Losing the Initiative in the First Island Chain How Organizational Inefficiencies Can Yield Mismatched Arsenals

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Abstract: Much has been written of renewed great power competition and the characteristics of a potential armed conflict with the People's Republic of China. This article surveys the strategic environment and the features of the current military strategies, detailing how such a conflict might be waged. In preparation for a potential conflict with China in which defense of the first island chain is required, the Joint force, and in particular the U.S. Navy and Marine Corps, have invested heavily in technology intended for amphibious expeditionary operations. However, most of the investment has centered on intricate and expensive aviation technology. Meanwhile, surface expeditionary technology has continued to age and now significantly lags its aviation counterparts such as the MV-22 Osprey and Lockheed Martin F-35 Lightning II. As a result, a strategic gap in capabilities has emerged that could dramatically impact the ability to execute an island-defense strategy.

Keywords: Bell Boeing MV-22 Osprey, Marine Corps organization, Marine Corps Requirements Oversight Council, MROC, deputy commandant for aviation

sing the iron triangle and sub-bureaucratic models of analysis, a case study method is offered to compare the acquisition of the Bell Boeing MV-22 Osprey and the Expeditionary Fighting Vehicles (EFV) to understand why the Department of Defense (DOD) and the Navy/Marine Corps

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With the global pandemic exacerbating an already tense strategic environment in the Indo-Pacific region, now is the time for bold action to remake the Marine Corps in a way that will best prepare it for the coming conflict in that troubled region. The Commandant of the Marine Corps, General David H. Berger, has made commendable strides toward that end. These efforts should be augmented further. Title 10 of the United States Code defines the Marine Corps, in part, as a military Service

> organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign.¹

Additionally, in 2019, the Commandant provided the following additional guidance for force design: "The Marine Corps will be trained and equipped as a naval expeditionary force-in-readiness and prepared to operate inside actively contested maritime spaces in support of fleet operations."² Despite laws and guidance that specify Marine Corps roles and responsibilities, which require a robust amphibious force for service with the fleet, during the last several decades the Marine Corps has successfully acquired next-generation aviation platforms (e.g., MV-22 Osprey and Lockheed Martin F-35 Lightning II) but not similarly cutting-edge amphibious surface platforms.

This examination contends that as a result of intra-Marine Corps structural barriers, a strategic gap has emerged that renders the Service less prepared to operate in a contested environment against an enemy with modern antiaccess/ area-denial (A2/AD) capabilities. In a hypothetical conflict in the vast Pacific theater—a DOD priority region—a highly dispersed but interconnected island-chain defense strategy has emerged as a leading course of action to thwart an increasingly aggressive People's Republic of China (PRC). In such a conflict, the aviation component would provide a high degree of mobility but cannot maintain a constant presence. Conversely, surface amphibious forces would be less mobile but capable of maintaining a more enduring presence in an operating area, operating simultaneously in multiple domains.

However, the platform-level disparities in great power amphibious and littoral warfare are simply a symptom of a larger problem. A breakdown in the strategic planning process has given way to a Marine Corps unable to adequately fulfill its Title 10-mandated amphibious mission in support of fleet operations across domains. There are intra-Marine Corps inefficiencies and structural barriers that have allowed the aviation component (and its civilian-contracted

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manufacturers) to be overrepresented relative to other communities of interest, both in Congress and at Headquarters Marine Corps. This is not to say that a robust aviation component is not a critical necessity for successful amphibious operations—it clearly is. However, the way the modern Marine Corps has come to view aviation's role in the organizational structure is misplaced. The unintended consequence is an imbalance of focus and advocacy that has led to a gap in operational capability with strategic implications. This article explores these capability gaps by using a comparative case study analysis of the MV-22 Osprey and the Expeditionary Fighting Vehicle acquisition processes and outcomes. The tilt-rotor Osprey was successfully fielded in the early 2000s while the EFV program was canceled in 2011.

This analysis does not attempt to prescribe or argue the merits of one platform over another. It may well be the case that funding and producing the Osprey was a wise strategic decision while canceling the EFV was equally prudent. This exploration aims to be ambivalent on both points. In fact, given General Berger's recent commentary regarding the Marine Corps being overly invested in exquisite surge force technology and platforms, the Osprey and EFV may well have both been unwise ventures.³ The purpose of the analysis, however, is to show that both programs curried favor and scorn with threats of cancellation at various points in their history. Both programs were criticized for being niche capabilities that were too expensive, and both programs were—at certain points—defended by the Marine Corps as crucial investments for tomorrow's conflicts. Whether the specific platform is the right or wrong choice, the broad categories of capabilities that they represent have long been advocated for as necessary in any type of future island defense strategy.

Free and Open

The 2018 National Defense Strategy describes a resurgent China as "the central challenge to U.S. prosperity and security."⁴ This analysis by the Donald J. Trump administration echoes that of the previous administration, which began a rebalance to Asia in light of a growing concern with China's actions in the Western Pacific. The United States and allies in the region seek to keep the Indo-Pacific region free and open for all participants without undue influence from Beijing. However, the Chinese have "weaponized the global commons," according to U.S. secretary of defense Mark T. Esper, making a free and open Indo-Pacific far less likely.⁵

Further, Beijing's land reclamation in the South China Sea has been used to house military equipment and personnel. At the same time, territorial claims in both the South and East China Seas are manifest encroachments on neighboring countries' exclusive economic zones. The South and East China Seas are home to several allies and partners who find themselves increasingly vulnerable to the threat China poses. In recent years, the Chinese military, coast guard, and civilian mariners have continued to push the boundaries of international law and norms as they salami slice away small islands and maritime territorial boundaries in efforts to establish a new status quo and extend their influence. The strategy of using salami slicing "involves the slow accumulation of small changes, none of which in isolation amounts to a casus belli, but which add up over time to a substantial change in the strategic picture."6 Partner nations including Japan, South Korea, the Philippines, and Vietnam are engaged in continuous gray zone conflicts with China. Gray-zone conflicts involve "employing sequences of gradual steps to secure strategic leverage. The efforts remain below thresholds that would generate a powerful U.S. or international response, but nonetheless are forceful and deliberate, calculated to gain measurable traction over time."7 As many commentators have acknowledged, these actions have endangered the rules-based international order and threaten to disrupt maritime trade in one of the world's busiest sea lanes. Though China claims its actions are lawful and done without malice, the United States sees the potential for China to act as a revisionist nation set on regional hegemony attained by bullying and coercion.

China's increasingly hostile actions are made more complicated by its robust antiarea, access-denial network of surface-to-air, surface-to-surface, and antiship missile and sensor systems. The People's Liberation Army, Air Force, and Navy have strengthened their capabilities in recent years, as directed by their government, to "win command of the sea and command of the air, and [to conduct] strategic counterstrikes."⁸ A mix of short-, medium-, and long-range ballistic missiles, cruise missiles, and precision-guided munitions have been stationed and oriented toward the South and East China Seas. These weapon systems extend well beyond the so-called first island chain which, as James R. Holmes has noted, "encloses the East Asian coastline."⁹ Coupled with antisatellite technology and cyber/electronic warfare weapons, Beijing has "hoist[ed] a protective umbrella over the near seas, [allowing] PLA navy units to range freely within the waters deemed important without leaving the protective cover of shore defenses."¹⁰

The Necessity of the Island-Chain Defense Strategy

The theoretical basis for pursuing amphibious weapons platform technology becomes apparent within the context of these threats. The United States has established a policy of competition intended to maintain the liberal, rules-based world order in which "air, sea, land, space, and cyber commons that form the current global system" are safeguarded along with "sovereignty, independence, and territorial integrity."¹¹ The Indo-Pacific has been designated the primary strategic theater of concern and China as perhaps the most critical competitor

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in this new era of great power competition.¹² The American strategy for competing and winning in this environment includes close cooperation with allies and significant forces forward deployed within the region.

In the initial stages of a conflict with the PRC, the United States and its allies would need to employ containing actions meant to counter China's sea-denial strategy such that follow-on forces can move into the theater. As former secretary of defense Robert M. Gates notes, "We should be less concerned with [China's] ability to challenge the U.S. symmetrically, and more with their ability to disrupt our freedom of movement."¹³ Several analysts have provided versions of a counter-A2/AD strategy that might collectively be called *island defense*. Andrew Krepinevich describes his method as "archipelagic defense"; T. X. Hammes describes a strategy of offshore control akin to a distant counter blockade.¹⁴ Elbridge Colby and Jonathan F. Solomon argue for well-dispersed "presence in the first layer" of a Corbettian disposal force able to absorb enemy strikes and then rally to prevent a fait accompli.¹⁵ Similarly, Holmes argues for a maritime perimeter defense in the first island chain that features "natural guard towers and narrow defiles—islands and straits."¹⁶

All the proposed island defense-like strategies have several things in common. First, in all cases, forces are forward based and well dispersed. This component of the strategy makes each target (an austere outpost with antiship weapons, for example) far less valuable. To destroy enough of these outposts to have operational or strategic effects, Beijing would be required to expend an exorbitant and perhaps prohibitive amount of resources. In this way, the cost imposition formula is reversed, as Hammes points out. The second point of commonality is the requirement for next-generation technology that allows forces to move at high rates of speed, employ unmanned and electronic warfare capable systems, and communicate in a degraded environment. In execution of an island-defense strategy, aviation assets provide much needed mobility and firepower, but aviation alone is "operationally insufficient," as current Marine Commandant Berger highlighted in 2020.¹⁷ In concert with naval assets that provide reconnaissance and surveillance, allied forces ashore-the guards in Holmes's watchtowers-must be able to quickly displace between and maneuver on islands-many of which do not provide space or terrain for airfields. In other words, the U.S. military inventory needs both aviation and highly capable surface amphibians (manned or otherwise) to successfully implement an island-defense strategy. Why, then, does the Marine Corps lack the sufficient hardware to conduct twenty-first century missions in support of sea denial and sea control fights? What has driven the acquisition outcomes of the last several decades of the twentieth century and beyond?

A Mismatched Arsenal

Since the end of Vietnam, the Marine Corps has pursued several high-end technologies capable of moving Marines over longer distances and at greater rates of speed. Aging platforms and increasingly capable coastal defenses of potential enemies animated the Marine Corps' pursuit of these capabilities. In the air, one preferred platform was the V-22 Osprey—a tilt-rotor aircraft capable of taking off and landing like a helicopter but flying like a fixed-wing airplane. Based on the assumption that future amphibious operations would need to be launched from beyond the horizon, the Marine Corps invested heavily in the Osprey as the replacement to its aging fleet of Vietnam-era helicopters. On the surface, for both land and sea, the over-the-horizon answer was to be the Expeditionary Fighting Vehicle, previously known as the Advanced Amphibious Assault Vehicle (AAAV). Designed to achieve high water speed and increased lethality with stabilized weapon systems, the AAAV/EFV was to replace the Vietnam-era landing vehicle, tracked, or LVT.

A cross-case analysis of the EFV and Osprey programs will draw out and highlight those key factors that lead to one program's survival and the other program's demise. Both are considered next-generation platforms, while one is a surface amphibian and the other a tilt-rotor airframe designed with amphibious operations in mind. Both programs represented capabilities that the Marines argued were necessary for high-end amphibious operations against a modern, twenty-first century enemy with ever-increasing A2/AD weapon systems capabilities. Both programs were opposed, at various points in time, by secretaries of defense.

The cross-case study analysis will draw on the iron triangle model and numerous other studies that have been based on that theoretical foundation. Coined by Gordon Adams in his book, The Iron Triangle: The Politics of Defense Contracting, the iron triangle model stipulates that policy decisions are the result of interactions and trade-offs between a federal bureaucracy, interest group(s), and congressional committees.¹⁸ The present analysis will consider the influence of the following stakeholders: industry (the manufactures of the weapon systems), the administration including the Office of the Secretary of Defense (OSD), and Congress (particularly the armed service committees and subcommittees). Borrowing from the methodology of Christopher M. Jones and Kevin P. Marsh, this cross-case comparison will also include the unique position of the specific Service most affected by the platform-in this case, the Marine Corps.¹⁹ The intent of the analysis is to understand what factors and stakeholders most influenced these decisions within the context of the strategic gap in capability already identified. Including the Marine Corps as distinct from the secretary of defense will allow for a deeper, sub-bureaucratic analysis of the Marine Corps' role in policy creation.

As explained by Nikolas K. Gvosdev, Jessica D. Blankshain, and David A. Cooper, analyzing the sub-bureaucratic level—the levels below the main agency itself—provides a "more helpful perspective to see increasingly subordinate officials as proponents of increasingly narrow sub-agency interests that are sub-sets of overall core agency interests."²⁰ In the iron triangle-based study, the analysis ends at the Service itself, but proponents of the sub-bureaucratic model argue that interest groups and sub-agencies within the Service would need to be analyzed to understand organizational behavior and its contribution to policy outcomes. To accomplish this, the analysis of sub-bureaucratic interactions will seek to understand how the Marine Corps and various intra-Service agencies contribute to organizational decision making.

Iron Triangle Analysis: Osprey and Expeditionary Fighting Vehicle Industry

The main contractors for the Osprey were Boeing and Bell Helicopter. Both companies showed a tremendous amount of political skill throughout the development process, as evidenced by three significant decisions: subcontractor locations, main production facility locations, and creation of the Tilt-Rotor Coalition in Congress.²¹ The Bell-Boeing team employed some 2,000 subcontractors, including major players in the defense industry from across the country, such as Grumman, Lockheed Martin, and IBM.²² With much of this work spread throughout the country, only eight states were not directly affected by Osprey work, which set the stage for a powerful political machine of support for the aircraft.²³

The manufacturing plan for the EFV was starkly different to that of the Osprey. The vast majority of the manufacturing work was to have been completed in General Dynamics' Lima, Ohio, plant. Perhaps owing to the difference in technological complexity and size of the program in terms of costs, EFV simply could not employ as many subcontractors and spread the workload in as many state labor markets quite the way the Osprey could. According to a 2011 Congressional Research Service (CRS) report, the unit cost of the Osprey was \$93.4 million and a total contract cost of \$52.9 billion.²⁴ A CRS report from the same year cited the EFV's unit cost at \$24 million and \$11.163 billion in total contract size. The size and scope of EFV relative to Osprey limited General Dynamics in creating the widespread—and potentially more politically powerful—network of subcontractors and manufacturing facilities.²⁵

Legislature

While the Marine Corps provided the most fervent special interest group for

the Osprey, Congress was its most potent and unwavering ally. The Tilt-Rotor Coalition was the name given to what was a powerful lobbying group in Congress made up of representatives from the states primarily benefiting from the program, such as Texas and Pennsylvania. As previously mentioned, the prime contractors were able to spread the manufacturing work, and thereby employment benefits, of the Osprey to many states. By the mid-1990s, Osprey subcontractors were working in 258 congressional districts with more than 10,000 jobs spread across those districts.²⁶

This is not to say that congressional support was altogether lacking for EFV, however. There was considerable backlash in the immediate aftermath of Secretary of Defense Robert Gates's announcement of cancellation. A spokesman for former California congressman Duncan Hunter, then a member of the House Armed Services Committee, told reporters in January 2011 that "[Mr. Hunter] 'is confident that the committee will reject the secretary's proposal to eliminate EFV'."²⁷ Furthermore, Hunter told reporters that he thought Gates is "trying to destroy the Marine Corps" with his decision to cancel the EFV.²⁸ Missouri congressman Todd Akin, then chair of the Subcommittee on Seapower and Projection Forces, made similar comments, calling canceling the EFV "a bad idea."²⁹ Three members of Ohio's congressional delegation wrote a letter to President Barack H. Obama highlighting the benefits of the vehicle and encouraging the administration to keep the program.³⁰

Despite the apparent flurry of support for the EFV and intentions to fight the secretary of defense on his proposals, by April 2011 much of that support was gone. Duncan Hunter, a former Marine and considered by General Dynamics and EFV advocates as one of the strongest EFV supporters in Congress, backed away from plans to lead a congressional effort in support of the EFV.³¹ One of the key reasons for the Congress's acquiesce may have been a keen political move made by Gates in testimony. Knowing that Republicans in the House of Representatives were pushing for more defense spending, Gates argued that passing an actual defense budget—instead of continuing to operate on continuing resolutions at previous year's levels—would indeed result in an increase in defense spending.³² Seeing the potential for more overall spending in a number of favored areas like missile defense, representatives like Hunter began issuing statements of regret about the EFV, saying that he supports the EFV but recognizes the reality of fiscal constraints.³³

Executive

The evaluation of the Executive Branch's position includes the Office of the Secretary of Defense but will not include the Marine Corps, as the Service vying for or defending a particular weapon system is a stakeholder with a different set of goals relative to the Pentagon leadership. For example, the OSD is charged with "provid[ing] oversight to assure the effective allocation and efficient management of resources consistent with approved plans and programs."³⁴ The Marine Corps, like other Services, has an incentive to ensure its survival. One method for doing so would be to develop or continue developing unique capability sets that carve out missions and roles for the future. In this sense, the goals of the OSD and the Service can be in opposition. In 1989, then-secretary of defense Richard B. "Dick" Cheney made it clear that he opposed the Marine Corps' efforts to buy the Osprey, citing the programs exorbitant cost projections and lamenting the resources already consumed by the program.³⁵

Secretary Cheney argued that the Osprey was too expensive for such a narrow set of missions. Essentially, the Osprey filled a niche role that did not justify the cost. When Congress continued to fund the program, Cheney refused to spend the money—prompting a 1992 U.S. comptroller general's ruling that Cheney's actions violated the law, thereby forcing the administration to expend the funds allocated to the Osprey.³⁶ By August 1992, however, the administration gave up its efforts to kill the program when it became clear that Congress was intent on funding the program and seeing it through. As a recession had taken hold of the economy and with Osprey manufacturing spread throughout the country, especially in voter-rich Texas and Pennsylvania, it was becoming politically dangerous to oppose the program.

Regarding the EFV, both the William J. "Bill" Clinton and the George W. Bush administrations showed support for the vehicle in that they never directly opposed the Navy's budget for the program. In the late 1990s, the program enjoyed success and was touted as a "model defense acquisition program" during the research and development phases.³⁷ However, by 2006, when major reliability concerns and test failures plagued the program, a scornful eye was turned on the EFV by both the administration and Congress. In a 2008 congressional report, the House Oversight Committee expressed frustration at a rushed and mismanaged program that was now "billions of dollars over budget and many years late."³⁸

The Obama administration's budget requests through fiscal year (FY) 2011 included funding the EFV. However, Secretary Gates, among others, repeatedly expressed frustration with the program; Gates publicly questioned whether the very requirement for a "niche capability" like the EFV made sense in an era when A2/AD systems can be launched many miles toward sea-based systems.³⁹ Driven by pressure to trim the enormous defense budget from both the White House and an economy still reeling from the financial crisis, Secretary Gates put the EFV, along with other programs, in his cross-hairs. While allowing further production efforts of both the Osprey and the F-35, the secretary put both programs similarly on notice. By 2011, Secretary of Defense Gates's pa-

tience with the program appeared to have ended. The proposed FY 2012 budget requested termination efforts be funded for the EFV as Gates announced his intentions to cancel the program.

Service

The Marines' connection with each of the platforms in question provides the starkest difference in the analysis so far. Beginning with the EFV, the Marine Corps' relationship with its Service-defining platform has been a rocky one. Foregoing the history of amphibious tractors prior to the late 1970s, a post-Vietnam Navy and Marine Corps wrestled with the emerging challenges of ever-increasing A2/AD capabilities. Rightly spurred by the need to avoid or outmaneuver a sophisticated and capable enemy with advanced coastal defenses, the Marine Corps knew its surface amphibian—the LVT—was too slow and not lethal enough.

As a result, the Marine Corps sought to develop the landing vehicle, assault (LVA), which was to be a high-speed platform. However, by 1979, Marine Corps leadership was ready to close the door on the LVA. The driving factor for the Service's desire to cancel the LVA was, ostensibly, an assumption that the nature of the threat did not call for high water speed and over-the-horizon launches. In his memo to the under secretary of defense for research and engineering, then-Commandant General Louis H. Wilson wrote, "[based on discussion with the Chief of Naval Operations] I have concluded that initial assault waves . . . can be launched effectively from distances considerably less than 15 to 25 miles This eliminates the previous overriding requirement."⁴⁰

After arguing that the requirement had changed or been reinterpreted, the Commandant spent several more paragraphs (and subsequent testimony before Congress) lamenting the money the Marine Corps had spent on developing the technology. By January 1979, the Marine Corps had spent approximately \$20 million on researching and developing the necessary technology—a little more than \$71 million in current year dollars. After explaining that an emerging technology known as the landing craft, air cushioned (LCAC) would provide enough high-speed lift for amphibious assault, General Wilson concluded by saying, "The LVA was a vehicle that I am convinced the Marine Corps could not afford."⁴¹

Without a replacement in sight, the then 10-year-old LVT entered the 1980s as the Marine Corps' only answer to its requirement for an armored surface amphibian. Renamed the Amphibious Assault Vehicle, the platform unfortunately continued to suffer from the same speed and lethality shortfalls previously identified. After considerable intra-Marine Corps debate, the Service begrudgingly embarked on a concept exploration for an advanced amphibious assault vehicle.⁴² The high projected cost is often anecdotally referenced as a

source of a great deal of consternation for many in the highest echelons of Marine Corps leadership.⁴³

Though the program enjoyed success in the research and development phase, winning two DOD acquisitions awards during those years, the AAAV began hitting major reliability problems in early testing.⁴⁴ Renamed the Expeditionary Fighting Vehicle (EFV) in 2003, a number of updates to the program's requirements and system redesigns after repeated poor showings during testing drew much criticism through the early 2000s. After experiencing a Nunn-McCurdy breach in 2007 and yet another baselining of the program, projected dates for initial capabilities were pushed to 2015.⁴⁵ By 2010, however, the Marine Corps' defense of the platform became lukewarm. Service officials began shifting their tone in the way they defended the budget—jockeying the Service to a political position where it might retain EFV-related funds in the event the program is canceled.⁴⁶ By August of that year, then-Commandant General James T. Conway, a longtime advocate for the vehicle, remarked publicly that the Marine Corps was very concerned about EFV affordability in an era of defense spending cuts.⁴⁷

Compounding the problems for the program was the counterinsurgency fight raging in Iraq by the late 2010s. The flat-bottom hull design of the EFV drew more criticism and concern. The House Armed Services Committee commented that the EFV is likely less survivable than the new Mine-Resistant Ambush Protected (MRAP) vehicle, whose V-shaped hull better protected occupants from improvised explosive device (IED) blasts.⁴⁸ Moreover, the Global War on Terrorism was focusing attention and resources away from conventional war and an even sharper eye was turned toward those programs that seemed to detract from the then-current efforts in Iraq and Afghanistan.

The Marine Corps' reaction to Secretary Gates's decision to recommend cancellation of the program was to capitulate. Then-Commandant of the Marine Corps General James F. Amos publicly supported Gates's decision. In response to directed questions about the need for the EFV from Congress, Marine Corps leaders including Amos but also his assistant commandant, future Joint Chiefs Chairman General Joseph F. Dunford, defended the decision to cut the program. Both generals spoke of yet another service life extension for the Amphibious Assault Vehicle, a platform that will turn 50 years old in 2022.

While the EFV did not enjoy continued support from the highest echelons of Marine Corps leadership, the Osprey's experience was decidedly different. After identifying the need for faster and more capable helicopters in the closing years of the Vietnam War, the Marine Corps spent the 1970s (as it did with the LVT) looking for a potential replacement option. In 1982, the Osprey program was authorized and a contract for full-scale development was awarded in 1986.⁴⁹ By 1989, then-Commandant General Alfred M. Gray told Congress that the Osprey "is the most important advance in military aviation since the helicopter. . . . It is my number one aviation priority."⁵⁰

The domestic and geopolitical situation the Marine Corps found itself in by the late 1980s was considerably different than the situation 20 years later. In the late 1980s, with the Cold War coming to an end, each Service maneuvered to position itself for the next generation's fight. The Marine Corps saw the Osprey as a critical piece in that effort. In attempts to make the Osprey's high price tag more manageable, the Marines offered to scrap plans to buy the M1 Abrams tank (an offer that was ultimately rejected). Indeed, for most of the program's history, the Marine Corps has been its biggest champion.⁵¹

In response to Secretary of Defense Dick Cheney's push during multiple years to cancel the Osprey, Marine Corps officials did not publicly disagree with the secretary of defense, but they did use other opportunities to advocate for the aircraft. For example, in addition to conducting behind-the-scenes lobbying for the Osprey, Marine Corps officials would use opportunities in congressional testimony to defend the platform. For example, when questioned about affordability, Service officials would offer that the Osprey remained the most affordable option for a replacement helicopter, all while being careful not to refute Cheney publicly or directly. This oblique approach became so apparent that members of Congress began publicly admonishing the Pentagon for applying a gag order on the Marine Corps.⁵² As opposed to the EFV, the Marines made no public statements supporting the cancellation decision of the Osprey and instead chose to be very judicious in the way it provided ostensible support to OSD's decisions.

Though barred from making overt statements condemning the secretary of defense's position, Marine Corps leadership continued to provide testimony favorable to the Osprey in response to direct questioning from Congress. The Marines continued to show analysis that they contended showed the Osprey as the most cost-effective solution to the Service's aging helicopter problem, providing evidence that it was most suitable for addressing the operational need for high-speed, long-distance amphibious transportation.⁵³

Analysis

The Expeditionary Fighting Vehicle died, not because it cost too much but because the Marine Corps stopped fighting for it. It may not have been possible to garner the same kind of broad congressional support for the EFV that the Osprey enjoyed, but the Marine Corps failed on a number of levels to shore up a strong political arm to support its next-generation surface amphibian. Both the EFV and Osprey were expensive and behind schedule based on original estimates—but the Marine Corps continued to fight for one and not the other. Before determining why, we must first address a number of options Marine Corps leaders had at their disposal if they wanted the program to continue. This analysis counters the prevailing argument that cost overrun was the prime reason for the vehicle's demise and that there was nothing that could have been done. If cost overruns were the actual or most important reason, a great many more programs would have been canceled as well, including the Osprey.

Two potential options were available to the Marine Corps to garner more political support for the EFV. First, the Service could have appealed more vocally to its most frequent mission set across the globe—humanitarian assistance and disaster relief. The AAV is commonly used as a logistics vehicle in crisis both at home and abroad. For example, after Hurricane Katrina flooded and destroyed much of New Orleans in 2005, the AAV was used as one of the few vehicles capable of reaching beleaguered and trapped residents in that city. Essentially, there was too much emphasis on the EFV's high-end combat roles and too little on mission sets that would have appealed to a wider base of support. Because the EFV tripled the AAV's water speed and raised lethality exponentially with its stabilized 30mm cannon, it was natural for both the defense contractor and the Marines to want to demonstrate these capabilities and justify the money spent on them.

Second, the Marine Corps could have appealed to its prime contractor, General Dynamics, to adopt a subcontract model like that of Osprey. Undoubtedly, the power of the Tilt-Rotor Coalition in Congress was due to the great many constituent states positively affected by additional manufacturing and production jobs associated with Osprey. Granted, this critique is clearer in hindsight, given that the contract award of the EFV happened well before the IED became the insurgent weapon of choice, thereby weakening the political prospects of a flat-bottomed vehicle capable of overland movement.⁵⁴ Nevertheless, the Marine Corps' historic leeriness toward the pricey advanced amphibious vehicle project ought to have given its advocates within the Service pause and reason to build the most powerful political alliance possible. In other words, the political strategy for the EFV appears to have been something of an afterthought. That neither of these options was employed to the extent possible reflects the Marine Corps' unwillingness to continue the political fight for the vehicle.

A Sub-Bureaucratic Analysis of Acquisition Decision Making

The iron triangle model sufficiently explains the relationship between the primary stakeholders in defense acquisition decisions, and the preceding analysis has pinpointed the Marine Corps' role in one platform's success and the other's demise. However, this theoretical lens only demonstrates the Service's role in that interaction but does not explain its rationale. Without such a rationale, it is difficult to highlight problems and recommended changes. Further analysis will be through the sub-bureaucratic analysis lens.

Two assumptions will be made to determine the organizational influences that have resulted in heavy investment in the aviation component of island defense while surface components have lagged. First, modern organizational history sets a contextual framework from within which any organization makes future decisions. This observation about the nature of organizations, particularly military ones, is borne out in the oft-cited criticism that the military is "always trying to fight the last war." In other words, experiences in previous conflicts shape the way military organizations view future ones.

The Marine Corps came away from Vietnam with a clear idea about its aging fleet of helicopters and amphibious landing vehicles. Both were soon to be outdated, and growing concerns about A2/AD networks fueled decisions to pursue next-generation technologies for both. However, a historical analysis of the value of both airpower and surface amphibians in that conflict and future ones will shed light on the Service culture that remains today. Airpower was of high tactical, if not strategic, value in Vietnam. Unlike other tools of military power, airpower could deliver perhaps the closest thing to meaningful or decisive blows. Helicopters provided transport and close-air support while bombers struck interdiction targets and, toward the end of the war, targets in the capital of North Vietnam, Hanoi. While an analysis of the strategic value of bombing runs is not the intent here, airpower's effect on the culture of the U.S. military continued on a trajectory established at its inception: with the right range, speed, ordnance, and targets, airpower can deliver a decisive blow.

The role of surface combatants—to say nothing of the strategic relevance of the U.S. Navy as a whole—was far less visible in Vietnam and played a much more minor role. Marine amphibious landing vehicles and Navy utility landing craft delivered thousands of Marines and their equipment ashore in unopposed landings in the early stages of the Vietnam War. Amphibious landing vehicles took part in several major battles such as Operation Starlite, a combined naval, air, and amphibious ground force attack on conventional Vietcong forces in August 1965 near the air base at Chu Lai. However, their role was generally minimized as tracked amphibious landing craft made for inefficient and cumbersome fighting vehicles in the dense jungles of Vietnam.

The strategic importance of airpower and its ability to deliver near-decisive results was demonstrated again during Operation Desert Storm (1990–91). Without question, the ground offensive was quicker and far less costly than it may have otherwise been because of the highly successful air campaign that preceded it. One need only reference the nickname given to the initial barrages of Operation Iraqi Freedom some 12 years later to understand what airpower's

effects had come to symbolize: shock and awe.⁵⁵ Given airpower's ever-more visible accomplishments in modern warfare, it comes without surprise that military and civilian leaders are continually ready to invest heavily in these important and powerful platforms.

By contrast, surface amphibians have not played the same role, especially given the character of the conflicts dating back to the Vietnam War. Ill-suited for mobility in the jungle and highly susceptible to IEDs, the asymmetric weapon of choice, amphibious vehicles seem to occupy a diminishing role in potential mission sets the U.S. military may carry out. In the handful of years before the EFV was canceled in 2011, the U.S. military had spent more than \$50 billion to produce thousands of MRAP vehicles.⁵⁶ Embroiled in an IED-laden counterinsurgency conflict given the apt moniker "The Long War," any practical use for a vehicle designed for contested entry after high-speed water movement seemed long ago irrelevant.

Highlighting the relative importance and use of both air and surface amphibians since Vietnam is relevant to this discussion because it explains the historical context and organizational memory of key figures in the Marine Corps, especially around the time the EFV was canceled. In 2011, all four-star Marine generals (including Commandant General James Amos and Assistant Commandant General Joseph Dunford) each began their careers in the immediate aftermath of the Vietnam War. They were both mid-level officers during the tremendously successful air campaign that preceded the Gulf War.

Beyond the relevant organizational memory in the modern Marine Corps, it is important to analyze the method by which the Service defines and advocates for its requirements. The Marine Corps Requirements Oversight Council (MROC) is the primary body that culls and synthesizes inputs from assigned advocates across the Marine Corps. The intended results are recommendations to the Commandant of the Marine Corps for what the Service needs and what ought to be advocated for in the halls of Congress.

The MROC, as a formal advisory board to the Commandant, began in 1999 to integrate more diversified voices at the highest levels of the Service. As then-assistant commandant of the Marine Corps General Michael J. Williams noted in a 2001 *Marine Corps Gazette* article, "[The deputy commandant for aviation] has long played a very effective role in advocating the needs of Marine Corps aviation . . . CMC directed that the other elements of the MAGTF have similar representation."⁵⁷ Though successive Commandants have slightly altered the MROC's charter and added to its framework, the basic mission remains the same: advise and assist the Commandant in the execution of their Title 10 and Joint Chiefs of Staff responsibilities.⁵⁸

General Williams, also an aviator, makes an essential point about the nature of Marine Corps advocacy before the MROC's creation. The aviation community has long had a powerful pair of advocates at Headquarters Marine Corps, given that at least one four-star and one three-star Marine general have always been naval aviators. The Assistant Commandant of the Marine Corps is customarily an aviator (except when General Amos, a McDonnell Douglas F/A-18 Hornet pilot, was Commandant), and the deputy commandant for aviation is a lieutenant general. The extent to which these high-ranking officials influenced previous acquisition decisions (the Osprey, for example) is unclear, but, as General Williams indicated, their voice has long been a powerful one.

The advent of the MROC did not eliminate the position of deputy commandant for aviation; instead, the council brought senior ground combat and logistics officers to serve as advocates for their respective slices of the Marine Air Ground Task Force (MAGTF). The purpose of the advocacy program is that "each element of the MAGTF and supporting establishment shall have an advocate at HQMC [Headquarters Marine Corps] who will represent them in various internal and external processes occurring within the National Capital Region."⁵⁹

The MROC creation was a step in the right direction. Before the MROC, all elements of the MAGTF other than aviation had no formalized voice to the Commandant of the Marine Corps. It may be easy to understand why this gap in advocacy existed for so long. The Marine Corps, like the Army and the Navy, have long understood the value of aviation. They each fought tenaciously to maintain an organic aviation capability after the creation of the Air Force. Yet, each Service has struggled to determine the right organizational structure for aviation assets and aviators. For example, the U.S. Navy will not assign a surface warfare officer to be the command a surface ship. Likewise, the Marine Corps will only assign an aviator to command a Marine Aircraft Wing. However, an aviator may be assigned to command a Marine Expeditionary Force—though, on the whole, are provided with fewer opportunities to integrate and control other elements of the MAGTF compared with their infantry officer counterparts in today's organizational construct.⁶⁰

The challenges of what to do organizationally with aviation is as old as the airplane. Writing in 1928 on the relationship of airpower to seapower, Lieutenant Commander Bruce G. Leighton discussed the pertinent questions of aviation with which naval leaders were wrestling: Do we have enough airpower, too much, are we using it correctly, are we spending enough or too much? Indeed, military leaders in all Services ask these questions today. However, Leighton goes on to say that these questions "are not *aviation* questions, they are *naval* questions."⁶¹

Leighton concedes that the airplane is indeed a unique machine and requires highly trained and specialized skills. However, the wondrous appeal of the flying machine and the challenging nature of its operation and the considerable expense of its maintenance may lead us to assume that basic warfighting considerations do not apply to it. In other words, separate, unique assumptions must apply to its application in combat or its place in our military organizations. This is a *false assumption*, Leighton argues: "To place aviation in a sort of separate niche in the scheme of war at sea, is supreme folly. One can no more separate air operations from general naval operations than one can separate gunnery from general naval operations."⁶²

Leighton was not arguing, nor is this author, that the airplane and airpower have not radically transformed the character of war. Nevertheless, Leighton argues that airplanes have changed the character of war "not because airplanes are airplanes; but because by the use of airplanes, our fighting ships can see farther and shoot farther . . . because superiority in information and in effective hitting range spells superiority in battle." The false assumption that Leighton attempted to point out in 1928 remains a valid critique in the way we handle airpower organizationally today. Leighton's analysis is used here to highlight an inefficiency that remains in places like Headquarters Marine Corps, and he exposes potential lopsided advocacies that may result. It makes no more sense to have a deputy commandant for aviation than it does to have deputy commandants for artillery, armor, or cyber operations. The deputy commandant for aviation (in addition to the Assistant Commandant) gives one particular mode of delivering ordnance or supplies an imbalanced voice relative to all the other such delivery methods in the Marine Corps' arsenal.

Intra-Marine Corps Changes: Deductively Producing the Right Force

A 2019 Rand study noted that the Marine Corps suffers far less than the other Services from intra-Service rivalry and unhelpful distinctions between intra-Service communities. The study points to the Service ethos of "every Marine a rifleman" and the organization of the Marine Corps as a combined arms Service as the likely reason for this phenomenon. "Relative to other services," the study concludes, "the variance in prestige and legitimacy associated with different occupational specialties, and the sense of interbranch competition among them, is quite modest in the Marine Corps."⁶³ Similarly, a 2015 quantitative analysis conducted at the Naval Postgraduate School noted that only a minor subculture exists between the various communities in the Marine Corps (ground, aviation, and support).⁶⁴

The unique multidomain, master-of-none nature of the Marine Corps has given way to what many observers have called an existential paranoia for Marines, a fact evidenced by the Marines' fierce loyalty and coalescence around culture and lore. Given these characteristics, it appears all the more surprising that the Marine Corps enters the third decade of the twenty-first century without next-generation capabilities to span its multidomain mission. However, the power of history and organizational structure, as discussed in the previous section, has given way to a Service that has, perhaps inadvertently, failed to acquire the necessary tools for that mission.

The iron triangle analysis noted that the Office of Secretary of Defense held similar positions in both cases. Attempting to provide oversight to resource management in both cases studied, the OSD downplayed the need to invest large sums of money into seemingly futuristic requirements. Further, congressional support is not as predictable as it once was for the Services. This is particularly true for the Marine Corps, once known for having the "Green Coalition" on Capitol Hill, as was the case in the late 1980s with the Osprey. Whether this is owing to a furthering of the trend to defer to the Executive Branch on matters of national defense, the fact seemingly remains that the most important job for the Services, beyond personnel management, is to properly analyze and advocate for its equipment needs with which it can train and provide the best possible force for the combatant commanders.

Given the MROC's central role in validating requirements for and strategic direction of the Marine Corps, it is imperative that the Marine Corps make changes in its organizational structure if a more balanced advocacy effort is to be achieved. However, merely giving individual communities more or less of a voice at the table misses the point. If the purpose of the MROC is to advise and assist the Commandant in the execution of Title 10 responsibilities, then it is crucial that the form of the MROC supports that function. Title 10 tasks the Commandant to organize, train, and equip the Marine Corps. Title 10 also clearly stipulates the mission and purpose of the Marine Corps itself. What the MROC ought to do, therefore, is serve as a validating body that holds the Service accountable to its Title 10 responsibilities on behalf of the Commandant.

To anticipate the likely retort—this is not what is currently happening, despite the stated mission of the MROC. Despite the explicit Title 10 requirement for the Marine Corps to master amphibious operations and be a naval expeditionary force, there is no one focal point for this core competency. Naval integration is currently spread between several directorates. For example, the deputy commandant for combat development and integration is charged with Navy-Marine Corps capabilities integration, while the commander, Marine Corps Forces Command, is charged with integrating with the Navy for "operational initiatives."⁶⁵

What the Marine Corps as an enterprise misses in this organizational structure is a focus on expeditionary and amphibious warfare as the prime mover of all other capabilities, which are the Service's raison d'être. The current directorates and their constructs focus on all necessary warfighting capabilities and all relevant functional areas but fail to coordinate their efforts toward the ultimate goal of creating and maintaining a seagoing expeditionary force. Instead, that end state comes into fruition by concurrent actions meant to build the individual capabilities and functions necessary for such a force. In other words, the Marine Corps inductively produces a seagoing expeditionary force. Instead, the Marine Corps ought to deductively produce and evaluate the force from the perspective of the prime reason for its existence.

To deductively produce a force in line with its Title 10 responsibilities—a naval expeditionary force-in-readiness—Headquarters Marine Corps and thus the MROC must restructure. The most important change begins with creating the position of the deputy commandant for naval integration and amphibious warfare. The new deputy commandant would advocate for and oversee the Service's core competency and be the Commandant's chief liaison for the employment of the Fleet Marine Force with the U.S. Navy. The deputy commandant, naval integration and amphibious warfare would replace the deputy commandant for aviation. Aviation, as one of the many critical domains during any amphibious operation, would be advocated for by the directorate that already integrates warfighting capabilities across domains: combat development and integration.

General Berger sent a clear message to the Service in his *Commandant's Planning Guidance*: "I intend to seek greater integration between the Navy and Marine Corps... with the rise of both land and sea-based threats to the global commons, there is a need to re-establish [*sic*] a more integrated approach to operations in the maritime domain."⁶⁶ Therefore, with a strategic basis for reorienting toward amphibious operations, and a Service chief willing to assume risk to do so, now is the time to make bold changes to how the Service operates. The Marine Corps must not only say it is reinvigorating the notion of being an extension of the fleet, but it must also restructure its organizational construct at the highest echelons to ensure that goal is realized.

Beyond replacing the deputy commandant for aviation with naval integration and amphibious warfare, perhaps the most critical and needed change is how the Marine Corps organizes and thus promotes and retains its officers. If the adage "where you stand depends on where you sit" is a correct one, then simply rearranging organizational titles will hardly be enough to produce the desired outcomes in this case. Though additional analysis beyond the scope of this article will be required, it would seem most important to alter the career paths of Marine officers such that we integrate them across the MAGTF sooner than the Service currently does.

Additionally, it is worth noting that the new structure is in line with the Commandant's view of future employment considerations. While combined

arms employment will continue to be the Service's preferred method for employment, the Commandant envisions unprecedented levels of flexibility in Marine Corps deployment. Perhaps, in a not-so-distant future contingency, only a detachment of aviation assets is needed, or perhaps multiple batteries of the High Mobility Artillery Rocket System (HIMARS) ought to be the prime focus in some instances in support of U.S. Indo-Pacific Command. Moreover, because forthcoming conflicts will be far more multidimensional and interconnected than ever before, it will be more important in the future to have an officer corps with generalized and diverse experience across the MAGTF earlier and more often. There cannot be one or two communities that serve as the de facto center of gravity for the Marine Corps. The Commandant has made clear that the focus is, as it always should have been, on seagoing expeditionary warfare in support of sea control executable in a multitude of ways given the nature of the operating environment.

Finally, it should be noted that this article's discussion does not undermine the importance of any one community, least of all the infantry, heretofore the Service's center of gravity. As military strategist Joseph C. Wylie concluded, strategic victory comes not from our ability to destroy-but to control. Bombs and missiles were and will continue to be useful elements of military power, but those weapons can only destroy. "It is the man on the scene with a gun," he argued, that is the only thing capable of exercising control.⁶⁷ While combat enablers become more or less important depending on the character of the conflict, the delivery-or threat of delivery-of armed troops to effect control is a constant in the conduct of war. Transporting and supporting the fighter on the scene with the gun is the very purpose of aviation and surface amphibious weapons platforms. What the foregoing analysis has attempted to argue, however, is that as the specific character of war ebbs and flows toward and away from different methods of employing military power present organizational constructs that continue to stovepipe community-centric influence will continue to produce the antithesis of flexibility and adaptive thinking.

Conclusion: The ACV and Beyond

When the EFV was canceled in 2011, the Marine Corps was left with the AAV, a 40-year-old amphibious vehicle long obsolete and inadequate for tomorrow's fight. However, that was not the end of the story. To its credit, the Marine Corps began working in earnest to find a vehicle that would serve as a replacement for its aging craft and a stepping-stone to true next-generation technology. Toward that end, the Amphibious Combat Vehicle (ACV) was born and is currently in production and initial fielding. What the ACV and the herculean efforts the Marine Corps has employed to field it quickly shows is that the Service fully appreciates the role surface amphibians play—today and tomorrow—presuming it does not suffer the same fate as the EFV.

Today's strategic environment is characterized by peer or near-peer competition in which the United States' ability to project power across the Pacific is once again central. In the last great war for control of the Pacific, the United States required an innovative strategy and creative, new equipment in all domains to see it through. The same is true for the next fight for the Pacific. In a potential conflict for sea control in the Pacific, the United States must not only project power into the Pacific but must hold it while under constant threat from land- and sea-based systems. High-speed maneuver, sensing, electronic warfare, and lethality will be a must.

Perhaps the Osprey and EFV (or ACV) are not the platforms needed to enact an island defense strategy, but they are a product of organizational construct that gives way to a potential over-investment in one particular domain's platforms, and this will only allow the gap in strategic capability to perpetuate. The Marine Corps provides the national security apparatus with a nimble force capable enough to provide decision space at the beginning of a conflict. However, as it stands today, that Service lacks the necessary equipment to gain and hold that space in contested littoral areas.

The existence of a capability gap created by the lack of credible surface amphibian platforms is not a point of contention—it is the prime reason for congressional pushback on the EFV cancellation, and it is the reason for the breakneck speed at which the ACV has made it through the acquisition process. No single official or set of officials is to be blamed in this case.

Deep-seated culture and the manner in which decision-making bodies within the Service were constructed unintentionally altered the resulting policy directions by overemphasizing the role air platforms needed to play in budgetary strategy. Given generally similar reactions by the other stakeholders in both instances (Congress and the Executive Branch), it is therefore the case that inter-Service bureaucracy contributed in large part to the existence of a national strategic level gap. Altering the nature of the bureaucracy is the most logical way to ensure the nation continues to receive what it pays for: a truly expeditionary force-in-readiness.

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