**Naval Integration**
*An Old Approach for a New Era*

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**Abstract:** Current debates on naval integration mostly focus on whether the naval Services’ warfighting concepts are on target—the *why* of naval integration—or whether integration efforts are jeopardizing the Marine Corps’ ability to fulfill longstanding roles and missions. An underappreciated aspect of this topic is the process, or the *how*, of naval integration. The actions of the U.S. Navy and Marine Corps during the interwar period are a positive example of naval integration and indicative of the long-term effects that can follow. Many current developments, in particular the growing partnership of the Marine Expeditionary Force (MEF) and fleet commands, are examples of effective naval integration and will help ensure that the Services arrive at the proper end state.

**Keywords:** naval integration, naval expeditionary operations, fleet operations, Navy operations, Marine Corps operations, amphibious operations, sea control, sea denial, deterrence, interwar period, composite warfare, command and control

There is a great deal of discussion today about the wisdom of an all-in commitment by the Marine Corps to naval integration and the risks associated with divesting of legacy capabilities. Some believe that the
Marine Corps has simply gone too far, while others argue that a bold approach is required to make up for ground lost to strategic competitors such as China and Russia while the nation fought two wars in the Middle East. Advocates of the latter position believe that the urgency of the situation does not allow for a piecemeal approach. This debate has been front and center in military journals, with prominent authors on both sides of the debate. Virtually all acknowledge the long-term threat posed by China, but there are significant differences of opinion regarding how much of the Marine Corps should be retained as a multipurpose crisis-response force to fulfill other missions, often independent of the Navy, such as counterinsurgency or sustained land combat. Critics of radical integration are also concerned that the Marine Corps is incurring significant risk by making long-term force structure decisions based on still-evolving concepts and unproven technologies.

While these debates about why and how far naval integration should go are important, an equally important but less-focused on element is the process of how to implement naval integration. While process is a less glamorous topic than strategy, roles and missions, or force design, it is every bit as important in the current environment. First, both the Chief of Naval Operations (CNO) and the Commandant of the Marine Corps have made historic policy and acquisition decisions that make it clear that they are not turning back. Right or wrong, the naval Services are moving toward far greater integration. This fact highlights the importance of managing the process in a manner that plays to the strengths of each Service and makes the nation more secure. Second, while national strategy, Service warfighting concepts, and theater plans will evolve over time, the growing importance of sea control and sea denial and their role in deterrence has become evident. These functions will undergird all future naval warfighting concepts in an era of great power competition. Third, a disciplined process of naval integration will validate capabilities and identify capability gaps that will inform strategy and force structure decisions. The process itself can and should help shape the end state.

The actions of the Navy and Marine Corps during the interwar period provide excellent examples of effective integration and its potential effects. In 1933, the establishment of the Fleet Marine Forces (FMF) represented a dramatic and new, almost radical, commitment to integration, cementing the Marine Corps’ already close relationship with the Navy. At a time when the Marine Corps was fulfilling missions in places such as Nicaragua and Haiti, the decision to fence off the equivalent of a Marine brigade for exclusive service with the Navy was a bold one. This force reported directly to the commander in chief, U.S. Fleet. Over the next decade, the decision yielded wide-ranging impacts across the doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy (DOTMLPF-P) spectrum. It spawned
the development of new technology and led to experimentation and exercises to validate the tactics associated with amphibious operations. The FMF decision also created new energy to complete the drafting of a document that would redefine the nature of naval integrated operations: the Tentative Landing Operations Manual (TLOM).  

The TLOM was completed in 1934 and addressed the critical components of amphibious warfare, including command relationships, naval gunfire, air support, ship-to-shore movement, the tactics of securing a beachhead, and logistics. The development of modern amphibious doctrine was directly tied to the operational and strategic question that Navy and Marine Corps leaders had been pondering since at least 1912: how to defeat Imperial Japan in a naval campaign in the Pacific if and when war came. It was an ambitious project since there was no precedent in how to conduct successive assaults on heavily defended islands across an ocean expanse. Many of the authors were students at Marine Corps Schools in Quantico, excused from classes to work on the project. One Marine captain said of his work on the TLOM’s aviation committee that they “approached the subject . . . with a lantern in one hand and a candle in the other—but neither of these seemed to throw much light on the subject, so we wound up hiding our lights under a bushel and using the imagination that God gave us to use for this particular purpose.” Though at times guided only by their imaginations and “fear and trembling” for those who would put their ideas into action, the TLOM and its doctrinal successors have stood the test of time. Starting with Landing Operations Doctrine, Fleet Tactical Publication 167 (FTP-167) in 1938, this doctrine has been the playbook by which all U.S. and allied forces have conducted amphibious operations from the Guadalcanal, Normandy, and Inchon landings to the long-range assault of Task Force 58 into southern Afghanistan in 2001. The modern manifestation of the TLOM is now found in various Joint and Service publications addressing amphibious operations and its component elements such as embarkation and ship-to-shore movement. The most important of these is Amphibious Operations, Joint Publication (JP) 3-02.

**The Fleet Marine Force Imperative: Then and Now**

The commitment to reestablish and reinvigorate the Fleet Marine Force by the Commandant of the Marine Corps, General David H. Berger, represents a bold commitment to greater naval integration during the current interwar period. The Chief of Naval Operations, Admiral Michael M. Gilday, has likewise committed to closer partnership with the Marine Corps and has described the warfighting end state of the Navy as the capability to deliver decisive “Integrated American Naval Power” to the nation.
volves developing the necessary capabilities to deter, and if necessary, defeat an authoritarian regime in the Pacific. However, the fundamental military problem is different to that faced in the 1930s, owing to factors such as the U.S. strategic position in the world, the impact of modern technologies, and the new normal of competition below the threshold of conflict. China’s militarization of reefs in the South China Sea (SCS) highlight the importance of deterrence in order to avoid similar or worse fait accompli scenarios that are difficult, if not impossible, to reverse.

As General Berger stated in his *Commandant’s Planning Guidance: 38th Commandant of the Marine Corps* (CPG), “the focal point of the future integrated naval force will shift from traditional power projection to meet the new challenges associated with maintaining persistent naval forward presence to enable sea control and denial operations.” That is to say, the aims are to maintain a persistent forward presence in littoral areas, including within the weapons engagement zone of potential adversaries, and to deter competitors such as China from bullying, coercing, or invading their neighbors. To be a credible deterrent, these forward-postured forces must be able to control use of the sea for friendly purposes (sea control) or deny use of the sea and key littoral areas (sea denial) to adversaries. Though no longer the focus it once was, the ability to seize battlespace through traditional—yet thoroughly modified tactics, techniques, and procedures—amphibious operations remains a core capability.

Increasingly, the Navy will be challenged to effect sea control or project power against adversaries such as China, Russia, and Iran, especially in their home regions. Ubiquitous satellite coverage, advanced sensors, artificial intelligence (AI), unmanned systems, and long-range cruise and ballistic antiship missiles have narrowed the military and technological advantage that the United States has enjoyed for the past several decades. Hybrid warfare tactics have complicated the calculus further. Until the United States develops new technologies and force-employment concepts, it will be increasingly challenged by adversaries able to hold high-value targets, such as aircraft carriers, at risk.

Other Services have a critically important role to play, but the synergy of two Services within one military department, a common naval heritage, and a history of habitual operational relationships make the Navy and Marine Corps ideal partners to counter China’s hegemonic ambitions in the Western Pacific while deterring other revisionist powers. Just as *Landing Operations Doctrine*, FTP-167, guided the conduct of amphibious operations for all the U.S. Armed Services during World War II (WWII), there is reason to believe that Joint doctrine can evolve from current naval Service developmental efforts such as the *Expeditionary Advanced Base Operations (EABO) Handbook: Considerations for Force Development and Employment*. 
The End State: Well-Defined Enough?

If improving the capability to effect sea control and sea denial are the proper and primary reasons for naval integration, what the Navy and Marine Corps will look like at the end of a successful naval integration effort—the force structure end state—is less well-defined. What proportion of the Marine Corps should be optimized for EABO versus crisis response or more traditional power-projection missions? Should all Marine Expeditionary Forces and Marine Expeditionary Units be mirror-imaged, or should they be tailored to account for different theater priorities and operations plans? The Commandant has said that he welcomes an “informed debate,” and it is clear that the debates will continue and be influenced by myriad factors, including combatant commander priorities, world events, and congressional funding.

For now, the direction from the naval Service chiefs is clear. The Marine Corps, or some portion of it, will be wholly devoted to sea control, sea denial, and fleet sustainment as described in warfighting concepts such as distributed maritime operations (DMO), littoral operations in a contested environment (LOCE), and EABO. These warfighting concepts, along with combatant commander operation plans, will continue to evolve, as they should. During the interwar period, War Plan Orange, the plan developed to deal with potential war with Japan, was updated at least a half dozen times. To improve the Services’ capability to conduct sea control and sea denial and contribute to the refinement of concepts and plans, the integration process must be well managed and properly weighted. If not, it is likely that the Navy and Marine Corps will waste time, energy, and money and ultimately fail to effectively deter China and other competitors from realizing their territorial and/or political ambitions.

Naval Integration Across DOMTLFP-P

Doctrine and Policy

The Navy and Marine Corps continue to publish an impressive number of strategy and concept documents that describe the military problems facing the naval Services, even though the classification level of many of these documents inadvertently hinders broader understanding and debate. However, one thing that remains missing is a broader metanarrative that describes why the nation needs the Marine Corps and how an integrated naval Service is critical to the nation’s defense at this time. A benchmark document that did just that is The Role of the Marine Corps in National Defense, Fleet Marine Force Manual (FMFM) 1-2, published in 1991. Avoiding contemporary jargon, well crafted, and succinct, The Role of the Marine Corps in National Defense clearly articulated the Marine Corps’ roles and responsibilities in naval campaigns, continental campaigns, and Joint operations. Such a document would be invaluable in answering questions from Congress and forestalling squabbles with other Services—likely one
of its original purposes—and should be updated and republished as a top priority.

The Services should create a new framework for naval expeditionary operations from the sea (i.e., traditional amphibious operations as described in Amphibious Operations, JP 3-02) and to the sea (i.e., operations as described in DMO, LOCE, and EABO). New concepts and doctrine should also take into account the attributes and capabilities of the other Services since the challenges posed by adversaries such as China and Russia can only be addressed by a Joint force operating across all warfighting domains. Doing so will require expanding the concept of a fleet, similar to that of Captain Wayne P. Hughes, who, in Fleet Tactics and Naval Operations, pointed out that much of the Soviet Navy was composed of land-based bombers and missiles during the Cold War. It will require acknowledging that a Rockwell B-1 Lancer bomber carrying ship-killing missiles (e.g., long-range antiship missiles) or an Army terminal high-altitude area defense (THAAD) and Patriot Advanced Capability-3 (PAC-3) site may be as important as a Marine Corps expeditionary advanced base (EAB) or a destroyer to the Joint force maritime component commander (JFMCC). Current Navy and Marine Corps concepts—and those in development—could and should evolve to become doctrine with applicability to all the Services. Such an approach makes the most sense from both a warfighting and taxpayer perspective.

The Service headquarters should avoid becoming involved in tactical command and control arrangements. This is more than just getting Beltway agendas out of the Fleet’s way. The Fleet is where tactical innovation happens. That innovation also takes time. It took a previous generation 13 years to develop workable amphibious doctrine. It will require more than a few months to work through multidomain command and control and other issues. Moreover, command and control constructs should be driven by the mission, forces available, and communications capabilities; factors and nuances that only the Fleet has a proper appreciation for. It is also important to note that fleet warfare is changing. While the Navy has long trained and operated at the strike group (carrier strike group or expeditionary strike group) level, there is a growing awareness that the Navy must learn to master fleet-level warfare, with multiple strike groups and Marine Corps formations operating in harmony. This means that current tactical-level command and control arrangements and doctrine will inevitably change and will need to adapt.

An example of a flexible approach to command and control (C2) was demonstrated by Vice Admiral Charles W. Moore Jr. and Brigadier General James N. Mattis as the nation mounted its initial military response to the terrorist attacks of 11 September 2001. Moore, serving as the Naval Forces Central Command (NAVCENT) and 5th Fleet commander, selected Mattis as commander of the hastily formed Naval Expeditionary Task Force 58 instead of
a Navy flag officer. In a similar fashion, Mattis took a nonstandard approach, electing to form what was essentially a composite Marine Expeditionary Brigade (MEB) from two separate Amphibious Ready Groups/Marine Expeditionary Units (ARG/MEUs) instead of a more doctrinal amphibious force with one commander, landing force and one commander, amphibious task force. Both Moore and Mattis allowed the nature of the mission, the forces available, and principles such as simplicity—versus doctrine or precedent—to inform their decisions in the sphere of command arrangements. Task Force 58’s subsequent successful long-range assault into southern Afghanistan from amphibious ships in November 2001 validated the wisdom of their approach.27

Given this and other positive examples of operations that have benefited from flexible command arrangements, the hyper focus on composite warfare absent a fuller understanding of the tasks to be accomplished by EABs or Marine Littoral Regiments (MLRs) seems premature. Unique mission requirements drive command relationships and arrangements. This is especially true when considering the added complexity of controlling weapons systems with ranges potentially exceeding hundreds of miles, rather than tens of miles, and as a result must call into question orthodox notions of the employment of Marine forces at the tactical, operational, and strategic levels of war. While a sense of urgency is understandable, too much Service headquarters’ guidance threatens to hamstring commanders in an area where flexibility is a prerequisite, not a liability.

Additionally, while the Commandant’s guidance specifically mentions that the Marine Corps must be able to operate within a composite warfare construct, it appears that this direction has been distorted to mean that a Marine officer must be a warfare commander.28 A more appropriate focus for the Marine Corps would be to determine where and when it is appropriate to provide resources and capabilities to the warfare commanders (e.g., air, surface, subsurface, information warfare) and what programmatic changes would be required to fully realize this particular form of integration. Depending on the scenario, a Marine element ashore with the proper fires, C2, and scouting/antiscouting capabilities could participate in the composite warfare construct of a task force in a fashion similar to that of a destroyer. If the Marine element in the task force provides the preponderance of capability for a specific mission, then it might be appropriate to be designated a warfare commander. In the end, command arrangements should be an outgrowth of the objectives and forces available and not predetermined.

Training, Leadership, and Education
On the positive side, there is good news to report in the way of curriculum changes underway in places such as Marine Corps University and the U.S. Na-
val War College. After a slow start, there has been a demonstrable increase in the focus on great power competition, China, naval warfare, hybrid warfare, and wargaming and momentum is only growing. Recent online competitive wargames based on Pacific War scenarios conducted by the Marine Corps Command and Staff College and the Training and Education Command (TECOM) Warfighting Society have demonstrated their educational value. There is a need for more games with a maritime focus, particularly since most commercial off-the-shelf games today are land-centric. Schools should also maintain a strong emphasis on past examples of military innovation and military organizations that have successfully adapted to the changing character of war. An educational organization leading the way in wargaming and innovation is Marine Corps University’s Brute Krulak Center for Innovation and Creativity in Quantico, Virginia. It functions as a hybrid “think tank/do tank” and has become a hub for wargamers and original thinkers. The Krulak Center offers a growing catalog of publications, podcasts, and short videos on their website.

Wargaming and simulation have been a high priority in the naval Services, and this must continue, provided they are conducted the right way and their limits are appreciated. For instance, fewer wargames with the right participants is preferable to more wargames with the wrong (or insufficient) participants. Checks and balances must be built in to protect against confirmation bias because wargames are often cited as the justification for Service positions on warfighting concepts and budget decisions. There is real pressure to deliver—pressure that can stifle critical analysis. It is important to remember that EABO is merely one potential solution to the sea control/sea denial challenge. Congress will question, and the other Services will propose, alternative solutions, such as more ships, tankers, bombers, and long-range missiles. Navy and Marine Corps concepts will have to compete in this democracy of ideas. There has never been a better time for the employment of internally focused red teams, employed to provide opposing points of view and challenge bias, to ensure “blue” cells consider as many perspectives and contingencies as possible. Robust red cells, acting as enemy commanders and planners, too, must replicate thinking and uncooperative adversaries and their capabilities as closely as possible in order to challenge blue concepts and concepts of operation.

While the Service headquarters need not be entwined in tactical C2 negotiation, they can help ensure better outcomes in this area through training and education. All but a very few Marines have experience and knowledge in areas such as tactical data links and space systems, both of which are critical to fighting in a maritime space increasingly dominated by long-range precision strike systems. For this reason, the Marine Corps should strongly consider bringing back the C2 Systems Course for company-grade officers (an Expeditionary Warfare School [EWS] equivalent) and infuse it with a distinctly maritime fla-
votr, as well as expanding the number of master’s degrees offered in disciplines such as systems and software engineering.

**Organization, Personnel, and Policy**

The naval Services should commit to standing up a Joint office dedicated to solving the technical challenges posed in operationalizing DMO and EABO and closing kill chains.\(^3\)\(^2\) This will involve solving hard engineering and software problems required for the Marine Corps to operate within the Navy’s Cooperative Engagement Capability network—essential in a composite warfare structure—and for both Services to operate effectively within broader Joint command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) and fires networks.

In the name of naval integration, some have gone so far as to recommend a wholesale reorganization of Navy and Marine Corps headquarters staffs.\(^3\)\(^3\) Others have argued for changes that would ultimately lead to a single naval representative on the Joint Chiefs of Staff (JCS) and a combined Service headquarters providing “common fiscal, acquisition, and technology policy and support to operating forces.”\(^3\)\(^4\) However, a convincing case has not been made that these proposals would improve the Services’ capability to conduct naval expeditionary operations together. From the perspective of influence within the Pentagon bureaucracy, combining Navy and Marine Corps staffs, and presumably Service chiefs, would eliminate one four-star, several subordinate flag officers, and numerous field-grade officers and have the effect of diminishing overall naval influence within the JCS and throughout the Pentagon, not to mention Capitol Hill. It also seems likely that such a massive reorganization would create churn that would distract institutional focus rather than concentrate it on the strategic problem set. Taking concrete steps to infuse more discipline into the planning, programming, budgeting, and execution process of each Service, like those referenced in the CPG, seem like a better and more realistic approach in this area.\(^3\)\(^5\)

One of the most positive developments over the past year has been the increase in coordination between MEFs and numbered fleets. Excluding U.S. Fleet Cyber Command, 10th Fleet, there are more numbered fleets (six) than MEFs (three). Despite the disparity, the level of operational and tactical planning between the MEFs and numbered fleets is unprecedented, at least in recent memory.

For example, at the direction of its commanding general, II MEF planners have spent most of 2020 working side-by-side with the 6th Fleet staff in Naples, Italy, discussing the conduct of naval integrated operations in the European theater. Their efforts have also contributed to detailed analysis of component-level command relationships, a topic briefly addressed in the CPG. Efforts such as
these, including the close and growing partnership between III MEF and the 7th Fleet, should be the priorities of naval integration. MEF commanding generals and Fleet commanders are ideally suited to lead this effort, positioned as they are between Service chiefs and component commanders on one side and tactical warfighters on the other. They have sufficient rank to push through initiatives and obtain necessary resources. When MEFs and Fleets work in close harmony, they improve the planning capability and capacity of both staffs. For example, generally speaking, Marines have more experience in staff planning than their Navy counterparts, while Navy officers have a far greater understanding of composite warfare and the workings of a Fleet Maritime Operations Center. MEF and Fleet commanders have sufficient maturity and experience to balance Service and operational priorities and are best positioned to ensure naval forces strike the right balance between being ready to fight tonight and conducting the experimentation needed to prepare for future fights. Finally, MEFs and Fleets have strong formal and informal connections to Service training and education organizations for reach back support. Habitual relationships with the Marine Air-Ground Task Force (MAGTF) Staff Training Program, the School of Advanced Warfighting, the College of Maritime Operational Warfare, and the Maritime Advanced Warfighting School all stand out in this regard.

While recent coordination between MEF and Fleet staffs is a solid beginning, they are limited by staff capacity. The naval Services would accelerate integration—and thus better prepare for future threats—by expanding Joint credit to Marines and sailors serving in one another’s Service headquarters and senior staffs. While the Goldwater-Nichols Department of Defense Reorganization Act of 1986 was a boost for the Joint force, it has inadvertently weakened the bonds between the naval Services. Today, given a choice of billets, a competitive officer will choose a Joint billet, even if it involves a permanent change of station move, over service with their naval counterpart since Joint duty increases that officer’s chances at promotion and is a prerequisite for consideration for selection to flag rank. In light of the times, this needs to be remedied. Joint credit for intranaval service duty would be a small but powerful incentive in attracting the best officers to work on the challenges of naval integration while remaining competitive for promotion. Doing this will entail changes to Joint and Service policy and U.S. law, but it can be done and will certainly be less complicated than establishing a new branch of the U.S. armed forces as was recently accomplished with the stand-up of the Space Force.

Today’s Navy and Marine Corps units are saturated with commitments around the globe in a way that was not conceivable during the interwar period. It is not that commanders and staffs are not keen on the idea of experimentation and innovation; it is simply a fact that jam-packed deployment schedules and Training Effectiveness Evaluation Plans leave little white space in their sched-
ules. As the Navy looks to revitalize Fleet Battle Problems and experimentation as it did between 1923 and 1940, naval integration should be a high priority. 37 It is imperative that both Service headquarters prioritize the commitment to dedicated experimentation forces and conduct exercises that test the latest Service concepts. 38 There are already clear signs that this is beginning to happen. For example, the recent memorandum of agreement, signed between the commander, 3d Fleet, and the commanding general, I Marine Expeditionary Force, describes in detail how these two commands will train and experiment together for the next several years. Efforts such as these may be the most important component of the transformation envisioned in recent doctrine, strategy, and concept documents. 39

**Naval Integration: Never an End in Itself**

Navy and Marine Corps efforts to more closely integrate must remain explicitly tied to the strategic imperative of deterring China and the naval functions of sea control and sea denial. As with the original FMF in 1933, the Marine Corps’ commitment to a reinvigorated FMF, together with the CNO’s commitment to integrated American naval power, have the potential to lead to positive, long-term impacts. 40 However, for this to occur, there must be experimentation, wargaming, and exercises, similar to that accomplished during the interwar period. 41 Supported by their Service headquarters and training and education commands, MEFs and Fleets are well positioned to do this, in part because they live in the world of operational problems. Their collaboration will reveal the potential of a truly integrated naval force and clarify its role in the nation’s defense. As General Berger recently testified before Congress, “an integrated naval expeditionary force within contested areas provides the joint force with an asymmetric advantage, an edge that we must preserve and strengthen in this era of great power competition.” 42

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**Endnotes**


2. The naval Services in the U.S. military include the Navy, Marine Corps, and Coast Guard. *Naval integration* in this article refers to the growing partnership between the Navy and Marine Corps. This integration has both organizational and operational implications. In cases where naval integration includes the Coast Guard, that is specifically noted.

3. In this article, unless otherwise noted, the *interwar period* refers to the time frame between World War I (WWI) and World War II (WWII). This period was marked by remarkable original thought and innovation despite austere defense budgets.

14. Weapons engagement zone—there are multiple current doctrinal definitions aligned to antisubmarine warfare, surface warfare, and air and missile defense. In Marine Corps usage, it generally refers to the maximum range at which a combatant can detect adversary forces and effectively employ antiship missiles and land-attack missiles against them, but this usage is not yet codified in doctrine.
24. *Expeditionary advanced base* (EAB): a locality inside a potential adversary’s weapons’ engagement zone (WEZ) that provides sufficient maneuver room to accomplish assigned missions seaward while also enabling sustainment and defense of friendly forces therein. This definition is a summary of various briefs and published material from official Marine Corps sources; and Oriana Pawlyk, “B-1 Bombers Train to Launch Long-Range Anti-Ship Missile over Black Sea,” Military.com, 1 June 2020.
25. In the Marine Corps, the term *Fleet* has traditionally been shorthand for Fleet Marine Force units or those in the operating forces (as opposed to headquarters or supporting establishment units). “Fleet” is used in that sense here and in the subsequent sentence. The word “fleet” also has a more general meaning and usage. For instance,
the term *fleet warfare* later in this paragraph is referring to naval warfare or the warfare practices of the U.S. Navy. Finally, *Fleet* is sometimes used to refer to a naval organization such as numbered fleets (e.g., 7th Fleet). While it can be confusing for those outside the naval Services, most often the meaning of Fleet or fleet can be deduced from its context within a sentence or paragraph. That principle holds true in this article.


32. Kevin Eyer and Steve McJessy, “Operationalizing Distributed Maritime Operations,” Center for International Maritime Security, 5 March 2019; and Brose, *The Kill Chain*. According to Brose, “The kill-chain is a process that occurs on the battlefield or wherever militaries compete. It involves three steps: The first is gaining understanding about what is happening. The second is making a decision about what to do. And the third is taking action that creates an effect to achieve an objective.” Brose, *The Kill Chain*, xviii. Brose goes on to state that “when members of the US military complete that process of understanding, deciding and acting, they refer to it as ‘closing the kill-chain’.” Brose, *The Kill Chain*, xix. A more procedural approach is the model find, fix, track, target, engage, and assess (F2T2EA) presented by Eric M. Hutchins, Michael J. Cloppert, and Rohan M. Amin, “Intelligence-Driven Computer Network Defense Informed by Analysis of Adversary Campaigns and Intrusion Kill Chains,” Lockheed Martin Corporation, accessed 6 October 2020. For an early mention of kill-chain processes, see Adm Jonathon Greenert, USN, “Kill Chain Approach,” *Chief of Naval Operations* (blog), 23 April 2013.


to General or Flag Rank and chapter 38, section 662, Promotion Policy Objectives for Joint Officers.


38. FRAGO 01/2019, 3.


