a second lieutenant, it is not uncommon for pilots to join the FMF as captains. Because of their extensive training, pilots agree to an eight-year active-duty commitment after earning their wings, while a ground officer has a total of a three-year active commitment. Consequently, pilots often get to the FMF as their ground counterparts are finishing their initial military obligations. This results in a pilot completing their active-duty service obligation at approximately twelve years of service, while their ground peers complete their active-duty service obligation at the four-year mark. However, pilots are promoted using criteria similar to ground officers, and MOS skill counts very little toward pilot promotions. Pilots repeatedly stated that their best pilots, including TOPGUN and Weapons and Tactics Instructor Course graduates, were either choosing to leave the Marine Corps or being passed over for promotion. It is believed they are being passed over because, while they have tremendous MOS talent and credibility, they may lack the type of fitness reports, ground jobs, or professional military education promotion board's desires. Passing over-qualified and well-respected individuals for these reasons is disappointing to the individual pilot, their peers, subordinates, and superiors, resulting in reduced trust and morale.

5. Offer a continuous retention bonus and maximize flight pay.

The Marine Corps offers sporadic retention bonuses. In 2017, they revived the bonus for the first time since 2011. This bonus was initially only offered to three communities and was subsequently broadened when the Corps started to realize the gravity of their retention problem. Whereas Air Force pilots are continuously provided a bonus to at least the twenty-year mark, Marine pilots are not. When it is offered, no one knows how long it will be accessible, and it is only offered for the duration leadership deems the pilot will commit to at least twenty years of service. This is frustrating to Marine pilots, and many consider it a cause of the Corps' egalitarian ethos. Additionally, many believe flight pay should be increased. These programs already exist and can immediately be maximized to incentivize pilots to stay in the Marine Corps.

6. Conduct exit interviews.

Pilots exiting the Marine Corps should conduct an exit interview where their anonymity is guaranteed. These interviews should be done with an impartial interviewer. The findings should be collected, analyzed, summarized, and viewed by commanding officers, headquarters Marine Corps, and those within the Corps' manpower division. Gathering and disseminating this information would allow leaders (at all levels) to implement strategies to facilitate retention. Exit interviews should not only be extended to Marine pilots but all Marines leaving the Marine Corps.

Conclusion

The Marine Corps has a pilot retention problem fueled by, among other things, leadership and cultural issues. This article listed nine thematic barriers to fixed-wing Marine pilot retention and offered six mitigating recommendations. The information relayed in this article was extracted from this author's doctoral dissertation, *A Qualitative Descriptive Study of Job Expectations, Job Satisfaction, and Retention Among Fixed-Wing Marine Pilots*.[21] The intent of conducting the study was to communicate thick and rich descriptive text as conveyed by well-respected, seasoned pilots. This allowed the author to investigate and fill gaps in the literature, thereby expanding what is known about the pilot retention problem.

Marine Corps leadership at all levels should take retention seriously. The Marine Corps will be a better prepared and more functional operating force when Marines in far greater numbers desire to stay. The Marine Corps and its Marines are too important to let this largely fixable problem go another day without being addressed.

Notes

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USMC

Cross Border Payment Systems' Impact on National Power

Nuanced payment systems could undermine economic sanctions programs

by Maj Geoffrey Irving, USMCR

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Marine Corps leaders at all levels rightfully expend much of their studies on military strategy and tactics. Throughout this continuous course of study, we become masters at our craft and concurrently come to understand that military means are a tool of last resort when a nation seeks to affect the geopolitical landscape. Far before the use of military might come tools of diplomatic, economic, and even cultural coercion. For example, Russia invaded Ukraine with a ground force, the size of which is unprecedented in Europe of the modern era. The White House's primary and only response has been economic sanctions. Thus, I argue it is helpful to better understand how military power is nested in the larger package of economic sanctions and tools that shape national-level policy.

This article will assess whether nascent Chinese alternate retail and wholesale cross-border payment systems could undermine the effectiveness of United States economic sanctions programs. The United States has enjoyed a long period of relatively unchallenged global primacy since the fall of the Soviet Union in the late 1980s. During this period of primacy, the United States has exerted its influence abroad through multiple levers of national power. The traditional framework for analyzing governmental levers of power uses the acronym DIME—diplomatic, information, military, and economic means.[1] Nations and their governments seek to influence the international stage with any means available. This analysis will

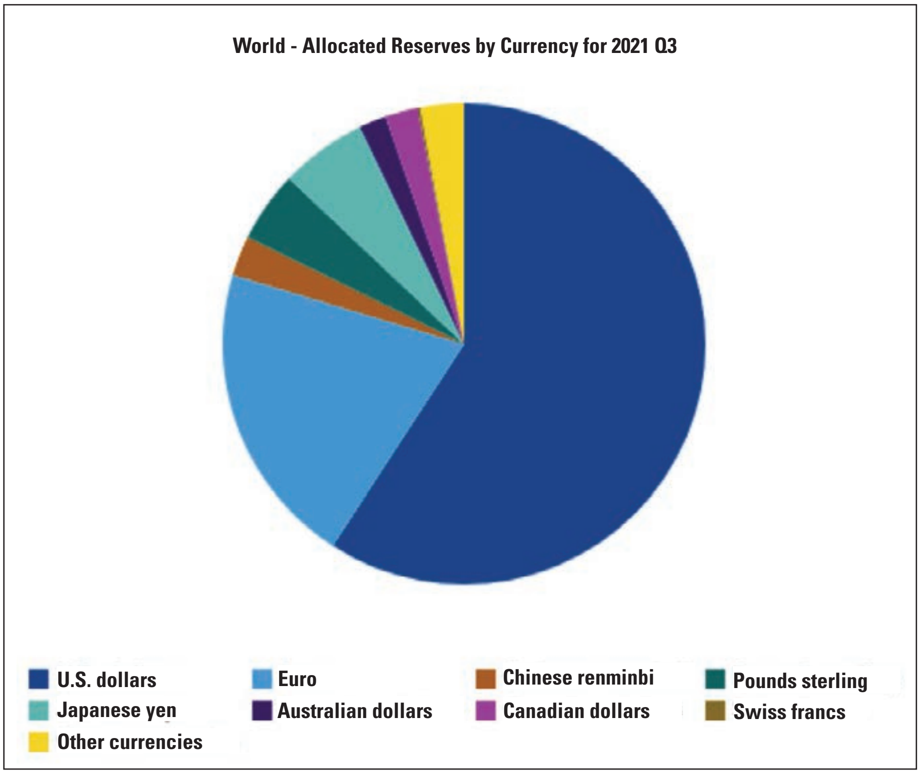

Figure 1. Distribution of global reserves by currency. (Figure provided by author.)

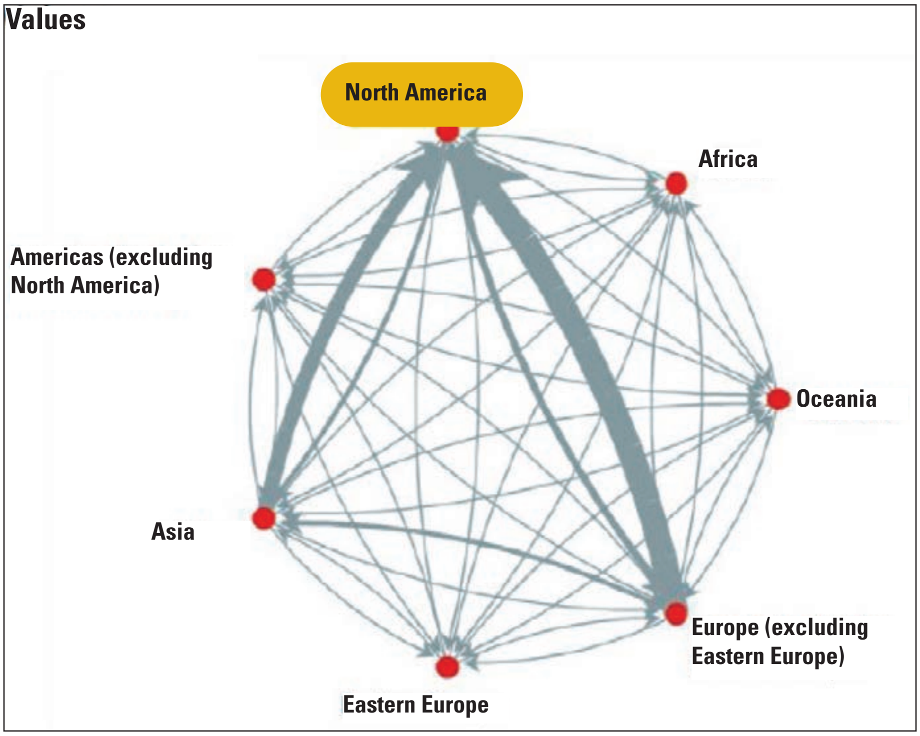

Figure 2. Value of cross-border transactions by regional corridor. *(Figure provided by author.)*

focus on the relationship between the United States' economic and military levers of power.

The United States enjoys a central role in the global economy. The United States Dollar (USD) is the most traded currency in the world and has a dominant position in foreign exchange reserves.[2] As shown in Figure 1, in the third quarter of 2021 the USD made up 59.13 percent of all foreign currency reserves, with the Euro in a distant second place at 20.48 percent.[3]

Because of the USD's reach throughout the global economy, the United States has been able to exert national power abroad through domestically promulgated regulations and laws. For example, the United States Department of the Treasury maintains a sanctions program that can financially ruin foreign actors that run afoul of U.S. political interests.[4] As shown in Figure 2, the majority of cross-border transactions are made in USD. Therefore, because the overwhelming majority of institutions that facilitate cross-border payments inevitably transact in USD, they are inevitably subject to U.S. monetary controls. Because of this reach, the United States sanctions program has had an unprecedented strength to affect foreign actors to further U.S. national interests.

Many of the transactions that U.S. sanctions programs can affect pass through antiquated cross-border payment systems like the correspondent banking network. These incumbent systems maintain the efficacy of the U.S. sanctions program because they are carried out by highly regulated entities that are intrinsically tied to (if not incorporated in) the United States.

... disruptive payment systems are entering the market and offering payment services that could allow actors to avoid U.S. sanctions controls.

However, disruptive payment systems are entering the market and offering payment services that could allow actors to avoid U.S. sanctions controls. These new entrants have the potential to erode the efficacy of U.S. sanctions and therefore reduce the U.S. government's ability to use sanctions controls to achieve international foreign policy goals. Lacking effective economic tools, U.S. policymakers may turn to other levers of national security. This article will describe both incumbent cross-border payment systems and emerging peer-to-peer rivals to the incumbent system as well as consider the effects that these emerging systems will have on U.S. sanctions programs and tools of national power, more broadly.

Existing Cross Border Payment Structures

Cross-border payments are payments where the sender and the recipient reside within two different national jurisdictions.[5] This is a simple definition that covers a complex web of different payment structures variably based upon the specific location of the payor and the payee and the type of payor and payee—including individuals, businesses, banks, financial institutions, and governments. Cross-border payments do not necessarily involve a currency conversion but often do—only adding complexity to the transaction chain.[6] Cross-border payments can be further segregated into retail and wholesale segments.

Cross-border retail payments are typically characterized by smaller transaction sizes between individuals, businesses, or governmental agencies, while cross-border wholesale payments are generally made between banks or non-bank financial institutions for their own accounts or to settle batched transactions on behalf of their customers. Whether retail or wholesale, cross-border payments follow a number of distinct and often slow and archaic payment rails.[7]

The majority of licit cross-border payments flow through the correspondent banking network, which is an arrangement under which one bank holds deposits owned by other banks (respondents) and provides payments and other services to those respondent banks.[8] Messages to credit or debit foreign accounts are typically sent through the SWIFT messaging system—a system originally introduced in 1972 by a Belgian corporation.[9] The correspondent banking network has been shrinking as a share of cross-border payments.[10] The correspondent banking network's retreat has been attributed to burdensome regional regulatory requirements that make the cost of maintaining and operating these networks commercially unappealing. As seen in Figure 3, the overall number of active correspondent banks decreased between 2011 and 2015 while the volume of payment messages increased in the same period.[11] This data shows that even as banks are shutting down active correspondent networks into specific unprofitable global corridors, the volume of payment messages is increasing and the overall value of those payment messages is steady.

A growing number of alternatives to the correspondent banking network, including region-specific interlinked payment infrastructures, single-platform payment models, and emerging peer-to-peer payment models, create a mosaic of different payment options that make it difficult to track overall cross-border payment volume and statistics. Both retail and wholesale payments move across these models, but it is worth noting that the overwhelming majority of value falls into the wholesale payments category.[12]

Region-specific interlinked payment infrastructure allows payment service providers from one country to transmit payments to another country based on specific technology partnerships. These interlinked partnerships usually grow in situations where two neighboring countries have a high volume of consistent financial transactions. An example of this is the FedGlobal Mexico Service, which allows U.S. financial institutions to send automated clearing house transactions directly to Mexican financial institutions.[13]

Single-platform payment models are characterized by a single company that has physical locations across different jurisdictions. Therefore, the single-platform provider can bridge jurisdictions internally, without the use of external

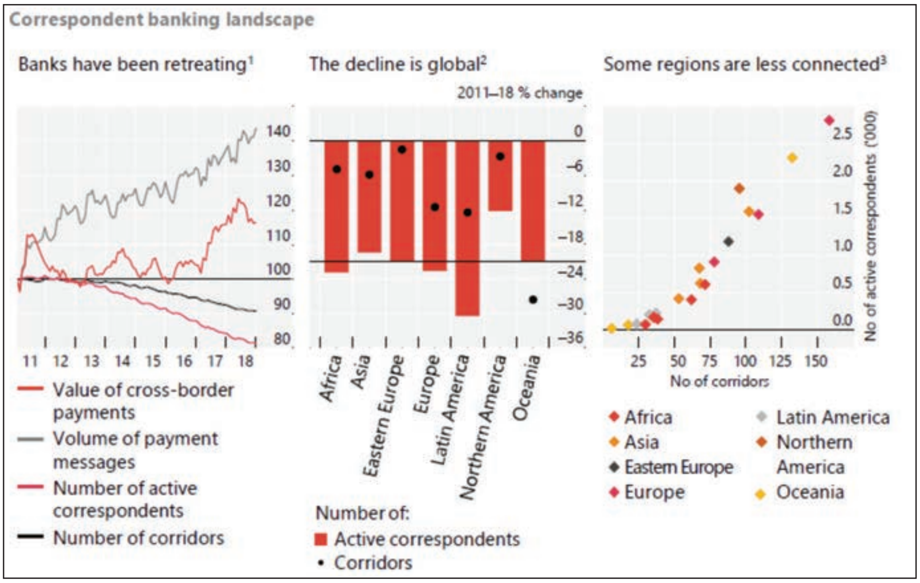

Figure 3. Correspondent banking network payment metrics (2011–2018). (Figure provided by author.)

communication platforms like SWIFT. Traditional money transfer operators like Western Union operate in this model and typically charge high fees to cover the high overhead and operational cost of maintaining a physical presence in multiple jurisdictions.[14]

Finally, peer-to-peer retail cross-border payments include many new entrants to the payments ecosystem like e-money providers, challenger banks, and various central bank digital currency and cryptocurrency projects. Peer-to-peer payment systems are new, innovative market disrupters that pose a theoretical threat to existing payment systems. However, peer-to-peer models, constitute only a minuscule sliver of cross-border transaction volumes when compared to established systems like the correspondent banking network.[15]

All the legacy cross-border payment systems are characterized by high cost (a result of onerous liquidity, compliance, and transaction costs along long payment chains), low speed (as a result of regulatory and compliance reviews and limited working hours), and limited transparency (meaning uncertainty about cost and speed as a payment message travels through the long payment chain).[16] While these payment rails are not efficient, they do pass through highly regulated entities and therefore undergo stringent scrutiny for compliance with nation-specific sanctions regulations. In essence, the inefficiency of the system is a natural result of the constellation of changing sanctions and other specific financial regulations that are baked into financial transfers. This makes the existing cross-border payment system both extremely slow and extremely difficult for a target of U.S. and European sanctions to do business in.

People's Republic of China's Retail and Wholesale Digital Currency Projects

To address the challenges of the current suite of cross-border payment options and to create alternatives to USD-dominated cross-border payment rails, many nations are experimenting with central bank digital currencies (CBDCs), which would be a peer-to-peer payment system (as described) built from the ground up to supplement or ultimately replace legacy payment systems. One of the most prominent live examples of a CBDC is the Bahamian Sand Dollar—a digital currency that found particular utility in a nation made up of disparate and remote islands that make it difficult to distribute physical currency or establish traditional banking networks.[17] The Sand Dollar is a small use case that is currently in operation throughout the Bahamas. Other larger central banks around the world are assessing similar CBDC projects.

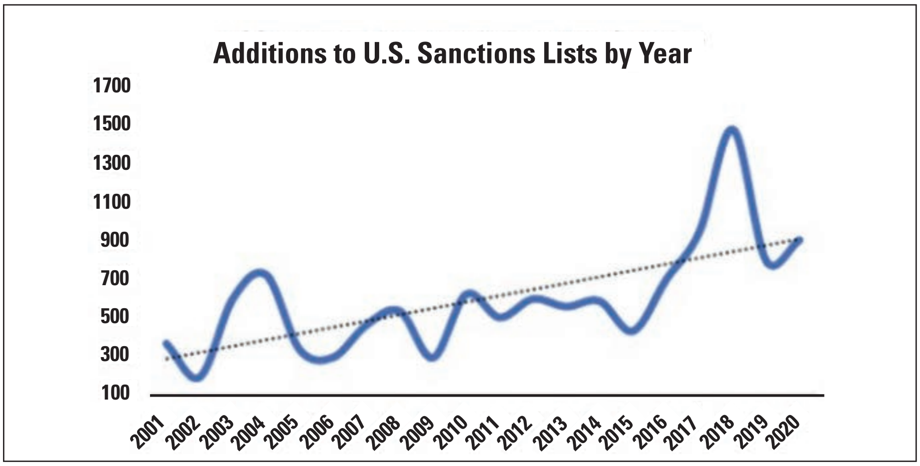

Figure 4. U.S. additions to OFAC sanctions list by year. *(Figure provided by author.)*

On a much larger scale, the People's Republic of China (hereinafter referred to as "China") has been testing and planning its own CBDC, dubbed the "e-CNY" since 2014.[18] The e-CNY has been designed in a joint venture between a number of different entities like the State Information Center of China, the People's Bank of China (PBoC), and private and quasi-private partners like Red Date Technology Co., China Mobile, and Union Pay. Red Date is a private blockchain company based in Hong Kong and is the driving force behind the Blockchain Services Network platform that is envisioned to host many e-CNY digital payment applications.[19] China Mobile is one of China's largest telecommunications providers and will provide the communications infrastructure for digital payments while UnionPay is China's Visa or Mastercard equivalent and has a dominant position in China's existing domestic digital payment ecosystem.[20] In its early stages, China's e-CNY project was meant to provide a digital equivalent to cash to the domestic Chinese consumer—a consumer base that has already widely adopted digital payment systems like AliPay and WeChat Pay.[21]

In addition to digitizing domestic retail payments, the Chinese government has explored options for attaching cross-border peer-to-peer payment systems to its e-CNY and Blockchain Services Network projects.[22] The potential use case of having a PBoC-controlled cross-border blockchain payment system that operates outside of highly regulated entities like correspondent banks is significant. A Chinese-designed and operated cross-border payment system could bring China's international partners even closer. If that payment system was able to outpace legacy systems by offering near-instant settlement and embedded verification on a blockchain network then it would also be a credible competitor to current inefficient cross-border payment systems even for non-sanctioned parties. At the very least, China's cross-border payment system would make Chinese government entities and businesses immune to the effects of U.S. economic sanctions. Payments would bypass traditional correspondent banks that absorb sanctions scrutiny and would allow Chinese wholesale transaction volume to continue unabated.

In its initial stages, China has partnered with the Bank of International Settlements and other close geopolitical partners to start building its wholesale cross-border transaction system.[23] Called the mCBDC Bridge project, or "mBridge" for short, China is partnering with Thailand, Hong Kong, the United Arab Emirates, and other jurisdictions and companies to create a more efficient cross-border wholesale payment system. In a public statement, the Bank of International Settlements described the system thusly.

> The prototype demonstrates a substantial improvement in cross-border transfer speed *from multiple days to seconds*, as well as the potential to reduce several of the core cost components of correspondent banking. It thereby demonstrates the potential of *faster and lower-cost cross-border transfers* for participating jurisdictions. As explained in Section 2, the benefits would be further increased for jurisdictions that do not benefit from a vibrant correspondent banking network due to the retreat of correspondent banks.[24] (Emphasis added.)

If China successfully implements its distributed-ledger-based, cross-border wholesale payments system, its central bank will exert operational control over both its domestic and international payment rails and therefore will be able to operate free from Western sanctions controls. This may be a secondary consideration given the fact that it will have established retail and wholesale payments systems that take seconds rather than days to settle. In a scenario where China was the subject of stringent U.S. and European sanctions, the Chinese government might find it difficult to access U.S. dollars or Euros from the West and its economy may certainly be affected by other economic tools like trade embargoes, but China's foreign cash reserves are vast, and its domestic consumption has been steadily rising since 2010 to offset any pain caused by embargoes or tariffs.[25] These characteristics will make China's economy well-fortified against foreign coercive economic measures. Further, with a foundation of economically aligned regional partners on its mBridge cross-border payment system and with a growing domestic middle-class fueling consumption, foreign economic national policy tools will be largely blunted. The U.S. government will have to search for other means to influence the Chinese government.

Recent History of U.S. Department of the Treasury Office of Foreign Asset Controls Sanctions Activity

Because the USD enjoys such a dominant position in international transactions and in central bank reserves, it has become a tool of first resort for the U.S. government. During the Trump Presidency, new additions to the Office of Foreign Asset Controls sanctions list doubled from years past.[26] The U.S. government's overreliance on monetary sanctions to execute its foreign policy has had a long-term effect of eroding the impact of specific monetary sanctions. Seeing the increasing frequency of U.S. sanctions, targeted nations and individuals have taken steps to insulate their economies and wealth.[27] A focus on alternative cross-border payment systems was the resulting insulation.[28]

As seen in Figure 4 (on previous page), the past decade has seen a steady increase of specially designated individuals and nations added to the Office of Foreign Asset Controls' sanctions list. While this chart shows the extreme spike in sanctions activity under the Trump administration, it does not include other economic measures that the administration brought to bear, including export controls, import restrictions, foreign investment reviews, tariffs, and novel measures like proposed bans or forced mergers of Chinese mobile apps.[29]

Although the recent spike in new sanctions additions has largely been targeted at Chinese government entities and companies, Russia has long been the United States' primary sanctions target—with new sets of sanctions levied in response to every post-Cold War Russian foreign adventure. For example, Russia's 2008 invasion invited new U.S. sanctions. Russia's 2014 annexation of Crimea invited more U.S. and EU sanctions. Furthermore in response to Russia's 2022 troop buildup and saber-rattling on Ukraine's western border, the United States is again threatening the "mother of all sanctions."[30]

These historical examples have done little to deter Russian action, but they are at least in part responsible for Russia's economic stagnation over the same period.[31] Other nations like China, seeing the negative effects that international sanctions can have on even a large and distributed economy like Russia's, naturally look to alternatives to the U.S.-dominated cross-border payment systems to minimize future impact. Further, the United States' heavy-handed use of sanctions has made it exceedingly clear that initial U.S. retaliatory action to offending geopolitical behavior by international actors will inevitably be sanctions.

Other nations like China ... naturally look to alternatives to the U.S.-dominated cross-border payment systems to minimize future impact.

Conclusion

Legacy payment systems are slow, unpredictable, and could fall behind in the competition for market share of both retail and wholesale cross-border payments if they fail to adapt to new technology. These legacy systems have done little to mitigate the inherent inefficiencies of the correspondent banking network and as a result, affiliate banking agreements have slowly shuttered due to commercial infeasibility. These cross-border payment networks are built upon an economic and monetary infrastructure underwritten by the USD. Because of the Dollar's centrality, the U.S. Government has had plenary authority to sanction targeted nations and individuals with significant effect. However, as the correspondent banking network recedes and foreign competitors to wholesale cross-border payments networks like China's mBridge program emerge, there is significant potential that the United States' ability to effectively sanction foreign actors will wane. There is little risk that mBridge will emerge as a significant competitor to the correspondent banking network in the near future. However, if the incumbent systems fail to innovate speed and adaptability into their processes, the shift away from SWIFT messaging across correspondent banking networks is feasible.

Without the ability to sanction foreign actors effectively, the U.S. government will have very few remaining levers of national security. With only diplomatic or military tools left at its disposal, the U.S. government would very quickly have to choose between issuing empty statements of condemnation or engaging in military brinksmanship. Economic sanctions have long been an effective political tool for a nation to "do something" without risking military conflict. Without the middle path that effective economic sanctions provide, the road to conflict could become much shorter. Military leaders should understand the impacts of the erosion of economic tools and prepare for an increased workload on the international stage to project American power.

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USMC

2021 Gen Robert E. Hogaboom Leadership Writing Contest: First Place

Slapping the King

The case for humble leadership

by Maj Dilan M. Swift

> *"Do you wish to rise? Begin by descending. You plan a tower that will pierce the clouds? Lay first the foundation of humility."*
> *—Saint Augustine of Hippo*

>Maj Swift is an Infantry Officer with the 4th Light Armored Reconnaissance Battalion. He ended his active service as Weapons Company Commander, 3d Battalion, 5th Marines, and is an active member of The Warfighting Society.

The ancient Babylonians practiced a strange ritual during each New Year's celebration. The King, festooned in royal garb, stood outside the city walls, alone before a statue of the god, Marduk, who the Babylonians believed had granted the King his position of power and leadership. Beneath the watchful gaze of his people manning the high walls a high priest approached. He stripped the King of his vestments and violently slapped him across the face. Having humiliated the King in front of his people, the high priest then ordered the King to kneel beneath Marduk, recant his sins, and reaffirm his dedication to his subjects.[1] While this ritual had many purposes, some of which historians have yet to decipher, there remains one purpose chief among them: elevating humility as an imperative for leadership.

While Marines will instantly recognize the leadership traits associated with the Corps' most famous person (JJ), verb (TIE), and subsequent noun (BUCKLE), humility is a stranger.[2] The Corps' chief mnemonic device is seemingly inane, yet the traits it stands for are used to provide a leadership framework young leaders can fall back on. While helpful, stringently following these traits without a moderating leadership principle can see leaders down a path of overconfidence, presumptuousness, and prey to cognitive bias. The infamous JJ DID TIE BUCKLE needs an update. Our leadership principles need one final trait, humility, to bind them together and forge leaders into eternal students capable of adaptation, collaboration, and critical decision making.

A Quick History

It is no coincidence that *human* and *humility* look and sound so similar. Both words originate from the Latin word *humus*; literally "earth" or "mud." From *humus,* to *humilis*, to *humilitatem*, and then *humility* we can follow a word as it rises from being "of the earth," to "insignificant," to simply "modest."[3] Humility, born of modesty, this final "quality or state of not thinking one is better than others" is, unfortunately, in increasingly short supply yet is in dire need as leaders ascend hierarchical organizations.[4]

Saint Augustine of Hippo, proselytizer of humility. ***(Photo:Wikimedia Commons.)***

"Perfection is impossible without humility. Why should I strive for perfection if I am already good enough?"
—Leo Tolstoy

Beware Success

Humility guards leaders against hubris and overconfidence. Contemporary psychological research reinforces how critical a healthy dose of humility is to curtail the deleterious effects of hierarchical success. Professor Dacher Keltner of the University of California, Davis calls this conundrum "The Power Paradox."[5] His research has found that while leaders typically gain success, and thus power, through traits and actions that "advance the interests of others," those very traits fade "when they (successful leaders) start to feel powerful or enjoy positions of privilege."[6] The oft-cited refrain, *power corrupts*, has been born out in Professor Keltner's studies, where people rise "on the basis of their good qualities ... their behavior grows increasingly worse as they move up the ladder."[7] At a certain level, after great success, the traits they once needed are no longer useful or relevant.

Professors David Owens and Jonathan Davidson, on the other hand, call it the "Hubris Syndrome."[8] It is the same malady. As leaders climb the hierarchal ladder, success after success, the very positive traits that enabled success strip away one by one. Instead, they are replaced with leadership traits and characteristics far more associated with hubris. Owens and Davidson view, "Hubris Syndrome as developing after power has been held for a period of time" and diagnose it as an actual change in a leader's psychological personality.[9] While not every leader becomes consumed by hubris, Owens and Davidson argue that routinely successful leaders are more likely to develop negative leadership traits and are subsequently "resistant to the very idea" that they have changed at all.[10] Such leaders see themselves as successful and feel no imperative to adapt, change, or modify what they see as behaviors that led to their very success in the first place. Clearly, this research is concerning in an organization as hierarchical as the Marine Corps and DOD writ large where leadership decisions can have drastic implications.

Fortunately, while the research concerning organizational and hierarchical success paints a dark picture, it is not deterministic. In fact, the deleterious effects of power need not be. Instead, if acknowledged, addressed, and prioritized in organizational leadership training and education they can be curtailed entirely.

Marduk, the Babylonian god who demanded humble leadership. ***(Photo: Wikimedia Commons.)***

"Humility is the solid foundation of all virtues."
—Confucius

Recommendations

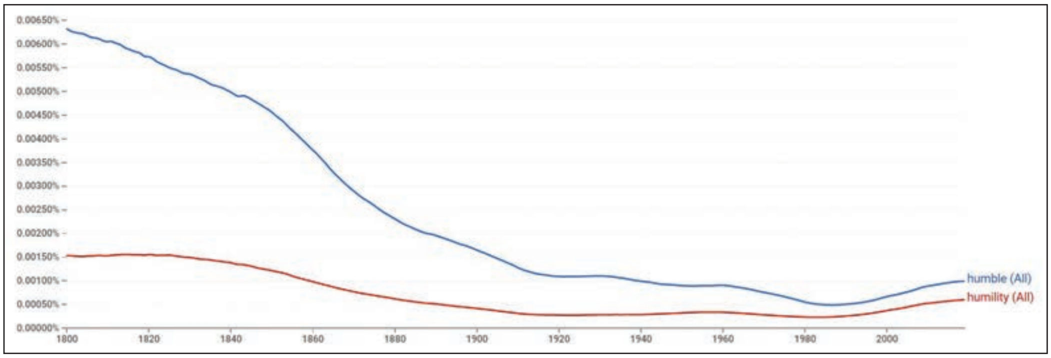
Introducing humility into Marine Corps leadership culture and education may seem an unnecessary challenge; another principle, among many, that is not fully embraced across the force. Yet, humility is unconsciously practiced daily and embedded into our organizational culture. Humble leadership simply needs to be acknowledged and properly framed for leaders to understand the centrality of humility to personal development, leadership success, and organizational health. Leaders can:

1. Reflect: Leaders are Thinkers

Much as our greatest military leaders read, many also wrote. They reflected on their learning, interactions, and experiences to develop a deeper understanding of their environments, enemies, and, most importantly, themselves. GEN Ulysses S. Grant exemplified this approach. His ability to reflect on his "own behavior" enabled him to "think clearly about command responsibilities" and be honest with himself.[11] Furthermore, Grant's constant self-reflection consistently benefited his strategic thinking. It slowed down his decision making. It ensured pride did not "cloud the process."[12] Slowing down, reflecting, and thinking allow leaders to check themselves, question biases, and interrupt flawed thinking. Type or write a rolling journal. Write letters to friends, family, and mentors. Take notes in books and articles. Think, and think about thinking. Reflection is free, it merely requires prioritization and time and is crucial for leadership growth and excellence.

2. Practice Graciousness and Transparency

Some of the gravest casualties of military hierarchy and discipline are gratitude and transparency. Subordinates do as they are told because that is what they are expected to do. Similarly, outside of operational restraints, withholding information can be used by leaders as a tool of influence and authority. Yet, practicing graciousness and transparency can lead to respect, understanding, and buy-in. Simple practices, like saying thank you, recognizes individual contribution and imbues a sense of value



"Humility" and "Humble" Ngram as generated by Google Books. An Ngram is a chart depicting the prevalence of historical word usage in publicly available books, speeches, and articles. *(Photo: Google Books Ngram Viewer.)*

in subordinates. Similarly, practicing radical transparency with a team reveals a leader's humanity, warts and all. Paired with competence and integrity, this builds trust across an organization. Humble leaders make these practices a habit and build environments around them where it is safe to constructively fail, embrace uncertainty, engage in dialogue, and innovate.[13] Those who prioritize graciousness recognize the contributions of others while vulnerable leaders connect with their teammates on a more fundamental, human, level. Both humility-based leadership practices generate buy-in, fidelity, and ownership across the organization. They can be easily practiced with a handshake, a thank-you card, a personalized note written on a 3x5 card, or a meaningful "rank on the table" conversation between professionals.

3. Practice Selflessness: Leaders Eat Last

From time immemorial Marine leaders have been taught the "Leaders Eat Last" principle. In fact, it is almost comical to watch the awkward shuffle of Marine officers and staff non-commissioned officers during meals. Each leader jostling to be last in line at the chow hall or to serve each other food during a warrior's meal after the junior Marines have taken their fill. This culture of servant and selfless leadership is correlated to what Professors David Effelsberg, Marc Solga, and Jochen Gurt describe as manifestations of "transformational leadership."[14] While most Marine leaders who eat last are not transformational leaders, through these authors' studies, and many Marines' anecdotal observations, this style of leadership leads to team members transcending self-interest for organization-wide benefit. Simply put, selflessness begets commitment and sacrifice at all levels in an organization. Whether it be leaders eating last at the field mess or merely demonstrating servant-based leadership in garrison, selflessness should be embodied by leaders at all levels and reinforced and encouraged throughout leadership development pipelines as a key element of humble leadership.

Why Not Humility? The Myth of the Mask

Yet, for all its advantages, humility is not one of the core leadership traits made famous by the Corps' notorious mnemonic device. Indeed, detractors would argue that the embodiment of humility carries great risk. It runs counter to the oft-cited "Mask of Command," the practice of creating psychological distance between the leader and led. By separating these groups, the mask enables impartial and judicious leadership. More importantly, it reinforces the hierarchical norms of military culture, a cornerstone of martial discipline and effectiveness. Finally, this mask not only protects decision making from emotion but enables two traits celebrated in Marine culture: decisiveness and courage, both critical in the face of grave risk. For some, humility is not the answer.

Often, however, the mask of command merely protects doubtful leaders from humiliation, a risk fundamental to authentic leadership. In fact, while decisive and courageous, some of our greatest leaders routinely risked failure and humiliation. This only furthered their success. Through their humility, they set the conditions to learn from their mistakes, grow as leaders, and foster unity and cohesion. Through their authenticity and competence, their men knew them, and in some cases, loved them. Simply put, discarding the mask allows for the abasement of pride and, subsequently, true growth as a leader.

Conclusion: The Humble Leader

Humility is the secret sauce of leadership. If we reflect and think deeply, we can recognize humility as a cornerstone of all great leaders. Humility keeps leaders calm in the face of calamity by providing reflective context. Humility keeps leaders grounded when they are high, by reminding them of how they succeeded in the first place, to whom they should be grateful, and of what to be wary of. A healthy dose of humility slows us down, helps us think, encourages us to be open to new and innovative ideas, to grow and rectify our blind spots and weaknesses, and to listen across an organization. Humility tempers over-confident enthusiasm as it strengthens judgment. It humanizes leaders and creates conditions for effective and adaptive teams. It is the critical shadow leadership trait that enables the reflective development of all others.

While the Babylonian New Year's Ceremony was indeed strange, the ritualistic slapping ended with a particular exhortation for the king's renewed and awakened leadership. After thorough humiliation in front of his subjects and upon receiving the king's affirmations, the high priest would respond in kind. He would affirm to the king; yes, the king had indeed been a just leader who had done right by his subjects. Yes, he had maintained order and peace. But most importantly, yes, through his willingness to be humiliated, the king had demonstrated his worth and right to his title, responsibilities, and burdens of leadership. We may not be kings today, but Marine leaders bare just as great a responsibility for the lives and welfare of our Marines and sailors. We should not need a humbling slap to remind ourselves of this honor.

Notes

1. Jennifer Laing and Warwick Frost, *Royal Events: Rituals, Innovations, Meanings*, (Milton Park: Routledge, 2017).

2. JJ DID TIE BUCKLE is the Marine Corps' leadership mnemonic device. It stands for Justice, Judgment, Dependability, Integrity, Decisiveness, Tact, Initiative, Endurance, Bearing, Unselfishness, Courage, Knowledge, Loyalty, and Enthusiasm.

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11. Michael Hennerlly, "The Reflective Leader: A Major Lesson From the Memoirs of U.S. Grant" *Foreign Policy*, December 1, 2017, https://foreignpolicy.com/2017/12/01/the-reflective-leader-a-major-lesson-from-the-memoirs-of-u-s-grant.

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2021 Gen Robert E. Hogaboom Leadership Writing Contest: Second Place

Be Curious

Enhancing leadership through curiosity

by Maj Andrew D. Messenger

>Maj Messenger is an Air Command and Control Officer currently serving as the Direct Air Support Center Division Head at Marine Aviation Weapons and Tactics Squadron One. He is an Expeditionary Warfare School graduate and a Weapons and Tactics Instructor.

There is a great scene from the hit series *Ted Lasso*. It begins with a challenge at the oft frequented local Richmond pub. Ted sticks his neck out to "stick it" to the ex-husband of the current club owner, who is, shall we say, a bit of a jerk. The challenge is a game of darts, and the match is all but lost when Ted begins a seemingly nonsensical rant about his childhood. The details of this scene will resonate with *Gazette* readers who also enjoy watching the mustachioed American wade his way through the nuances of life across the pond. For those unfamiliar, the lines that Ted—played by actor Jason Sudeikis—delivers with impeccable timing are below:

> Guys have underestimated me my entire life and for years I never understood why—it used to really bother me. But then one day I was driving my little boy to school, and I saw a quote by Walt Whitman, it was painted on the wall, and it said, "Be curious, not judgmental." I like that. (Throws triple 20). So I get back in my car and I'm driving to work and all of the sudden it hits me—all them fellas that used to belittle me, not a single one of them was curious. You know, they thought they had everything figured out, so they judged everything, and they judged everyone. And I realized that their underestimating me—who I was had nothing to do with it. Because if they were curious they would have asked questions. Questions like, "Have you played a lot of darts, Ted?" (Throws triple 20). To which I would have answered, "Yes sir. Every Sunday afternoon at a sports bar with my father from aged 10 until I was 16 when he passed away. Barbecue sauce. (Throws triple bullseye to win)."[1]

Please excuse the long quote—justice is not as sweet without context. If you have a pulse and a soul maybe you got goosebumps reading that. I sure did while watching it unfold. In this day and age, most things enter and exit our brains at hyper speed. It is only when the emotional sides of our brains are lit up that events form lasting and powerful memories. For me, this scene was one of them. There is something about the underdog taking down a bully and serving justice that is so rewarding to watch. A strong argument to be made as to the reason for this—especially in Marine circles—is that we all want to be the hero. The hero is a leader that exhibits strength in dire situations. Now, Ted was just playing darts, but that scene is a microcosm of life in the Marine Corps as a leader. Since we are all leaders in the Marine Corps, the lessons espoused from this scene span across the ranks.

Gen John A. Lejeune captured it best stating,

> The young American responds quickly and readily to the exhibition of qualities of leadership on the part of his officers. Some of these qualities are industry, energy, initiative, determination, enthusiasm, firmness, kindness, justness, self-control, unselfishness, honor, and courage.[2]

Perhaps this quote was the impetus behind the leadership traits. The traits are laudable, but at the end of the day, the most important thing about being a leader is getting others to follow you. It makes sense to Marines. In the chaos of battle, there needs to be a voice that rises to the top and compels men and women to act and act decisively. How do you do that? Be curious.

In the chaos of battle, there needs to be a voice that rises to the top and compels men and women to act and act decisively. How do you do that? Be curious.

I doubt there are many Marines that would question the sentiment that first and foremost the Marine Corps is a people organization. We do more with less and put the onus of innovation and mission accomplishment on the talented men and women that wear the cloth. It is a special thing to wear U.S. Marines on your chest and something we all take pride in—in a unique way from the other Services. I remember an instance at Officer Candidate School when I saw two sergeant instructors working out in a random field with old rusty weights. I was equal parts proud to be a part of the Corps (with a full respect for the fact that Chesty himself probably pumped with those weights) while terrified of the future and what I had gotten myself into. This instance and others like it, like marching at the cyclic rate across the bridge to Bobo chow hall, form the bedrock of what it means to be a Marine. Shame they took that bridge down, but I am sure they have found other ways to make Officer Candidate School the best-worst experience ever.

On a balmy morning at Camp Barrett in Quantico, I had missed a belt loop while dressing for formation at The Basic School. Out of nowhere, I felt my belt loop getting tugged at. I looked over my shoulder to see The Basic School staff platoon commander (SPC) appear out of thin air. We locked eyes, nothing was said other than maybe an "aye sir," and life went on. My SPC could have ignored it or chewed me out, but instead, he chose to gently let me know that I was better than that and he expected more. I'll be damned if I've ever missed a belt loop since. I hate that I think of my SPC every time I route my MCMAP belt through my trousers, but I guess there are worse things. The point is, that my SPC was a great leader, and I have often reflected on certain situations and wondered how he would handle them. Obviously, an SPC should be a great leader given their influence on the officer population of the Corps.

With the small size of the Marine Corps, every one of us that wears the uniform has just as much of an influence, whether it is obvious or not. This influence manifests in a myriad of ways. It can be through actions (how you carry yourself) or words (what you say or fail to say). Maybe it is an intangible touch on a Marine's shoulder to ask them how things are going at home or a kneecap discussion about life goals. Whatever the form, what you say and do at any rank and in any leadership capacity matters.

Okay, be curious, not judgmental. How do we as leaders in the Marine Corps interpret that? I full-heartedly believe that if every leader in the Marine Corps could carry this with them and internalize it, we would have better retention and less toxic leadership. The impact that we all have on each other with our actions and words is immeasurable. For our time in uniform, sure, but in life as well. It does not matter if they were a peer, subordinate, or senior, when people have said things to me that fired up my amygdala, I remembered. Luckily for me, most of it has been positive, but I doubt every Marine is so lucky. Some of the tidbits include: good leaders question everything, sweep out the sheds, lead from the middle, make other leaders, bloom where you are planted, there is no left sock, seek initiative, be a good dude, I am proud of you, we need you, good presentation. I will spare the negative statements, but those stick with me as well, as I am sure the readers can attest. I will say, any time I have wanted to get out of the Marine Corps it has been because of the actions or words of leaders I thought (and hoped) were better.

As luck or divine intervention would have it, as this article was in draft form (the last day of the contest), a LTC Dietzman dropped an unrivaled parallel in my lap. At the time, I was attending the Maritime Staff Planner's Course at Naval Base Point Loma. He was speaking about adult learning. It was a primer for the course to get the students in the right frame of mind. In his class, he discussed the Buddhist concept of Shoshin. It goes like this, "Shoshin is a word from Zen Buddhism meaning 'beginner's mind.' It refers to having an attitude of openness, eagerness, and lack of preconceptions when studying a subject, even when studying at an advanced level, just as a beginner would."[3] This concept resonated with me in a dramatic way. Most of us have been exposed to the idea of cognitive bias. If we believe something to be true or false, we are likely to look at a problem through that lens. Likewise, if we as leaders fail to see the uniqueness in every single Marine, we may fall into the trap that everyone is exactly as they appear on the surface and thinks just like us. But if we are curious, we can remove the veil and see things for what they really are. I will use myself as an example.

I will let you (and any of my future Marines I may be privileged to lead in the future that read this article) in on a secret: I am my harshest critic. The space between my ears comes up with some terrible things at times, completely opposite from some of the wonderful things people have told me throughout my life. My internal dialogue sometimes sounds like this: *why did I say that? Everyone else is way smarter than me. I'm in over my head. I need to be a better father and husband. I wish I wasn't wearing this shirt!* You get the idea. I torment myself. It is not just my dialogue, I judge my daily interactions with people and how I perform during certain events, like a presentation for work for example. It is never good enough for me even if people tell me I did a good job. I do not know why I feel this way, but I also do not think it is unique to me. If you have ever been in a class where the instructor is pulling teeth to get student participation, it is either because the class is boring, or it is thought-provoking and people are afraid to put themselves out there—for fear of being judged. I participate in those classes and do just fine, on the surface, but on the inside, I question everything. For something as small as a class introduction, I have to pull my heart out of my throat and take a few deep breaths before it is my turn. My thought is that I feel this way because the stakes are high as a service member in the Marine Corps. We deal in people's lives, the very same people that will answer the call and be expected to perform at a high level in

Whatever the form, what you say and do at any rank and in any leadership capacity matters.

combat. The man or woman to our left and right. Failure is not an option for any of us from private to general, but we all falter at times.

I care deeply for my Marines, my job, and my performance. I never want to be looked at as someone that is not carrying their weight. But I had a moment recently where my loyalty to my profession faltered—if only just to me. I had been dealing with family issues with my sister, my second daughter was born, and I suffered a back injury requiring an ER visit. When it rains, it pours. I did not want to feel the way I did, but I wondered if Marine Corps life was for me anymore. As I ascended the stairs to the office all of it went away—sort of. We in the Marine Corps have an uncanny ability to compartmentalize and focus on the task at hand. Things started to shape up as time healed the initial whiplash that took place from the injury and my daughter settled into a more manageable routine, but I wondered if my colleagues noticed the fatigue on my face. The fatigue of life, and then I began to wonder how many Marines walk their duty station halls with family issues on their mind or trauma from past experiences, and I realized something important. We are all doing our best to deal with the complexities of life while also juggling permanent change of station orders, parenthood, being a son or daughter, a sibling, or a friend. It is hard. It has taken a few pages to get here, but finally, we have arrived at the point of this article. You never know what people have going on in their lives, find out, after all—we are a people business. Uphold the standard, sustain the transformation, but be curious, not judgmental.

Notes

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MARINE CORPS ASSOCIATION
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2022 LtCol Earl "Pete" Ellis Essay Contest

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In an essay of 2500 to 3000 words, answer the following question:

Loitering munitions, semi-autonomous drones, and cyberspace operations are changing the character of war in the 21st century. How does this change drive a new approach to combined arms and how can the MAGTF retain a competitive advantage in the future operating environment?

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Contest is open to all Marines and Friends of the Corps.
Participants associated with the *Gazette* editorial advisory panel may not compete.

2021 Gen Robert E. Hogaboom Leadership Writing Contest: Honorable Mention

Responsibility and Fault

The weight of leadership

by LtCol Brian J. Wilson

"The sort of words a man says is the sort he hears in return."[1]
—Homer, Iliad

>LtCol Wilson is an Infantry Officer with combat tours in both Afghanistan and Iraq. He is currently serving as a Planner at the Marine Corps Warfighting Lab.

In the chilly desert spring of 2006, a young rifle platoon commander spent the better part of three days planning his unit's first vehicle-mounted patrol through Ramadi, Iraq—the sprawling capital of the Anbar province and the nation's hotbed of a raging insurgency. He checked and rechecked intelligence reports and conducted a detailed map and imagery study. He attended debriefs of relevant previous patrols and performed physical reconnoiter by riding along with adjacent units transiting the general area to be patrolled. He attempted to do all the preparatory actions he had perfected during training in the hills of Quantico, VA, the blackwater swamps of eastern North Carolina, and the wind-whipped high desert of Twentynine Palms, CA. Yet, after all the orders had been issued and the pre-combat inspections long completed, four body bags held the remains of men he led while another clung to life in the back of a dust-covered helicopter racing east to a regional trauma center. Responsibility for their injuries would be the young officer's to bear for the rest of his days. He moved on, carrying the questions, the confusion, and, of most consequence, the fault.

The Marine Corps defines leadership as, "the sum of those qualities of intellect, human understanding, and moral character that enables a person to inspire and to control a group of people successfully."[2] Marine leadership education primarily focuses on the application of effective principles and techniques. Emphasis is placed on the organization's leadership philosophy and structural design to a lesser extent. However, the lasting negative implications of leading on the battlefield are rarely addressed. Subsequently, bound by conflated definitions and an illogical model of cause and effect, Marine leaders often unjustly bear the burden of fault. When the smoke clears, many of the Corps' leaders are ill-prepared to march forward under the weight of leadership in battle.

Understanding and reframing the topic of fault centers on the concepts of authority and responsibility. Authority is the power to influence or command thought, opinion, or behavior.[3] Responsibility is the liability to be called to answer, account for, or be legally reviewed.[4] Early on, Marine leaders learn that authority must be delegated while responsibility absolutely cannot be. The basis for that lesson is rooted in Department of the Navy regulations, which explains that "the commanding officer may ... delegate authority to subordinates ... such delegation of authority shall in no way relieve the commanding officer of continued responsibility for the safety, well-being and efficiency of the entire command."[5] The regulation continues by explaining that, "The responsibility of the commanding officer for his or her command is absolute," and "The authority of the commanding officer is commensurate with his or her responsibility."[6] The regulation also explains that the title of commander applies to all those serving as officers-in-charge of units or standing duty as direct representatives of a commanding officer. Even in its regulatory-based accuracy, the notion of transferal of authority (but not responsibility) has challenging by-products in a real-world application.

What Is Said Versus What Is Meant

The authority, and chiefly the responsibility, of commanders is inextricably linked to accountability, both in the success and failure of a unit. Accountability is when a person is subject to giving an account or being answerable.[7] As students in The Basic School, Marine officers are inundated by the adage that *a platoon commander is responsible for* *everything the platoon does or fails to do*. *MCWP 6-11*, *Leading Marines,* provides the institutional underpinning for this ubiquitous sentiment by boldly professing, "How Marines perform will depend on the kind of leadership they have, by the example and courage demonstrated by their leader."[8] The publication further emphasizes the notion saying, "A unit led by an able and aggressive leader who commands respect because he set the example and demonstrated courage and confidence will perform any task asked of them."[9]

Conversely, the document makes little to no references to possible inverse outcomes in unit performance. Based on that key omission, one could conclude that poorly performing Marines or unit failure is exclusively indicative of some leader deficiency. That is often the exact conclusion reached by Marine leaders reacting to failures occurring under their charge. Their deduction could be correct, as a direct correlation between failure and their performance or competence may exist. On the contrary, it is likely that in many situations no correlation exists. Without qualification, the ideas represented by definitive and ideal concepts and statements such as those in *Leading Marines,* create rigid rules that leave little room for necessary exceptions to account for reality.

Beyond the omission of alternate and negative outcomes in performance, or the specific association of leadership on those events, the topic is void of a major reality. Leaders, while wielding significant influence, only control certain elements of a multilayered cause-and-effect equation, which governs outcomes. The equation consists of endless cycles of preparation, circumstances, actions, reactions, and chance. Of primary significance for leaders on a battlefield, as former Marine General and Secretary of Defense, James Mattis often reminded his forces, "the enemy gets a vote"[10] by deciding key elements of engagements, which significantly influence the outcome. Not only does the enemy get a vote but so too do the myriad of other influences that impact the outcomes such as weather, and emotional, psychological, and physical health. Presently, Marine leadership models view cause-and-effect interactions as linear calculations, where a leader's input sequentially drives outcomes. The equation is:

A + B + C = D

- A: The subordinate or unit being led
- B: The task or mission
- C: The leader's influence
- D: The desired outcome, objective, or end state

The equation lies at odds with a leader's true sphere of influence and the factors that affect it. Leaders have considerable responsibility for preparation, mitigation, and appropriate reactions. However, "war is hell," and even leadership executed perfectly rarely produces perfect outcomes. On a battlefield, imperfect outcomes frequently translate into young men and women murdered by a determined and oftentimes simply lucky enemy. It is incorrect to view war as governed by individual actions or decisions at a single place or in time. *MCDP 1*, *Warfighting*, communicates an appropriate message on the realities of combat, explaining that war is a series of non-monolithic interactions between countless independent yet interrelated decisions and subsequent actions simultaneously.[11]

> ***"Subordinate leaders at the lowest levels enforce load discipline to ensure that Soldiers do not voluntarily carry excess weight."***
> **—Army Techniques Publication 3-21.18, Foot Marches**

What Has Been Forgotten

A juxtaposition of the words responsible and fault reveal a key distinction in definitions:

- Responsible: liable to be called to account for.[12]
- Fault: responsibility for wrongdoing or failure.[13]

Defining fault by using the word *wrongdoing* creates with it a distinct connotation. The failure of a Marine or unit cannot always be proceeded by the wrongdoing of a leader. Yet, Marine leaders are conditioned to operate in extremis, without regard for this underemphasized fact. Accordingly, many Marine leaders link overall responsibility with unjustified fault. Context of the chaotically dynamic and often violent situations in which Marine leaders carry out their duties is obstructed when the word wrongdoings is not fully considered.

A more realistic formula must be used to accurately educate the Corps' leaders on navigating complex scenarios. In the simplified and idealistic equation of A + B + C = D, the values of A (the subordinate or unit being led) and B (the task or mission) are constants, with little impacting the values once they are set in the formula. The value of D (the desired outcome) ties directly to the inputs of C (the input of the leader) more than all others. If the formula does not result in the value of D equaling the desired outcome of B (the task or mission), the equation fails based on the input of C: the leader. The problem with this representation lies in the gross oversimplification of the factors present in a wartime Marine leader's cause-and-effect scenario. A more realistic equation would include a minimum of three other factors, such as:

- E: The enemy's "vote."
- W: Environmental and human factors such as weather, climate, hunger, and fatigue.
- X: Black swan events: events that are radically rare, have an extreme impact, and are seemingly predictable in retrospect, though they were not.[14]

The addition of these factors adjusts the equation to:

$A\,(E + W)^{X} + B\,(E + W)^{X} + C\,(E + W)^{X} = D$

The sum of the enemy's vote and the environmental factors magnifies exponentially by any black swan events and then multiplies each of the original factors in the model. X (the black swan) will not always be present, but one cannot discount the probability of its impact should it be, as it can serve as a devastating spoiler. The challenge in the updated equation centers on the leader having little capacity to control or influence the values of factors E, W, or X. Additionally, there is a limited ability for the leader to predict the occurrence or intensity of those inputs—specifically the black swans. Further still, the leader is restricted in his or her ability to proactively mitigate or react to those new factors. Simultaneously, those factors have a considerable direct influence on the values of A, B, C, and most importantly but indirectly, D—the outcome. It is unreasonable to place sole responsibility for a negative outcome on the leader.

What This Is Not

Most Marines universally receive the suggestion of removing a leader's responsibility for failure as blasphemous. That reality is rooted in the incorrect interrelation of burden and responsibility. Viewed through a traditional lens, this argument could be perceived as an attempt to relieve leaders from blame. It is not. This is not a conversation about blame, but one focused solely on the appropriate application of responsibility. The goal is not to remove all fault, as doing so is impossible. Humans are imperfect, thus, leaders will always harbor fault centered on those imperfections, even if no one else knows of the shortcomings. The goal should be to develop leaders who are able to execute the correct appropriation of fault by educating them on what fault is and where it lies. Specifically, Marine leaders must improve the ability to identify how fault relates to responsibility, both directly and indirectly.

LCpl Jonathan D. Boone (left) and then 1stLt Brian J. Wilson (Right) of 3d Plt, K Co, 3/8 Mar prepare for a patrol outside the Government Center in Ramadi, Iraq, on 16 May 2006. (Photo by Cpl Joseph Digirolamo.)

What Matters and What Can Be Done

When forced, I have attempted to explain my truth by telling people my hands are covered in the blood of those five Marines from Ramadi, but I am the only person who can see the red dripping from my palms. I was their platoon commander and am wholly responsible for all they did and failed to do, and what happened to them. Fifteen years passed before a conversation planted a seed that forced me to reconsider the myriad of factors that occurred deadly morning. Though I should and do bear complete responsibility for the deaths of four men and the serious injury of a fifth, much of the fault that has burdened me for most of my adult life is perhaps not mine alone. The equation was not simple. The enemy exercised his vote by choosing the time, location, and mechanisms of engagement as he launched a complex ambush. The rarity of rain in the harsh, dry desert added the predictable but impactful environmental factor of weather. The illusive and anomalist black swan came from concrete interference with electromagnetic waves and erroneously and disproportionally distorted satellite images.[16]

It is unreasonable to place sole responsibility for a negative outcome on the leader.

"For the rest of my life—each time I look in the mirror I will be acutely reminded of my shortcomings, and a piece of my heart will chip away, for in the shadows of my eyes I will see their faces, staring back at me—for the rest of my life."[15]

—*B.P. McCoy,* The Passion of Command

I have spent a decade and a half holding a rightful responsibility that is mine forever. Nothing will or should change that. Conversely, for the first time, I am contemplating whether the fault I have borne has been appropriate in magnitude and scope. Writing this truth evokes a real fear that I will be looked upon as a man simply seeking absolution. I am not. My hope is that by questioning the level of fault I have held and perhaps coming to a deeply emotional and somewhat paradoxical conclusion, I might persuade others to challenge accepted leadership approaches. Doing so can prevent them from loading their packs with unnecessary emotional and psychological weight.

I often reflect on the simple and obligatory annual exchanges I have with the sole survivor of the enemy's attack that faithful day in the spring of 2006. Each time, in some form or fashion, I tell him, "I love you, I'm glad you made it, and thank you for not hating me" on his "alive day"—April 2nd. In turn, I have always received something that resembles reassurance that it was not my fault. Perhaps, these words are simply me finally processing all the reassurances of arguably the most credible person in this matter after fifteen years.

Frankly, a career anchored to armed conflict has conditioned me in ways that have become who I am and will likely be forever. Accordingly, in writing this, as Homer wrote, I am speaking "the sort of words" I wish to hear, while accepting my ears may never capture their full context. I am, however, hopeful the Corps' future leaders can be different. I am optimistic that future generations of warrior leaders are routed away from the path too many like me have walked. Tomorrow's Marine leaders must be fully armed with an understanding of responsibility and fault and capable of differentiating their definitions and cataloging them appropriately. I pray that when they stand as old Marines, reminiscing on losses incurred in youth, they have carried the correct load on all the mental and emotional hikes in between. The burden of leadership is rightfully a heavy one. A poorly designed formula for load calculation only adds unnecessary weight to an already substantial pack. Doing so increases the probability of a figurative buckled knee as the catalyst to catastrophic failure.

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USMC

Mission Impossible

Marines in Lebanon 1982–1984

by MajGen James M. Lariviere

> MajGen Lariviere, USMCR, retired with 36 years of active and reserve experience in infantry, anti-terrorism, reconnaissance, artillery and ceremonial units including service as the CG, 4th MarDiv.

At 0622 on 23 October 1983, an explosives-laden Mercedes truck slammed into the Marine Battalion Landing Team (BLT) headquarters in Beirut, Lebanon. The subsequent explosion killed 241 Marines, sailors, and soldiers—the highest single-day loss of life experienced by American forces since Iwo Jima.[1] President Reagan sent the Marines ashore the year prior to provide a "presence" to facilitate the departure of foreign forces from Lebanon and allow the Lebanese Government (GoL) to regain control of their country. The mission ultimately proved to be problematic. A complex political-military environment, unrealistic policy goals, disagreements between the senior members of the Reagan Administration, and the inability of military leaders to derive a coherent military mission for the Marines of the U.S. Multi-National Force (MNF) all contributed to the failure of the intervention in Lebanon.

Today, the U.S. intervention in Lebanon from 1982 to 1984 remains one of the most controversial and misunderstood episodes in Marine Corps history. Forty years later, understanding the Reagan Administration's policy goals in the Middle East, why the Marines were sent ashore to provide a presence, and the military chain of command's struggle to develop a coherent military mission can provide lessons for policymakers and military leaders alike in today's dynamic national security environment.

Background and Road to Intervention

When the Reagan Administration assumed office in 1981 officials had several concerns regarding the wider Middle East. The 1979 Camp David Accords, brokered by the United States and concluding in a peace agreement between Israel and Egypt, were in a fragile state following the assassination of Egyptian President Anwar Sadat. That same year, the Shah of Iran was replaced by an Islamic Republic led by Ayatollah Khomeini that threatened regional stability and the flow of oil in the Persian Gulf. Adding to the instability was the USSR invasion of Afghanistan in December 1979. As a result, U.S.-USSR superpower competition tensions in the region were high. Following the defeat of Soviet client state Egypt in the 1972 Yom Kippur War, the USSR shifted its focus to supporting Syria and the Palestinian Liberation Organization (PLO) to counter both the United States and its ally in the region Israel.

In Lebanon, the 1976 ceasefire suspending the Lebanese Civil War left the country divided. Maronite Christian militias controlled most of the north except the area around Tripoli. A Syrian Arab Deterrence Force of 30,000 soldiers occupied the Bekaa Valley in the east. The PLO, operating as a "state within a state" in southern Lebanon, conducting frequent cross-border attacks into northern Israel further destabilized the region. As a result, the GoL controlled virtually no Lebanese territory. With the PLO in Lebanon adjacent to the U.S. client state of Israel, Lebanon emerged as a possible flashpoint for both an Arab-Israeli and a larger superpower conflict.[2]

Events boiled over in mid-1982. On 3 June 1982, terrorists attacked Israel's ambassador to the United Kingdom.

On 23 October 1983, the bombing of the Battalion Landing Team headquarters in Beirut, Lebanon, took the lives of 241 Marines, sailors, and soldiers. (Photo: Marine Corps History Division.)

In response on 6 June 1982, the Israel Defense Forces (IDF) launched Operation PEACE FOR GALILEE in southern Lebanon. The IDF initially meant the two-prong attack as a limited objective operation designed to push the PLO away from the border. However, PLO resistance collapsed, and the IDF advanced rapidly, achieving their 25-mile objective in less than 48 hours. While the eastern prong of the attack stopped short of entering the Bekaa Valley, the western prong along the coast advanced to the outskirts of PLO-controlled West Beirut. In response, the Syrians deployed an additional 16,000 troops to Eastern Lebanon bringing their total to 40,000. On 8 June 1982, Israeli air attacks destroyed Syrian SAM-6 sites in the Bekaa Valley and shot down 23 Syrian MiG fighters.[3] By 10 June, the Israelis had the PLO contained inside West Beirut.[4] To the outside world, Operation PEACE FOR GALILEE was increasingly viewed as an Israeli-Syrian conflict resulting in the siege of a major Arab capital.[5] Arafat was surrounded in West Beirut with his back to the water, the Israelis to the south, and Maronite Christian Phalange militias in East Beirut. Although the Israelis had the PLO surrounded, they were reluctant to initiate a ground attack in Beirut's densely populated suburbs and downtown area for fear of high casualties. However, the IDF continued to bomb PLO targets in West Beirut while international outrage grew over the emerging humanitarian crisis.

Internally, Reagan Administration officials were divided on how to respond to the Israeli incursion. Secretary of Defense Caspar Weinberger and National Security Advisor William Clark wanted to denounce Israel for resorting to military force. President Reagan and Secretary of State Alexander Haig were more sympathetic to Israel's views on the PLO. Haig saw the crisis as an opportunity to further the administration's Mid-East policy initiatives. On 12 June 1982, Haig issued instructions to Special Middle East Envoy Habib stating he should negotiate an end to the fighting to achieve three objectives: the withdrawal of all foreign forces (Syrian, Palestinian, and Israeli), the re-establishment of Lebanese sovereignty, and a secure northern border for Israel.[6] These ambitious policy goals would remain constant throughout the entire U.S. intervention in Lebanon.

In late June, Yasser Arafat announced that the PLO would withdraw from Beirut if an international force was deployed to protect the Palestinian withdrawal. Habib seized on this idea. As the Israeli siege of Beirut continued through the rest of July and early August, Habib negotiated with all sides. However, frustrated by the slow progress of talks and Israeli recalcitrance, on 4 August 1982, the United States joined other members of the U.N. Security Council in demanding a ceasefire and censuring Israel. Finally, an agreement emerged as Habib worked with French and Italian military and political representatives in Beirut. The concept that emerged was that of an MNF composed of U.S., French, and Italian forces would land at the port of Beirut to facilitate the departure of the PLO. The U.S. contingent designated for the mission was the forward-deployed 32nd Marine Amphibious Unit (MAU) embarked on amphibious ships as part of the Landing Force Sixth Fleet operating in the Mediterranean Sea.

Even as Habib negotiated a PLO departure, a debate ensued within the Reagan Administration regarding the merits of the intervention. Secretary of Defense Weinberger, Chairman of the Joint Chiefs of Staff Gen John Vessey, and the Joint Chiefs of Staff opposed the use of U.S. military force in Lebanon. They believed the mission was unclear, the anticipated force was too small to fight and vulnerable to terrorism, and the factional fighting in Lebanon was endemic. Only eight years after the fall of Saigon, Pentagon leadership was reluctant to inject U.S. forces into another intractable conflict with no clear mission, and no clear end state.[7] Proponents of intervention were Secretary of State Haig (and later Secretary Shultz), Special Envoy Habib, and members of the National Security Council Staff including Deputy National Security Advisor Robert "Bud" McFarlane. They argued the United States needed to show immediate and practical support on the ground to the GoL to regain control of its own territory. They also believed that a U.S. military *presence* was critical to the safe evacuation of the PLO from Beirut. The interventionalists argued for the Marines to stay for 60 days; the DOD wanted to limit the intervention to no more than 30 days.

Marine Commandant Gen Robert Barrow was particularly concerned. On 9 August 1982 Barrow sent a classified, four-point memo to Chairman Vessey. Barrow called the mission "vague and ill-defined" and stated it was not clear if the mission was an evacuation force or a peacekeeping force. He raised the issue of command relationships, stating, "With no unity of command, there is no single military or political authority" for the MNF. Barrow further stated that at that point there had been no mention of rules of engagement. Finally, he raised concerns about the extraction of the MNF if the PLO delayed departure or displayed any non-cooperation with the plan.[8]

In the end, President Reagan decided to send in the Marines but agreed to the 30-day limitation. On 12 August 1982, the Joint Chiefs of Staff (JCS) issued an order to Gen Bernard Rogers, U.S. Commander-in-Chief, Europe (USCINCEUR) entitled "Employment of U.S. Forces–Beirut Multinational Force (MNF)." The message stated "Your mission is to support Ambassador Habib and his effort in the withdrawal of PLO forces from the Beirut area" using the 32nd MAU's BLT but limiting the force ashore to 800 personnel. The message contained no mention of rules of engagement[9] or the chain of command other than Rogers should "establish with other participating nations a coordinating mechanism which will satisfactorily provide command and control over all the participating forces and make it possible to fight together."[10]

The mission of the MNF was solidified in the exchange of diplomatic notes between the United States and Lebanon during the period of 18–20 August 1982. In the United States' reply to the Lebanese Note Requesting U.S. Contribution to MNF, Ambassador Robert Dillon wrote the United States was prepared to deploy a force of approximately 800 personnel to[11]

> provide appropriate assistance to the Lebanese Armed Forces (LAF) as they carry out their responsibilities concerning the withdrawal of Palestinian personnel in Beirut from Lebanese territory under safe and orderly conditions. ... It is understood that the presence of such an American force will in this way facilitate the restoration of the Lebanese government sovereignty an authority over the Beirut area.[12]

Perhaps most significantly, it is the first mention of *presence* related to the Marine mission in Lebanon.

Ultimately, the mission of what became known as MNF 1 proved to be narrowly focused and achievable. On 25 August 1982, elements of BLT 2/8 Mar, 32nd MAU landed at the Port of Beirut and, along with French and Italian forces, evacuated PLO fighters to various Middle East and North African countries. Yasser Arafat and the PLO leadership headed to Tunisia to continue their fight against Israel from a distance.

Shultz and Habib argued to keep the Marines in Lebanon for the full 30 days. However, immediately following the safe departure of the PLO, Secretary Weinberger unilaterally ordered the withdrawal of the Marines from Beirut without any interagency coordination or discussion.[13] The 32nd MAU reembarked to their amphibious ships offshore on 10 September 1982. Weinberger cited multiple reasons for ordering the departure. First, the mission to evacuate the PLO was accomplished. Second, he did not believe the Marines could solve the problems of the GoL. Third, related to the second, was that the Marines could not solve the unrest in Lebanon. Fourth, since the president had agreed to a limited duration intervention of no more than 30 days and with the mission accomplished, there was no reason to stay.[14] A frustrated Bud McFarlane stated, "as soon as the last [Palestinian] fighter had left Beirut, Weinberger, without consultation or notification, ordered the Marines back aboard ship" and further described the order as "criminally irresponsible."[15]

MNF II and the Mission of *Presence*

Shortly after the Marines departed, events occurred that would bring them back to Lebanon. On 23 August 1982, the Maronite Christian leader of the Lebanese Forces militia, Bashir Gemayel, was elected president of Lebanon. On 14 September 1982, just before his inauguration, Gemayel was assassinated when a massive bomb destroyed his residence in East Beirut. Israeli forces immediately moved into advanced positions in Muslim West Beirut. Two days later, on 16 September 1982, Israeli forces allowed Christian Phalange militias to pass through their lines and massacre an estimated 700–900 Palestinian civilians in the Sabra and Shatila refugee camps in the southern suburbs of Beirut. The GoL requested the return of the MNF.

The request re-ignited the disagreements between Reagan Administration officials. National Security Advisor William Clark convened a meeting between Secretaries Shultz (who replaced Haig as Secretary of State in August that year) and Weinberger, General Vessey, CIA Director William Casey, and Attorney General Edwin Meese to discuss the massacre. According to one account, a sense of guilt pervaded the discussion. Habib's PLO Departure Plan stated that the U.S. would "provide appropriate guarantees of safety" for any Palestinian non-combatants who remained behind in Beirut. Shultz argued the early withdrawal of the Marines had set the conditions for the Israelis to allow the Phalange to retaliate. Looking at the administration's wider Mid-East policy, he thought the mission was to assist the GoL in gaining stability, first in Beirut, then throughout the country. The National Security Council staff, especially Deputy National Security Advisor Robert McFarlane, argued for a larger U.S. formation to force the withdrawal of both the Syrians and Israelis. Weinberger and JCS pushed back. Secretary Weinberger remained especially skeptical. He opposed the reintroduction of the Marines in Lebanon due to the lack of a defined mission.[16]

Again, President Reagan ordered the intervention either because of a sense of guilt or the belief that the Marine's departure had led to the massacre. However, the size of the U.S. commitment would remain the same as MNF I. In an address to the Nation on 20 September 1982, he announced the recreation of the MNF (to be known as MNF II) and the deployment of Marines for a "limited period of time." The mission was defined as "enabling the Lebanese Government to resume full sovereignty over its capital, the essential precondition for extending its control over the entire country." Reagan reiterated the overall goal of the "removal of all foreign military forces" from Lebanon.[17] Articulating a military mission to accomplish these policy goals fell to the Joint Staff.

From the interagency discussions, it was clear the Joint Chiefs not only opposed the redeployment of the Marines but that the Joint Staff struggled to clarify the mission. The JCS Alert Order issued on 23 September 1982 to USCINCUER reflects that struggle. Mission guidance was provided in several places throughout the order. In the "Situation" paragraph, the order states that the

> Current situation in Beirut makes it necessary to deploy a Multinational Force (MNF), including US component, which will serve as an interposition force at agreed locations, and thereby provide a multinational presence to assist the Lebanese Government and Lebanese Armed Forces (LAF) in the Beirut area.

Later in the order, the "Mission" paragraph states the mission was "To establish an environment which will permit the Lebanese Armed Forces (LAF) to carry out their responsibilities in the Beirut area." To do this, USCINCEUR was directed to "introduce US forces as part of a Multinational Force presence in the Beirut area." The "Concept of Operations" paragraph states that U.S. forces will "assist the LAF to deter passage of hostile armed elements in order to provide an environment which will permit LAF to carry out their responsibilities in city of Beirut." Finally, in the "Operational Constraints" paragraph, the order directs that "Forces will not engage in combat" and that "If hostile actions occur, protect U.S. forces and be prepared to conduct unilateral or combined withdrawal operations as directed."[18]

Subordinate commands did not interpret or clarify the JCS mission statement. Based on the JCS Alert Order, USCINCEUR issued an operations order to Commander In Chief, U.S. Naval Forces, Europe (CINCUSNAVEUR) on 24 September 1982 with no change to the mission statement.[19] The subsequent CINCUSNAVEUR and Commander, Sixth Fleet operations orders did the same only making modifications to the area of operations relative to the French and Italian contingents. Ultimately, the commander of the 32nd MAU, Col James Mead, stated his mission was to provide "a presence in Beirut, that would in turn help establish the stability necessary for the Lebanese Government to regain control of their capitol."[20] The 32nd MAU landed in Beirut on 29 September 1982 and took up positions at the Beirut International Airport. Its mission, and that of all subsequent MAUs, would remain the same throughout the remainder of the intervention even as the security situation in Lebanon deteriorated in the summer and fall of 1983.

Analysis

Military planners operate at the intersection of policy (and often politics), strategy, and operations. Crafting clear military missions to accomplish policy goals at the national level is often difficult and fraught. The policy goals for Lebanon outlined by the Reagan Administration in 1982–1983 were remarkably clear and consistent throughout. President Reagan outlined them in his 20 September 1982 speech, and they were reiterated in National Security Decision Document 64 dated 28 October 1982—namely to remove all foreign forces, Israeli, Syrian, and Palestinian, from Lebanon and to strengthen the ability of the GoL to control Lebanese territory.

To accomplish these objectives, military planners were never able to articulate a clear, feasible, or achievable military mission. Secretary of State Shultz argued that U.S. forces needed to be on the ground to demonstrate America's resolve and commitment to the future of Lebanon and the wider Middle East. In doing so, he made the Marine presence more a political, vice military, mission. How that *presence*, a term not to be found in any military lexicon, was provided and what the Marines did on the ground was the responsibility of the DOD.

The JCS Alert Order "Situation" paragraph states that the MNF "will serve as an interposition force at agreed locations, and thereby provide a multinational presence to assist the Lebanese Government and Lebanese Armed Forces (LAF) in the Beirut area." Interposition is a term used by U.N. peacekeeping operations to describe a military force used as a buffer between two opposing parties as a confidence-building measure, normally as a result of a peace agreement or ceasefire. The Alert Order fails to mention the parties in between which the MNF was to interpose itself. Presumably, it was the Israelis and Syrians but could potentially also mean the various Lebanese militias and the LAF. The intent was unclear. Furthermore, no agreement was in place to enforce nor was there an enforcement mechanism. Ultimately, the Alert Order stated combat operations were not authorized and that U.S forces were to withdraw if fighting did occur.

The "Mission" paragraph does describe a desired, however vague, end state. It calls for the MNF "To establish an environment which will permit the Lebanese Armed Forces (LAF) to carry out their responsibilities in the Beirut area." To do this, USCINCEUR was directed to "introduce US forces as part of a Multinational Force presence in the Beirut area." The "Concept of Operations" paragraph reiterates this by stating the MNF will "assist the LAF to deter passage of hostile armed elements in order to provide an environment which will permit LAF to carry out their responsibilities in city of Beirut." Taken together, the Marines were to establish an environment by deterring "hostile armed elements" through their mere presence. The exact assistance the LAF could expect beyond that presence was not defined. What was defined was that if the desired environment did not emerge and hostile action ensued, the U.S. forces would withdraw, and the mission would end. Thus, a small contingent of Marines, by their mere presence, without the authority to use force, and interposed between multiple unnamed hostile forces, was tasked to enable the LAF, and by extension the GoL, to regain control of their country.

At the national policy level, especially for officials at the Department of State and the White House, the mission was easy to conceptualize. On the ground in Beirut, the situation was less clear. Explaining to junior Marines their mission was to be *present* in the middle of the multi-sided conflict in Lebanon was difficult if not impossible. Beyond taking up positions around the airport, there were no other operational tasks for Marines to execute. If the desired environment did not emerge and fighting erupted, the Marines were expected to withdraw rather than use force to create that environment. The peacetime ROE provided for self-defense if fired upon but only ahead of an expected order to withdraw if hostilities persisted. When the 32nd MAU was replaced by the 24th MAU on 1 November 1982 some elements were tasked with training the LAF and conducting mobile presence patrols in East Beirut giving some of the Marines a sense of purpose. Unfortunately, both the training and the patrols contributed to the idea that the United States was there to support the Christians in Lebanon (LAF officers were predominately Christian and the LF militia forces were headquartered in East Beirut) and helped set the stage for the tragedy to come.[21]

Initially, the MNF presence did provide some level of stability in the Beirut area. It is unclear whether this was because of sheer exhaustion on the part of the various actors or fear of direct confrontation with the United States. Regardless, from the MNF's arrival in August 1982 through March 1983, the situation in Beirut was relatively calm. This changed when on 16 March 1983 a Marine foot patrol was attacked on the coastal road south of Beirut followed the next month by the bombing of the U.S. Embassy in Beirut on 18 April 1983. During the spring of 1982, while Special Envoy Habib was negotiating a peace agreement between Israel and Lebanon, Lebanese Christian, Druze,

President and Mrs. Reagan and the 28th Commandant Gen P.X. Kelley attended the memorial services for those lost in the Beirut barracks bombing. *(Photo: The Ronald W. Reagan Library.)*

and Muslim militias began to fight for positions in the outskirts of Beirut and the Chouf Mountains overlooking the city ahead of an expected Israeli withdrawal. Increasingly the Marines located at the Beirut International Airport were targeted as part of the fighting. The environment the Marines were tasked to provide was deteriorating, attacks increased, and the presence of the Marines made less and less sense. Yet, by one reckoning, over the course of the intervention, the Marines were visited by 13 senior officials from the executive branch, 45 congressional delegations, 2 Marine commandants on 5 occasions, and 31 senior flag officers from the Marine and Navy chain of command.[22] As the situation deteriorated throughout 1983, none of these officials recommended that the Marines withdraw as outlined in the JCS order or that the mission be altered. Only after the bombing was the Marine mission of presence called into question.

In September 1983, a combination of Muslim and Druze militias attacked LAF forces defending the town of Suq-al-Gharb. Bud McFarlane, who by this time had replaced Habib as Middle East envoy and was operating from the nearby U.S. ambassador's residence, convinced policymakers in Washington to authorize the Marines to fire in direct support of the LAF. On 19 September 1983, the requested naval gunfire was authorized and delivered. Transitioning from a mere presence to an active participant in the conflict made it inevitable the Marines would become a target themselves.

Conclusion

At the national level, policymakers owe military planners a clearly defined end state for any given political-military problem. Military planners owe policymakers their best military advice and judgment regarding military capabilities and realistic, achievable, and affordable course(s) of action to accomplish that end state. In Lebanon, the Reagan Administration's desired end state was clear and consistent—the removal of all foreign forces from Lebanon and the restoration of the sovereignty of the Lebanese Government. That end state proved to be too ambitious for the size of the force administration officials and military leaders could agree upon and the level of force they were willing to authorize. The reluctance to commit to any military enforcement mechanism led to the presence mission that proved to be more a political rather than a military construct. As a political mission, it was never universally understood by everyone in the military chain of command in the same way.[23] Military planners were never able to develop a clear military mission. As MajGen Colin Powell, then serving as Secretary Weinberger's military assistant stated, "America [was] sticking its hand into a thousand-year-old hornet's nest with the expectation that our mere presence might pacify the hornets."[24]

Lebanon is a stark example that a mere military presence without a credible enforcement mechanism is a recipe for failure. The mission in Lebanon was as unrealistic as it was unachievable. The experience prompted Secretary Weinberger to draft the now famous six-point "Weinberger Doctrine" as a future guide for the use of U.S. military force. Point number three states that decision makers must "have clearly defined political and military objectives which we must secure."[25] Forty years on, developing a clear military mission statement to achieve a desired policy end state remains one of the most important, and most difficult, mandates for military planners at all levels. Winston Churchill said, "Those that fail to learn from history, are doomed to repeat it." The best way to honor the 241 Marines, sailors, and soldiers who died in Beirut, Lebanon, on 23 October 1983 is to ensure the mistakes made during the operations are not repeated.

Notes

1. Benis M. Frank, *U.S. Marines in Lebanon 1982–1984*, (Washington, DC: History and Museums Division, Headquarters, U.S. Marine Corps, 1987).

2. Alexander Haig, *Caveat*, (New York: Scribner, 1984).

3. Ibid.

4. Ralph A. Hallenbeck, *Military Force as an Instrument of Foreign Policy: Intervention in Lebanon August 1982–February 1984*, (New York: Praeger, 1991).

5. *Caveat.*

6. Ibid.

7. *Military Force as an Instrument of Foreign Policy.*

8. Robert H. Barrow, *Memorandum for the Chairman, Joint Chiefs of Staff: Lebanon Planning*, (Washington, DC: August 1982).

9. Rules of Engagement were subsequently issued via a separate message from Commander, Sixth Fleet ED 55-47A.

10. Joint Chiefs of Staff, *Employment of U.S. Forces–Beirut Multinational Force (MNF), DTG 121837Z AUG 82*, (Washington, DC: August 1982).

11. *U.S. Marines in Lebanon 1982–1984*. The 800 number was purely arbitrary established by Ambassador Habib. The size of the MNF was to be 800 Americans, 800 French, and 400 Italians.

12. Department of State, *Department of State Bulletin*, (Washington, DC, September 1982).

13. Howard and Gayle Teicher, *Twin Pillars to Desert Storm*, (New York: William Morrow and Company, Inc., 1993).

14. *Military Force as an Instrument of Foreign Policy*.

15. John H. Kelly, "Lebanon 1982–1984," in "U.S. and Russian Policymaking With Respect to the Use of Force," ed. Jeremy Azrael and Emil Payin, (Santa Monica: Rand Corporation, 1996).

16. Casper Weinberger, *Fighting for Peace*, (New York: Warner Books, Inc., 1990).

17. President Ronald Reagan, "Address to the Nation Announcing the Formation of the New Multinational Force in Lebanon," address, Washington, DC, September 20, 1982.

18. Joint Chiefs of Staff, *Alert Order 230227Z SEP 82*, (Washington, DC: September 1982).

19. *U.S. European Command, Operations Order 2412007 SEP 82*, (Washington, DC: September 1982).

20. Staff, *32nd Marine Amphibious Unit After Action Report for Beirut, Lebanon Operations 29 Sept–1 Nov. 1982*, (Marine Corps History Division Archives. Beirut and Lebanon CD Collection #53, 1982).

21. The author conducted 170 motorized "presence" patrols in East Beirut as the reconnaissance platoon commander for BLT 3/8, 24th MAU between November 1982 and February 1983. Explaining to the Marines that the mission was to drive around East Beirut and to take no other action other than to be "present" was as difficult as described.

22. John B. Matthews, *Lessons Learned: The Pear Tree Grows as Americans Forget* (Unpublished manuscript, Marine Corps History Division Archives, Box A-25-A-6-4).

23. Department of Defense, *The Department of Defense (DOD) Commission on Beirut International Airport (BIA) Terrorist Act of 23 October 1983*, (Washington, DC, 1983).

24. Colin Powell, *My American Journey*, (New York: Ballentine Books, 1995).

25. *Fighting for Peace*.

USMC

Descent on Malta

Economy of force in joint assault operations

by Mr. Joseph Miranda & Dr. Christopher Cummins

Joint Publication 3-0, Joint Operations, comments about the military principle of economy of force: (1) The purpose of economy of force is to expend minimum essential combat power on secondary efforts to allocate the maximum possible combat power on primary efforts. (2) Economy of force is the judicious employment and distribution of forces. It is the measured allocation of available combat power to such tasks as limited attacks, defense, delays, deception, or even retrograde operations to achieve mass elsewhere at the decisive point and time.

Military situations where an attacker must achieve multiple objectives simultaneously provide excellent opportunities for both the wargame designer and players to examine and learn the principle of economy of force. The designer has the challenge of creating a game that isolates objectives from each other (or at least from the attacker's perspective that forces committed to one objective cannot participate in the fight for another objective within the timeframe of the game). Many situations start with the attacker being able to use the principle of mass to make an initial breakthrough but then are faced with divergent objectives that force the attacker to split forces (e.g. World War II East Front) while other situations start with the attacker having to split their forces from the beginning (e.g. Jena-Auerstadt). What the designer must do is mirror the situation in terms of what the defender could actually do to change the disposition of defending forces (often minimal, especially once the game begins) and what the attacker could do. The attacker usually has to make most of their decision(s) at the beginning of the game based on less than perfect intelligence about the defenders.

From a player's perspective, games that emphasize economy of force require sharp analysis of the situation at the beginning to get dispositions optimized. Any opportunities to adjust forces after the beginning of the game need to be considered carefully not only for where they will have the greatest impact but whether that impact actually can change the outcome.

Decision Games' **Descent on Malta: Operation Herkules** wargame (appearing in *Strategy & Tactics* magazine #335) simulates the planned but never executed Axis invasion of the strategically important island of Malta in 1942. The British had established a base on Malta and used it to launch naval-air attacks across the Mediterranean against Axis shipping supporting Erwin Rommel's campaign in North Africa. Axis planning for the invasion, codenamed *Operation Herkules*, involved extensive intelligence preparation of the battlefield, air attacks against the island's defenses and airfields, and

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training German and Italian airborne and amphibious forces. However, the invasion was canceled by Adolf Hitler in order to shift support to Rommel's drive into Egypt during June and July 1942.

Descent on Malta looks at what would have happened had the Axis high command had proceeded with Operation *Herkules*. It is a solitaire situation, where the player controls Axis forces and the game system runs the British defense. The reason for designing the game this way was there really was not much for the British side to do given Axis airpower being able to interdict ground movement. The player, representing the Axis combined command, is in the situation of having to allocate forces to one of several fronts and then carrying through.

The game map shows three islands: Malta itself, Gozo, and Comino. You can invade these islands with paratroopers, glider-borne troops, and amphibious landings, but once ashore they are committed. You have to distribute forces to screen secondary objectives while the main assault goes in for the big win.

The Axis can maximize its efforts by attacking critical defensive points. To defeat these positions requires intelligence operations that are conducted through the use of Staff Points, a quantification of higher level (J-2, J-4) planning and resources. For game purposes, intelligence can be anything from high altitude aerial reconnaissance to reports from agents on the ground. By conducting intelligence operations, you can determine the strength of dispositions of British forces and then allocate the optimal forces to each attack.

Since Staff Points are a quantification of your overall command and logistical capabilities, this system is a way to measure your distribution of forces. Do you want to enhance airborne and amphibious assaults? Refit damaged units back to full strength? Force march those units once on the ground?

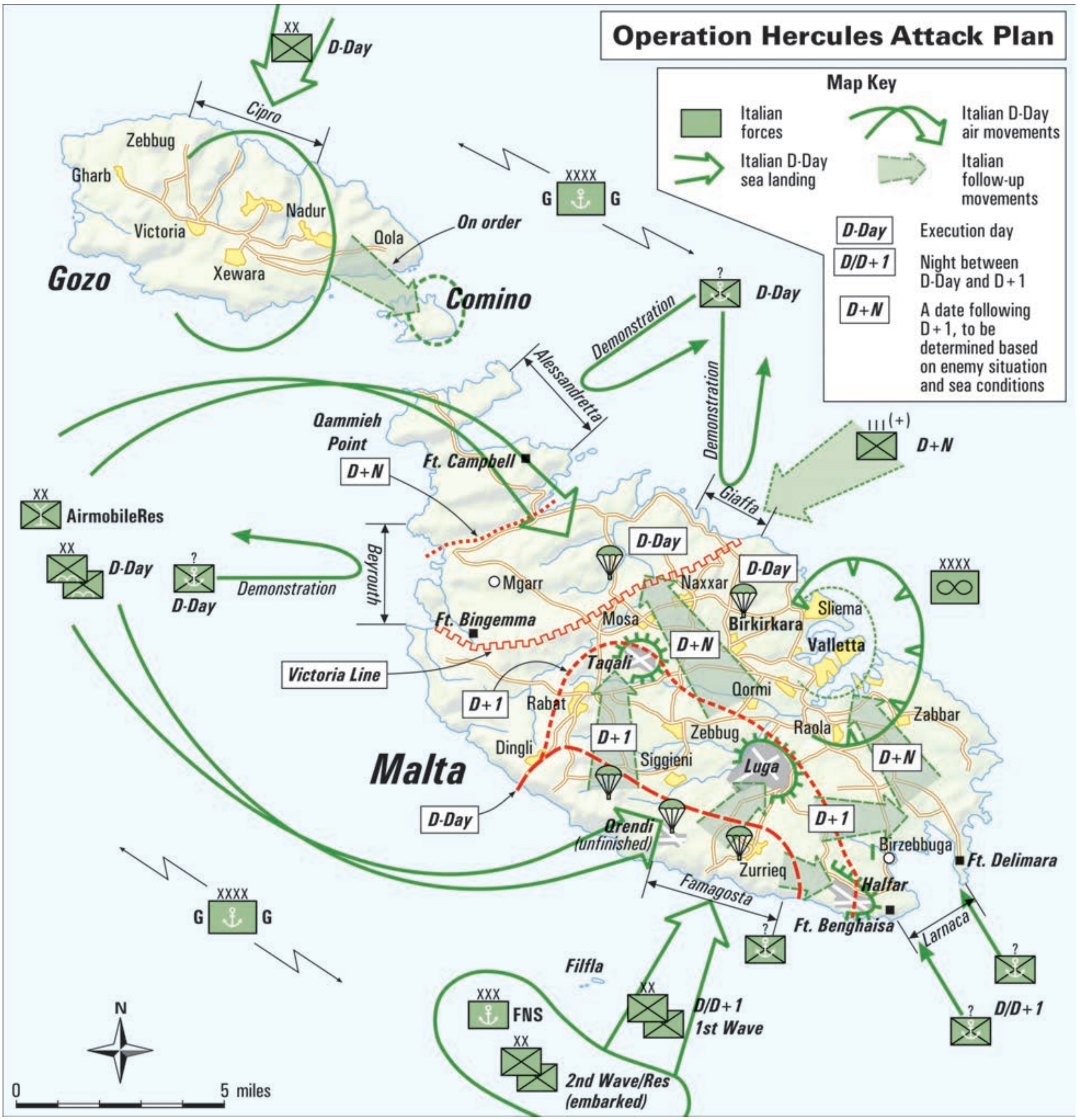
Such game mechanisms provide courses of action in an easy to utilize manner.

There are two ways of getting your forces onto the island: airborne landings and amphibious assaults. The Axis actually has considerable paratrooper and glider forces, the equivalent of a couple of divisions. But these units have to be allocated carefully to take out critical enemy targets. They also have to be supported by airpower, again, a considerable combat multiplier but one which can be dissipated if used among secondary missions. It's useful to coordinate airborne landings inland with amphibious assaults hitting the beaches with air cover concentrated overhead to overwhelm resistance. Once you have establish beachheads and captured airfields, follow-on forces can arrive by naval movement and airlift.

Joint Pub 3-0 also states:

> *The strategic environment requires the US to maintain and prepare joint forces for crisis response and limited contingency operations simultaneously with other operations, preferably in concert with allies and/or PNs when appropriate.*

Descent on Malta requires the player to employ joint forces to gain victory. In the German invasion of Crete in May 1941, the Luftwaffe proved decisive in providing close support to German airborne forces fighting Allied forces on the



ground, as well as attacking the Royal Navy ships at sea trying to support the defense. This situation was similar to what the Axis was facing in Malta in 1942.

Naval power is represented by game units representing various types of Axis naval squadrons (battleships, cruisers, etc.). These can be used to provide naval gunfire or to screen against the Royal Navy. The latter missions can be vital because certain game events can initiate a Royal Navy sortie that can inflict considerable damage on the invasion force. So you have to place a preemptive strike into the equation of force allocation.

The Italians have several special operations units. These include naval divers who can conduct beach landings in advance of the main assault force. The Germans have a company of Brandenburger commandos, trained to operate behind enemy lines. Special forces can be employed against critical points to gain goals out of proportion to their numbers.

This gets back to the game's victory conditions. These are based on two general factors: (1) inflicting losses on British land, naval and air forces; and (2) clearing the island of Malta, which means seizing airfields, towns and fortresses on the island. You have to plan in terms of economy of force operations in that invasion which might have taken place in 1942's Mediterranean theater.

Updating Officer Candidate Training

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On 9 September 2017, hundreds of hopeful candidates arrived to start Officer Candidate School (OCS) in Quantico, VA. For both recruits and officer candidates, training is sex-segregated, with entirely male or female platoons and a staff that matches. Unlike previous classes, one female platoon would soon have a male Sergeant Instructor.

An injury to a female drill instructor left 1st Platoon, Delta Company shorthanded. A gunnery sergeant from the Marine Corps Barracks, Washington (now a first sergeant), answered the call—knowing that if anything went poorly the choice could potentially cost him his career. On the other hand, we candidates did not really know what a male sergeant instructor would mean in terms of our training.

As we ran back to the barracks on pick-up day, we realized we were in for a rough ten weeks. Sergeant Instructor GySgt Algarin was in for a new and challenging experience as well. Integration is a highly visible topic in the military today, and all eyes were on him. How would he handle the task, and how would the candidates react? The underlying goal was to determine whether this type of integration could continue with future OCS rotations.

To the candidates of Delta Company, 1st Platoon, it was a wild success. "What happened here in the hills of Quantico was bigger than all of us. The impact this instructor had on us both individually and as a platoon was undeniable,"

Unlike previous classes, one female platoon would soon have a male Sergeant Instructor.

recalled then 2ndLt Cofrancesco. Though it may not have been a deliberately planned event, the introduction of a male instructor into a female platoon created a new dynamic that inspired growth and competition.

Integrating the staff at OCS had multifaceted impacts on both the candidates and the instructors. Tactical training at OCS focuses on the concept of "every Marine a rifleman." Because of previous limitations on female service in combat MOSs, few female Sergeant Instructors have infantry experience and must depend on book learning rather than experience when answering questions or explaining concepts to their candidates. Prior-enlisted female candidates are often unable to fill this experience gap for the same reason: few female Marines have been in combat MOSs long enough to qualify to attend OCS through the Enlisted Commissioning Program or the Marine Corps Enlisted Commissioning Educational Program. On the other hand, it is much more common for both male Sergeant Instructors and their officer candidates to have combat experience.

In addition to the tactical advantages male candidates have, entirely female platoons in training environments such as ours create an environment unlike any in the FMF. Never again will female candidates have entirely female chains of command. From the male perspective, entirely male chains of command are normal and may remain that way throughout their entire careers. The lack of integration is especially evident after the winter cycle at OCS when entirely male platoons arrive at the next step in their training at The Basic School. After seeing three female Marines over the course of their ten weeks of training, new second lieutenants were placed into integrated platoons and had to learn to interact with female peers. While integrating the platoons themselves at OCS may be decades down the line, integrating the staff would allow male platoons to sooner see and interact with female Marines, making their transition to further training and to their future platoons easier.

Our instructors demonstrated that an integrated staff could still be exemplary. They displayed the ability to work as a cohesive unit, despite the curveball they were thrown.

Sergeant Instructor GySgt Arellano said afterward that having a male as part of their platoon staff added experience without increasing the tension in the platoon staff:

> It was no different from working with my male counterparts over here at DI School. I found it interesting to see his way of teaching and interacting with the candidates. I felt I learned from him and from my team on the whole experience. We really took the concept of teamwork to another level. Everyone was passionate with making quality officers.

As Captains, we recognize the impact this experience has had on us, and we support continuing the integration of leadership billets ...

Platoon Sergeant GySgt Moody agreed, saying, "As far as what it did for the platoon it showed there was no difference just pure professionalism." Sergeant Instructor GySgt Algarin was up to the task, and the platoon benefited from his knowledge.

The experienced staff brought together not just varied MOSs but also years of combined experience as platoon staff at OCS. Their knowledge and flexibility created an environment where integration could succeed. This aspect created an atmosphere that fostered teamwork, comradery, and positive morale everything that a successful platoon strives to be. Not only the candidates but also the staff benefited from new the new perspective and experience that GySgt Algarin brought to the platoon.

There are many firsts that officers experience during their careers. Not many get to say that one of their "firsts" was also a first in Marine Corps history. As representatives of the female population of the Marine Corps, and of Delta Company, 1st Platoon, OCS 226, we are honored to have been granted this privilege. As captains, we recognize the impact this experience has had on us, and we support continuing the integration of leadership billets during the initial stages of training.

Fleet Tactics and Naval Operations

reviewed by Maj Skip Crawley, USMCR(Ret)

Fleet Tactics and Naval Operations by CAPT Wayne P. Hughes Jr. is the Third Edition of his highly regarded book *Fleet Tactics: Theory and Practice*—first published in 1986.[1] Hughes' intent for writing the First Edition of *Fleet Tactics* "was to write a timeless description of fleet tactics, chronicle their evolution, and describe current practices." I read *Fleet Tactics: Theory and Practice* many years ago. It was an interesting and informative book, and I can attest that CAPT Hughes accomplished his purpose.

With the collapse of the Soviet Union, Hughes felt "much of the [First Edition] had been influenced by the Cold War threat and a single set of strategic circumstances." Post-Cold War, "the U.S. Navy was devoted to the projection of power and influence around the world ... at the same time the focus ... was shifting to the coastal regions." Published in 1999, *Fleet Tactics and Coastal Combat* "reflected both those developments."

With his Third Edition, *Fleet Tactics: Theory and Practice,* Hughes sets out "to describe the interrelationships of tactics, logistics, and operations in historical campaigns" in order "to make explicit the kinds of refocusing that the Navy—or any navy—undergoes periodically." Hughes utilizes historical case studies to inform readers as to what he believes the Navy needs to do to meet future threats brought on by peer-warfare.

CAPT Hughes has "concluded that in the twenty-first century the fleet's new emphasis should be on gaining

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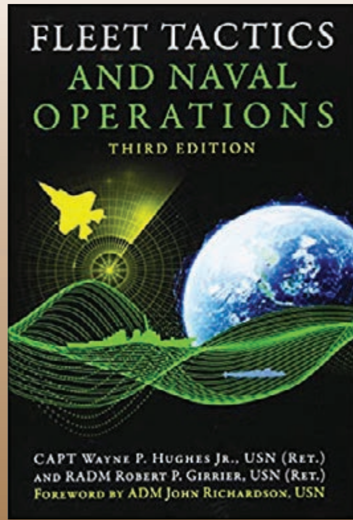
access to and fighting in dangerous littoral waters." Though CAPT Hughes' last work was published in 2018, *Fleet Tactics and Naval Operations* is quite timely given that the essence of EABO is fighting in contested littoral regions.

Why should a Marine officer read a book whose "most important reader ... has always been the American naval officer" and that is focused on using history, historical constants and

... the essence of EABO is fighting in contested littoral regions.

present-day trends to inform change in the Navy? First, as "Soldiers of the Sea," Marines ought to have a working knowledge of the dynamics of naval warfare, which have a tendency to be quite different from ground combat. Second, according to one commentator, "[Gen] Berger got the original idea for *Force Design 2030* from Capt (Ret) Wayne Hughes, author of the classic *Fleet Tactics*."[2] We will discuss a few of the great historical constants and present-day trends of maritime



FLEET TACTICS AND NAVAL OPERATIONS. By CAPT Wayne P. Hughes Jr., USN(Ret) and RADM Robert P. Girrier, USN(Ret). Annapolis: Naval Institute Press, 2018.
ISBN: 978-1682473375, 408 pp. $48.22

warfare to establish a foundation of understanding of some of the dynamics of naval combat. Then we will discuss what CAPT Hughes has to say about littoral warfare and Information Warfare and compare his perspective with what the *Tentative Manual for Expeditionary Advanced Base Operations* (*TM EABO*)[3] and *Force Design 2030* (*FD2030*)[4] say concerning these issues.

Constants and Trends

> *Constants* are practices that have not changed over centuries of naval operations and so are not likely to change in the future. *Trends* are developments that have changed in one direction and so are likely to continue in the same direction in future operations.

One historical constant is "there have been far fewer sea battles then land battles throughout history." Why? The most fundamental reason is that people live on land and the ultimate purpose of navies is to "seek to influence events ashore." Furthermore, "navies are difficult to replace." Ships are expensive and take years to build.[5] Naval combat also has different dynamics then land combat. "At sea the predominance of attrition over maneuver is a theme so basic that it runs throughout this book. Forces at sea are not broken by encirclement; they are broken by destruction." In the first four months of the Guadalcanal Campaign, two major fleet actions (carrier versus carrier) and at least four separate major surface engagements were fought before the Japanese Navy's power was broken, and they were forced to evacuate Guadalcanal.

Directly related to the above, is the "decisiveness and destructive nature of naval combat." During the entire 6-month Guadalcanal Campaign, the United States and Japanese both lost 26 major warships, with numerous others severely damaged. "At sea the essence of tactical success has been the first application of effective offensive force," or to put it more succinctly, *"attack effectively first."* In the Battle of Midway, the U.S. Navy was outnumbered four to three in carriers. But by some fortuitous circumstances and their own bravery and skills, our naval aviators were able to turn three of the four Japanese carriers into burning hulks in less than ten minutes—prior to our carriers being on the receiving end of a Japanese air attack—and our Navy went on to win a decisive victory. Hughes also points out that many naval battles have a tendency to teeter on the knife edge between victory and defeat before one side wins.

One important trend is the improvement in "scouting effectiveness." "Until the twentieth century surface raiders and pirates routinely evaded searches for months at a time." But "aviation enabled ... scouts to cover wide swaths of ocean and report the raiders' positions by wireless radio. Within a decade, the raiders had all but disappeared."[6] Another aspect of scouting is that it "seems to be that there is never enough of it." A closely related corollary is that many more resources than people think need to be devoted to scouting. At the Battle of Jutland, "Jellicoe committed 25 percent of his heavy firepower to scouting, Scheer allocated almost as much."[7] At the beginning of World War II, 50 percent of a Navy carrier air group was made up of "dual-purpose scout bombers for tactical reconnaissance."

Littoral Warfare: *"A single, integrated battlespace"*

> [Littoral Warfare is the] "complicated interaction of land, sea, air, space and cyberspace forces with tactics that crosses boundaries."
>
> Missile attacks to and from the sea add to the already prevalent strikes by aircraft, *blurring the longstanding tactical distinction between sea and land combat.* The engagements that have been fought for the control of coastal regions have been most effective when land and air forces have acted in concert, using missiles as the principle weapons. [Italics added by reviewer.]

As stated above, CAPT Hughes makes clear that a major purpose of this Third Edition of *Fleet Tactics* "is to describe littoral combat" and spends a considerable amount of time discussing tactics and operations in contested littoral waters. I believe that the first, and most important thing, to understand about littoral combat, is CAPT Hughes' contention that "the longstanding tactical distinction between sea and land combat" is essentially gone and the necessity to consider the land and sea portions of a littoral as a single whole. The second most important thing to consider is that just as land and sea need to be thought of as a single whole, one must think of information operations, cyberoperations, space operations and combat operations as a single whole. CAPT Hughes goes so far as to suggest that "Perhaps the navies of the world should no longer refer to naval tactics at all, but instead should think in terms of littoral tactics, which include warships."

Is CAPT Hughes view consistent with EABO? Definitely.

> Modern sensors and weapons range hundreds of miles both seaward and landward, blurring the distinction between operations at sea and on land and necessitating an operational approach that treats the littorals as a single, integrated battlespace.[8]

CAPT Hughes' view of littoral combat is consistent with TM EABO. What about Information Warfare?

Information Warfare

> At the most fundamental level, information warfare is about how to employ and protect the ability to sense, assimilate, decide, communicate and act—while confounding those same processes that support the adversary.

Interestingly enough, in his chapter discussing information warfare, CAPT Hughes includes "scouting with unmanned aerial and undersea vehicles," Artificial Intelligence, cryptography and cyberwarfare, deception and "exploitation of space satellites." A crucial point CAPT Hughes makes is the shift "from *information* superiority to *decision* superiority. How does one make best use of the avalanche of information available to the operator and commander?" [Italics in the original.]

FD2030 is quite aware of the importance of information operations, cyberwarfare and space operations:

> We believe that in a conflict with a peer adversary, first moves may be in space and cyber, so we must enable our Stand-in Forces, MEUs, and MEFs to integrate with, and have access to, those capabilities now.[9]
>
> Operations in the Information Environment (OIE) Doctrine. The Service lacks adequate OIE doctrine or training standards. This leads to a lack of awareness, education, and experience often reflected in commanders and staffs grappling with operating in a multi-domain environment and applying and integrating information capabilities ...[10]

Conclusion

CAPT Hughes' *Fleet Tactics and Naval Operations* gives readers a larger context to put *TM EABO/FD2030* in. I found *Fleet Tactics and Naval Operations* as interesting and informative as CAPT Hughes' original *Fleet Tactics: Theory and Practice* and even more timely. Given that *TM EABO* and *FD2030* have the Marine Corps operating and fighting in the contested littorals, CAPT Wayne Hughes' *Fleet Tactics and Naval Operations* is a must read for anyone interested in the unique dynamics of naval combat; present day trends in naval tactics and technology, and littoral combat. Highly recommended.

Notes

1. CAPT Hughes died in December 2019.

2. Owen West, "Are the Marines Inventing the Edsel or the Mustang?" *War on the Rocks*, (May 2022), https://warontherocks.com.

3. Headquarters Marine Corps, *Tentative Manual for Expeditionary Advanced Base Operations*, (Washington, DC: 2021).

4. Headquarters Marine Corps, *Force Design 2030 Annual Update,* (Washington, DC: 2022).

5. Compare and contrast. *USS Enterprise,* the Navy's *first* nuclear powered carrier: Keel laid 1958; launched September 1960; commissioned November 1961; initial operational deployment June 1962; participated in Cuban Missile Crisis October 1962. *USS Ford:* Keel laid in November 2009; christened November 2013; delivered to the Navy May 2017; commissioned July 2017. Has yet to deploy as of May 2022.

6. Coincidently this reviewer was reading *Bismarck: The Final Days of Germany's Greatest Battleship* while reading *Fleet Tactics and Naval Operations*. Consider that in the first two years of World War II the *Kriegsmarine* was able to utilize surface raiders such as the battleship *Bismarck* to attempt to interdict the convoys supplying Great Britain and successfully positioned merchant ships throughout the Atlantic to refuel them. From 1942, onward this ceased due to the increasing effectiveness of aircraft reconnaissance and improved radar.

7. ADM John Jellicoe, C-in-C of the British Grand Fleet and ADM Reinhard Scheer, C-in-C of the German High Seas Fleet.

8. Headquarters Marine Corps, *Tentative Manual for Expeditionary Advanced Base Operations*, (Washington, DC: 2021).

9. Headquarters Marine Corps, *Force Design 2030 Annual Update,* (Washington, DC: 2022).

10. Ibid.

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