The Case for Change

Meeting the principal challenges facing the Corps

by Gen David H. Berger

> ***"Much is written of courage in the fleet or in the field; but there is a courage of the closet that is no less praiseworthy and fully as rare, and that is the courage to do battle for a new or unpopular idea."***
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> ***—Alfred Thayer Mahan [1]***

The United States Marine Corps I lead in 2020 finds itself, like the rest of the U.S. defense establishment, at a crossroads. The passing of our Nation's "unipolar moment" and the emergence of revisionist great power competitors in China and Russia, coinciding with a sea change in the character of warfare driven by social and technological change, demands that we move rapidly to adapt to the circumstances of a new era.

This article lays out the case, as I see it, for the sweeping changes the Marine Corps needs to make to meet the principal challenges facing the institution: effectively playing our role as the Nation's naval expeditionary force-in-readiness while simultaneously modernizing the force to play its necessary roles in the operating environment described in the National Defense Strategy (NDS)—and doing both within the fiscal resources we are provided. Deep institutional change is inevitable when confronting modernization on this scale, and that type of change is hard. The urgency of change and the institutional reform and innovation necessary to achieve it has not diminished in the two years that have passed since the publication of the NDS. The ideas expressed below are not unique or original to me—forward thinkers across the defense establishment, academia, and industry have given voice to them for years. But the time to act is now.

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Today's Marine Corps

Today's Marine Corps, despite many surface adaptations to the demands of the past two decades of counterinsurgency operations, is at its core optimized for amphibious forcible entry and sustained operations ashore. This essential design has endured since the 1950s, though it has changed in details of equipment and doctrine in response to the secular trend, extending back to the dawn of modern warfare, toward greater range and lethality of weapons systems. My predecessors made significant advances in keeping pace with this trend in pursuit of capabilities they deemed essential to the Nation's defense, based on the operating environment and the resources available at that time. Despite those advances, however, in light of the unrelenting increases in the reach, effectiveness, and lethality of modern weapons, the rise of revisionist powers with the technical acumen and economic heft to integrate those weapons and other technologies for direct or indirect confrontation with the United States, and the persistence of rogue regimes possessing enough of those attributes to threaten U.S. interests, I am convinced that the defining attributes of our current force are no longer what the Nation requires of the Marine Corps. The rest of this article will review the reasons why.

Threat Technology–Secular Trends and the Rise of the Precision Strike Regime

The secular trend toward the increasing range and lethal effect of military technology is a commonplace of the history of modern warfare. Accompanying the development of range and lethality at every stage, albeit sometimes unevenly, has been the advance of the ability to apply that lethality effectively to military ends through the necessary command, control, communications, computer, intelligence, surveillance, and reconnaissance (C4ISR) organizations and technologies. These trends are of very long standing. Leaving aside the sweep of military history before 1945, the coming of the Atomic Age provided the clearest possible signal of their ultimate expression. The means to deliver lethality by very long-range unmanned means followed swiftly; Bernard Brodie noted in 1959, in strategic nuclear context, the advent of the "Missile Age."

As technology continued to develop, the outlines in maritime warfare of what the influential defense analyst Andrew Krepinevich identified as the "Mature Precision Strike Re-

gime" began to become evident at the tactical and operational levels of warfare. Although the advanced military establishments of the Cold War superpowers thankfully never met in open combat, indications of the evolution and proliferation of long-range precision strike and accompanying C4ISR technologies appeared as early as 1967 with the sinking of the INS *Eilat* by an Egyptian-operated, Soviet-manufactured SS-N-2 *Styx* anti-ship cruise missile (ASCM). Examples recur with regularity in the decades since, through the Tanker Wars and the South Atlantic War of the 1980s, to the crippling of the INS *Ah-Hanit* by a Hezbollah ASCM in 2006, and the attempted engagement of the USS *Mason* by similarly armed Yemeni rebels in 2016. Of critical note is the fact that these capabilities are now widely proliferated, to a limited degree of sophistication and integration, to regional powers and their non-state proxies, with the revisionist (and nuclear-armed) great powers possessing capabilities that increasingly mirror our own. The world we live in today, much less tomorrow's, displays most of the attributes of a truly mature precision-strike regime.

Unsurprisingly, the trends driving the maritime precision-strike regime also define the state of the art in joint warfare more broadly. As many observers have noted, the United States awakened the world to this reality with its one-sided annihilation of Iraqi forces in Kuwait in 1991. The revisionist powers have taken some time to close the U.S. lead, but evidence that they have done so is clear in their fielded forces and in the steady drumbeat of real-world incidents drawn from the recent history of military action below the threshold of great power conflict. The revolutionary impact of early ATGMs in the 1973 Arab-Israeli war prefigures the trend in the same manner as the extensive employment of naval ASCMs in that same conflict. More recent conflicts including Israel's 2006 conflict with Hezbollah in Lebanon showcase the increasing range and lethality of modern precision-guided ground ordnance, while Russia's devastating employment of massed long-range artillery, directed and enabled by advanced C4ISR and electronic warfare capabilities, against Ukrainian forces in 2014 provide the most recent example of the proliferation on land of something approximating the maritime MPSR. Accompanying these indicators is the clear lesson from the United States' own experience in Iraq and Afghanistan of the vulnerability to even improvised explosive devices of the light armor systems (Stryker, AAVP7, LAV-25) that form so large an element of the current force design of our Nation's expeditionary land forces.

Corresponding trends are visible in the aviation component of joint warfare, with the steady advance and proliferation of ever more sophisticated aircraft, surface-to-air missiles, electronic warfare capabilities, and associated C4ISR technologies to integrate and control these capabilities. Real-world evidence of the "live" employment of these capabilities (outside of the horrific and regrettable incidence of their misemployment against defenseless civilian airliners) is sparser than in the maritime and land domains. This is likely because the greater difficulty of integrating these advances still renders them largely the province of advanced state militaries, and because the United States still maintains a substantial qualitative lead in this domain. Nevertheless, two points bear emphasis. First, the state of the art in threat capabilities, especially sensors and both surface-to-air and air-to-air missiles, has already forced enormous and potentially prohibitively costly adaptation upon U.S. forces in response. The current emphasis upon low-observable stealth technology in aircraft design, for example, represents a large element of our technological response to the development and proliferation of the precision-strike regime in the air domain. Second, while advances in range, precision, and lethality drives high-end competition in the air domain, related technologies offer increasing risks and opportunities at much lower levels of conflict, potentially blurring the lines between air, maritime, and land domains and giving less sophisticated actors the ability to contest great-power air supremacy in previously unavailable ways. Real-world incidence of the employment of unmanned aerial systems and loitering munitions, from the crude efforts of the Islamic State and its non-state competitors in Iraq and Syria from 2014-2016, to the more sophisticated employment by Armenian separatists of an Israeli-manufactured HAROP loitering munition in 2016, to the swarming drone attack on the Saudi Aramco oil processing facilities that evaded air defenses, points to the expression of the secular trend at levels far below the realm of great power competition.

Why am I devoting space to a review of such well-established and documented trends? Because despite the available evidence and near-consensus in many defense circles as to the implications of these changes, we have been slow to adapt as a Service. Specific implications for our force design are addressed in greater detail below. In the meantime, I must consider the impact of a more recent (though far from historically unprecedented) development in warfare—the emergence of so-called "gray zone" strategies by an array of real and potential adversaries, most notably the two revisionist powers identified in the NDS.

Gray Zone Strategies-Multi-domain Competition within the MPSR

With the advance and proliferation of the precision-strike regime, our adversaries have already proven they can deter us, to a degree, from employing our existing force design to counter their malign activities and defend the interests of our Nation, as well as those our allies and partners. Recognizing that the United States must at a minimum, and to a degree that varies by threat and theater, employ greater caution in the employment of its existing military capabilities, these actors use the degree of deterrence thus achieved to advance their respective agendas by means of "gray zone," "hybrid warfare," proxy warfare, and related strategies.

There is little profit, for my purposes, in a debate over the intellectual merits of these various terms. The connecting file, from the perspective of force design, is the combination of deterrent effect with asymmetry of interest. Our adversaries, confronting the United States' long-standing lead in the technologies and capabilities of the precision-strike regime, have chosen to employ "salami slicing" strategies that confront

us with the alternatives of waging or threatening war over comparatively minor stakes, or accepting *faits accompli* in the form of local encroachments, annexations, or other violations of the rules of the established international order. Facing an adversary that has credibly fielded elements of a long-range reconnaissance strike complex, or possesses other capabilities (such as Iran's well-established capacity for irregular warfare, augmented by increasing capability for long-range precision strike), the United States is in greater or lesser degree deterred. If the objective the adversary seeks appears relatively insignificant, the U.S. incentive to overcome the deterrent effect is correspondingly reduced.

Recent history offers a number of examples, exhaustively analyzed in the national security literature of the past decade. China's "cabbage strategy" with respect to the disputed features of the South and East China Seas is commonly described as the classic example of a gray zone strategy, while Russia's destabilization of Ukraine and illegal annexation of Crimea epitomizes the so-far successful implementation of something more closely approximating "hybrid warfare." Meanwhile, Iran's pursuit of regional hegemony manifests as a more traditional program of political and religious subversion and proxy warfare in Iraq, Lebanon, Syria, and Yemen, all backed by an increasingly capable long-range reconnaissance-strike complex that displays, in local context, many of the attributes of the mature precision-strike regime.

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These strategies are designed to avoid obvious counters by the United States and its allies and partners. The idea, again, is to present us with what Michael O'Hanlon describes as the "Senkaku Paradox": *faits accompli* on matters of such relative insignificance, in areas at the margins of our current ability to project and logistically support significant forces, that we perceive a lethal response as simply "not worth it."

Imperative for Maritime Campaigning

The principal area where these trends play out today are in maritime theaters. Thus, it is no surprise that the NDS has directed our attention seaward, where the threats posed by both revisionist powers and rogue states are most significant.

Our "need to refocus on how we will fulfill our mandate to support the fleet" is clear enough in the Planning Guidance I issued in July 2019. Still, it is worth restating the arguments that underlay that contention in the context of the argument for significant change in our present force design. Of the four state adversaries specifically described in the NSS and NDS, two—the "revisionist power" of the People's Republic of China and the "rogue state" of Iran—present actual and potential threats that are either principally or partially of a maritime character. Russia, the other revisionist power, and North Korea, the second rogue state, present a variety of threats and challenges to the United States, but the majority of these manifest outside the maritime domain. These adversaries are more accurately categorized principally as land powers.

It follows that, although the Naval Services will play certain roles as elements of Joint forces engaged in any principally land-oriented campaign that may take place involving Russia or North Korea, it is likely that these roles will be of a supporting nature, including (especially in the case of Russia) the provision of capabilities to support the deterrence or defeat of malign activities outside of areas in the "near abroad," close to the borders of their sovereign territory. The Marine Corps will contribute to such campaigns in accordance with relevant plans and orders, but will not use them as principal determinants of its force design or force structure.

The predominantly maritime threat posed by China globally, against which the Naval services will need to operate in close concert to execute missions involving sea control and denial, long-range strike, and limited operations to provide assured access for elements of the Joint force, does represent the primary pacing threat against which our force design and force structure will be measured. Any fight against China, in particular, and for the present most critically the deterrence of any such fight, is an inherently joint endeavor to which the Marine Corps can contribute sensibly only as an integral part of the Naval force in the prosecution of a naval campaign. We will optimize our design for this threat, though as in the case of Russia, we will not consider exclusively the threat that China may pose in its immediate vicinity within the first island chain. Both China and the United States enjoy a range of options for confrontation and competition in a wider regional and global arena, though few of these involve credible scenarios featuring sustained land operations, and most of them are essentially founded upon the capabilities of the Naval Services.

Tomorrow's Marine Corps-Implications for Force Design

The preceding review of the imperatives for change explains why I concur with the 37th Commandant's assessment that "The Marine Corps is not organized, trained, equipped, or postured to meet the demands of the rapidly evolving future operating environment." The imperatives of maritime competition, deterrence, and conflict in an era of warfare dominated by the emergence of a mature precision-strike regime demand change. The NDS offers clear guidance at the strategic level as to the general nature of the change required; at my level, as a Service chief, appear the institutional challenges and tradeoffs of recruiting, training, educating, and equipping Marines to give the combatant commanders the tools they need to execute the strategy.

So what are the specific changes required? I have recently released a force design report describing in detail my conclusions thus far, and I will not repeat the whole of that here. It is also important to remember that "answers" are elusive when the task is preparation for an unknowable future. I keep constantly in mind the words of the great British historian Michael Howard, who was "tempted," he once said, "to declare dogmatically that whatever doctrine the Armed Forces are working on now, they have got it wrong." Sympathetic to the challenge of preparing forces for a test that can only truly be administered in battle, Howard went on to allow that it is not too much to hope that we will not "get it too badly wrong," and that is most certainly my intention.

The threat today accepts the (present) reality of U.S. conventional force superiority, and he has an answer for it in the form of the complex of aggressive behaviors "short of war that we have come to characterize as gray zone operations. Credible "lethality" is only a part of the answer to this challenge ...

Clearer to me than the specifics of what we must do in future are a few things we need to stop doing now. As I noted above, the Marine Corps we have today is weighted too heavily toward amphibious forcible entry and sustained land operations. The fact that these design imperatives are not necessarily complementary does not help us—much of our present equipment, for example, is larger and heavier that we might wish it to be for amphibious operations of any kind. Its development was shaped, practically speaking, more by the demands of sustained operations ashore (from DESERT STORM forward) than of amphibious operations per se. If we take the three considerations outlined above—**rise of the precision strike regime, gray zone strategies, and the imperative of maritime campaigning**—and the NDS's guidance regarding pacing for inter-state strategic competition as yardsticks by which to measure the adequacy of what we have today, the basic outlines of the necessary change become clear enough, at least at a fairly high level of abstraction.

First, a focus on a pacing threat that is both a maritime power and a nuclear power eliminates entirely the salience of large-scale forcible entry operations followed by sustained operations ashore. Such operations are problematic even in the case of the lesser rogue regime threats, as both of those identified in the NDS are also either nuclear or near-nuclear powers. As I noted in my Planning Guidance last year, this does not mean that forcible entry is no longer a capability the Nation might require at some level—merely that the requirement will be, for the foreseeable future, limited in scale, and focused specifically on the need to provide assured access for elements of the Naval or Joint force rather than as a precursor to sustained Marine Corps operations ashore.

Second, even if there were a strong and credible requirement for large-scale forcible entry operations, such operations could not be carried out in the face of an adversary that has integrated the technologies and disciplines of the mature precision strike regime. As I noted in my Planning Guidance, the days of massed naval armadas nine miles offshore from some contested feature are long over. It has been traditional in the Marine Corps to note that "naysayers" have taken this position since the failure of the Gallipoli campaign in 1915, and to point to the U.S. Naval Services' success in the interwar period in developing techniques of amphibious warfare that would prove the naysayers wrong. It is essential to note that the true lesson of this story is that the innovators of the 1930s created a complex of then-revolutionary ideas and technologies to solve the then-salient problem of the strongly opposed amphibious assault. The force we have today, with the notable but operationally insufficient exception of rotary-wing vertical envelopment, is an incrementally-advanced, higher-tech version of that same 1930s solution. We now must recognize that time has flowed on. Our problems today, in terms of threat, geography, and technology (among other considerations) are not those of the 1930s. With respect to the effects of land-based precision fires, especially those launched from the homeland of a nuclear-armed great power, the naysayers of the 1930s are now simply the realists of the 2020s. Our job is to come up with doctrine and technology appropriate for the challenges of today (and tomorrow).

Finally, given the geopolitical realities of today and the nature of China's society and strategic culture, it is highly likely that even if we did have an answer for the challenges of amphibious power projection in a mature precision strike regime, this capability would not be sufficient to deter or prevent our pacing threat from accomplishing its objectives in regions we judge important to our national security. The threat today accepts the (present) reality of U.S. conventional force superiority, and he has an answer for it in the form of the complex of aggressive behaviors "short of war" that we have come to characterize as gray zone operations. Credible "lethality" is only a part of the answer to this challenge—the ability to compete directly, daily, and globally, by means acceptable to the American people and the rule of law, is the missing piece.

Conclusion

The changes to Marine Corps force design that I have directed thus far are largely commonsense responses to an acceptance of the implications of these three major considerations. Our force will be getting lighter, and somewhat smaller. Capabilities such as heavy tanks and heavy cannon artillery that are suitable principally for sustained land combat, or that are simply too heavy or logistically demanding to be projected ashore in the theaters and against the threats of primary concern today, are being cut back. So are capabilities such as

attack helicopters that lack the range to be relevant against the pacing threat in the Pacific. Such heavy capabilities are found in abundance elsewhere in the joint force inventory, and I am confident that we can rely on them to be there to support Marines in any high-end ground combat scenario into which we may find ourselves drawn. Even Marine infantry battalions, the capability perhaps most central to my Service's historical record and self-image, will become fewer and perhaps smaller, a move that is fully justifiable in a force that will no longer be sized for large-scale sustained ground combat. Changes in these key units will be informed by the recent experiences of highly distributable ground units operating within adversary weapons engagements zones, including those of our own special operations forces.

On the other hand, existing capabilities that promise to make us more competitive under the realities of the precision-strike regime will increase. Long-range rocket artillery and high-endurance unmanned aerial vehicles, for example, are obvious contributors in this space and will be making their appearance in greater numbers enhancing the ability of future naval forces to win the reconnaissance versus counter-reconnaissance competition and "fire effectively first."

These moves are, as I've noted, fairly obvious and well-supported by the wargaming, analysis, and experimentation we have done to date. I am confident that we have not gotten it "too badly wrong" in essaying these steps. What comes next is harder, though. We have concepts on the books with names like "Distributed Operations," "Expeditionary Advanced Base Operations" and "Littoral Operations in a Contested Environment," along with some emerging thoughts about long-term persistent operations in the NDS's "contact layer" that we are discussing under the label of "Stand-in Forces." Fully analyzing and testing these concepts, through integrated Naval wargaming and analysis but most importantly in real-world, live experimentation, is our next great challenge. Since the world is not waiting for us to complete our analysis, much of this work will necessarily be done by our operating forces out forward, in seamless integration and alignment with the Navy. Marines and Sailors will have to uncover and develop solutions for the challenges of operating in the new modes our concepts suggest: in smaller units, on smaller ships, distributed over vast distances but linked by command and control systems and doctrines that allow such radically dispersed forces to achieve relevant, lethal effects in deterrence and in war. At least as challenging will be working out effective responses to the challenges of gray zone operations and assuring our regional partners that we will be there to support them, come what may.

I say this next stage will be harder not merely because the practical work of accelerating ideas that have long languished at the conceptual stage into concrete, modern-world reality will be hard. The work will be harder politically because it cannot presume the suitability of any part of our existing force design or the sometimes multi-billion dollar acquisition programs that have evolved to support that existing design. Programs such as the F-35 Joint Strike Fighter, the CH-53K heavy lift helicopter, and the entirety of today's Ground Combat and Tactical Vehicle Strategy (encompassing systems from the M1A1 Abrams tank through the Amphibious Combat Vehicle and the Joint Light Tactical Vehicle), are based upon assumptions that do not in my view adequately account for all three major realities I have discussed above. These systems are what we have today, and it is eminently possible that many of them, at the system level and at the programmatic level, can evolve to meet the needs of the future. But the jury is still out on this. I am fully aware the redesign of the force may be perceived by some external audiences as an oversimplification in the face of an uncertain future—perhaps even an obsessive focus on China at the expense of other enduring requirements. Those who suggest this are mistaken. While our force will be purpose-built in accordance with the three major realities noted above, the resultant force will be more capable of competing against and, when necessary, defeating the forces of revisionist powers and rogue states within the context of a naval or joint campaign. It will also retain broad capabilities for forward deployment afloat in support of the range of crisis and contingency operations that have historically been the "bread and butter" of the Marine Corps in the intervals between major wars.

While our force will be purpose-built in accordance with the three major realities noted above, the resultant force... will also retain broad capabilities for forward deployment afloat in support of the range of crisis and contingency operations.

Our historical and legislatively-mandated role as the Nation's force-in-readiness, "most ready when the Nation is least ready," remains a central requirement in the design of our future force, and one which I will keep unflinchingly in mind as I oversee the next stage of wargaming, experimentation, and analysis that will work out many of the specific details.

Note

1. W.D. Puleston, *Mahan, The Life and Work of Alfred Thayer Mahan*, (New Haven: Yale University Press, 1939).